

**CALIBRATING THE STEEL-MEMBERS
FATIGUE LIMIT STATES OF THE
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS**

by

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ABSTRACT

It is important to develop and incorporate the knowledge needed to design, construct, and maintain bridges to have the longest service life as possible. Consequently, the fatigue effects on bridges need to be considered and more accurately reflected within the proper bridge design specifications. This thesis describes the calibration process used to select the load and resistance factors for the fatigue limit states of steel bridge members within the AASHTO LRFD Bridge Design Specifications. The process presented within this thesis builds upon work completed as part of the Strategic Highway Research Program No. 2 including the determination of the fatigue load model. The resistance model was developed using available fatigue test data and statistically analyzed using specially developed techniques. Target reliability indices of 1.0 were chosen for all steel detail types based upon a procedure using Monte Carlo simulations and engineering judgment. Load and resistance factors were finally chosen for both Fatigue I and Fatigue II service limit states. The load and resistance factors for the Fatigue I limit state are 2.0 and 1.0 respectively. Similarly, the load and resistance factors are 0.80 and 1.0 for the Fatigue II limit state. We expect the new load and resistance factors for the fatigue service limit states to more accurately capture the fatigue effects of steel bridges and thus increase their service life.

Chapter 1

INTRODUCTION

The current AASHTO LRFD Bridge Design Specifications is based on a probability –based approach that includes factors selected from current statistical knowledge of loads and structural performance. These load and resistance factors are derived from a calibration procedure that uses load and resistance models, and reliability analyses. The objective of this report is to discuss the calibration of the fatigue limit states for steel bridge members and to report the results.

The resistance models are established for steel girder bridges using available fatigue data for various welded steel bridge detail types as synthesized by Keating and Fisher [1]. The statistical parameters are then derived using specially developed procedures which are discussed in chapter 2 of this thesis. The load models and the associated statistical parameters were developed by Nowak [1].

The reliability analysis uses a procedure that is based on Monte Carlo simulations. The representative bridge details are assessed using this reliability method according to current AASHTO specifications to determine the current level of structural performance and corresponding reliability indices. Target reliability indices are chosen and load and resistance factors and combinations are subsequently determined as to achieve these target reliability indices.

A more detailed description of the AASHTO code calibration procedure can be found in NCHRP Report 368 [2].

Chapter 2

BRIDGE FATIGUE RESISTANCE

The bridge fatigue resistance within the code calibration procedure is taken as a random variable. The variation of the bridge fatigue resistance is described by statistical parameters that are derived from available test data and engineering judgment. This chapter summarizes the development of the fatigue resistance database as well as the determination of the statistical parameters.

2.1 Development of AASHTO Fatigue Design Curves

A comprehensive database containing constant and variable amplitude fatigue test results for various welded steel bridge detail types was developed by Keating and Fisher [3]. This database includes the test data from the NCHRP test data up to 1972 as found in NCHRP Report 102 and 147; subsequent NCHRP test data from NCHRP Reports 181, 188, 206, 227, and 267; Japanese and European (ORE) test data; and other sources. This data can be seen in Table C.1 in the Appendix.

The fatigue data includes the detail type of each specimen, the minimum and maximum stress values, as well as the number of cycles observed until fatigue failure was evident. From this data, the stress range is taken as the only significant parameter in the determination of the fatigue life, thus a relationship between the stress range and number of cycles to failure was developed for the combined fatigue data [3]. The regression analysis performed on the stress range versus cycle relation showed that

this relation was log-log in nature. The curves of the data plotted in log form are characterized by [3]:

$$\log N = \log A - B \cdot \log S_r \quad (2.1)$$

or in the exponential form:

$$N = A \cdot S_r^{-B} \quad (2.2)$$

Where

N = number of cycles to failure

S_r = constant amplitude stress range, ksi

$\log A$ = log-N-axis intercept of S-N curve, a constant taken from AASHTO Table 6.6.1.2.5-1 for the various detail categories

B = slope of the curve

The combined fatigue data for each detail type was categorized into eight different detail categories based on the fatigue performance of the details as specified by the AASHTO LRFD Bridge Design Specifications in Article 6.6.1.2.3 [AASHTO]. Fatigue design curves were then determined for each of the fatigue categories. The design curves represent allowable stress range values that are based on a 98 percent confidence limit, or lower bound of fatigue resistance. Thus, for a particular detail type, most of the fatigue data falls above the design curve and the test data should not deviate significantly from the curve. The slope of the all of the design curves were determined to be very close to a constant value of -3.0 as shown through the use of regression analysis [3]. Thus, a constant slope of -3.0 was imposed on the equations in the regression analysis [3]. Figure 2.1 shows the current AASHTO fatigue design curves with the detail categories ranging from A to E'.

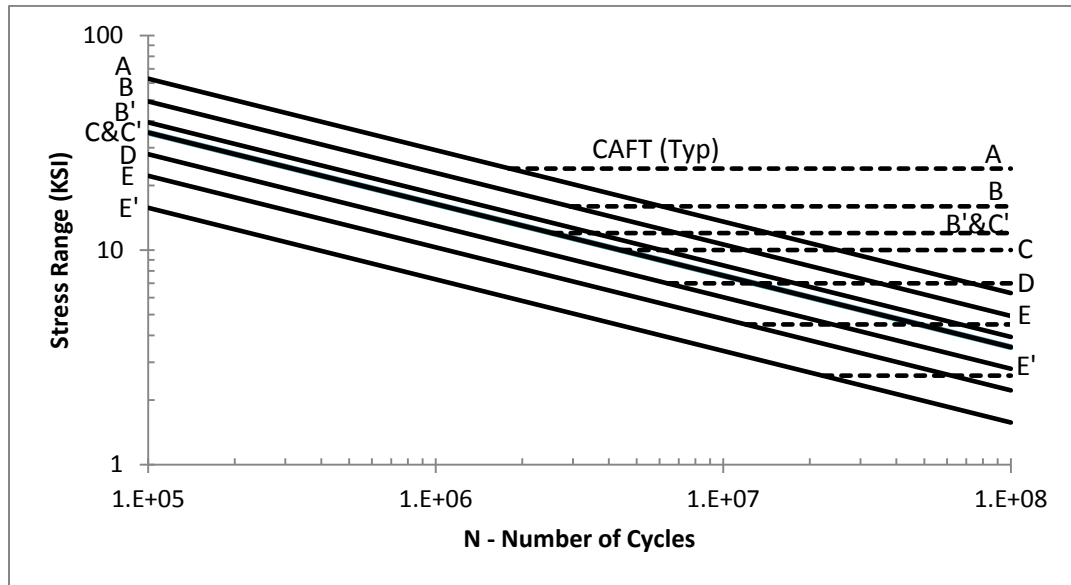


Figure 2.1 AASHTO fatigue design curves: stress range versus number of cycles. [4]

2.2 Determining Resistance Parameters

2.2.1 Fatigue Parameter

In order to properly calibrate the fatigue limit states of the AASHTO LRFD Bridge Design Specifications it is necessary to determine the statistical parameters of the fatigue test data used in the bridge fatigue resistance model. These parameters include the bias and the coefficient of variation of the fatigue data. As previously described the fatigue data is commonly presented in terms of the stress range and number of cycles to failure, or S-N curves in log-log space. The use of this relationship with the given constant amplitude fatigue test data, however, causes difficulty in accurately determining the statistical parameters. The available data was not sufficiently distributed along the S-N curves in log-log space for a regression analysis as the data was often gathered over a small increment of stress ranges and

limited in number. Any number of regression lines could have been used to describe this relationship between the stress range and fatigue life. Thus in order to better analyze the fatigue data a different relationship between the number of cycles and stress range was developed.

The test data was arranged to couple the number of cycles and stress range together in the form of an effective stress range for each test specimen. The effective stress range as presented in article 7.2.2.2 of the AASHTO Manual for Condition Evaluation and LRFR of Highway Bridges is taken as the cube root of the sum of the cubes of the measured stress ranges as seen in Equation 2.3 below [5]. The effective stress range is an accepted means to compare variable-amplitude fatigue data to constant-amplitude fatigue test data.

$$(S_r)_{\text{eff}} = (\sum \gamma_i S_{ri}^3)^{1/3} \quad (2.3)$$

Where

$(S_r)_{\text{eff}}$ = effective constant amplitude stress range

γ_i = Percentage of cycles at a particular stress range

S_{ri} = constant amplitude stress range for a group of cycles, ksi

The formula describing the parameter used for the test data follows the form of the above equation; however, this equation is applied to each of the test specimens. Thus the percentage term is equated to a value of one and is subsequently multiplied by the number of cycles, N, to yield the following equation:

$$S_{fi} = (N * S_{ri}^3)^{1/3} \quad (2.4)$$

Where

S_{fi} = proposed fatigue damage parameter

This new fatigue parameter is taken as a normally distributed random variable in order to determine the fatigue resistance bias and coefficient of variation for each of the detail categories. The data was fitted to many of the typical distributions commonly used and it was determined that the normal distribution best characterized the nature of the fatigue data. The bias is a ratio of the mean value of the test data to the nominal value described in the specifications. The calculation of the nominal, mean, and coefficient of variation values are described in the subsequent sections.

2.2.2 Probability Plots to Determine Statistical Parameters

The collection of the fatigue data in terms of the new fatigue parameter for each detail category was then statistically analyzed using normal probability plots as the data best fits the normal distribution which is explained in further detail later. The normal probability plot is a graphical technique used in determining the statistical parameters of a normally distributed data set. The data points are plotted against a theoretical normal distribution and form an approximate straight line. Points that deviate from the straight line indicate deviation from normality. In other words if the observed data is normally distributed the points should form a straight line.

The horizontal axis of the normal probability plot represents the values of the data set while the vertical axis is the set of standard normal values or Z-scores. These standard normal values are representative of the cumulative distribution function of the standard normal distribution. Thus an ordered pair plotted within the normal probability plots of this project has an abscissa of the new fatigue parameter and an ordinate of the corresponding standard normal value.

The fatigue data for each detail category was then filtered to include the data that most accurately reflects the fatigue behavior of each category. In other words, the

data was truncated based on the nature of the curve within each normal probability plot to include the pertinent fatigue data. In general, the majority of the lower portion of each curve was selected for each detail category. This lower tail of the data was selected because it is the portion of the curve that fits the normal distribution, as it is the straight portion of the normal probability plot. Moreover, the lower portion of the fatigue data represents the range of values that fatigue cracking is expected to occur within when analyzed for the fatigue limit states load combinations using the Monte Carlo simulation approach which will be discussed in more detail later. Failure occurs when the load exceeds the resistance; thus the higher portions of the fatigue data sets represent fatigue resistance data that are very unlikely to be exceeded by the fatigue loads used within this study and therefore are insignificant.

Different approaches for selecting the cutoff values in which different cutoff values were used for each category were investigated to determine the sensitivity of the resulting reliability indices. It was determined that the relative difference of the results determined from the different techniques were negligible. Other techniques used to determine the cutoff values included the use of constant cutoff values for all of the various detail categories as well as manually inserting best-fit lines by different analysts. Table 2.1 shows the resulting cutoff Z-score values. Figure 2.1 and 2.2 show the normal probability plots of the full fatigue data set and the truncated data for categories C and C' respectively.

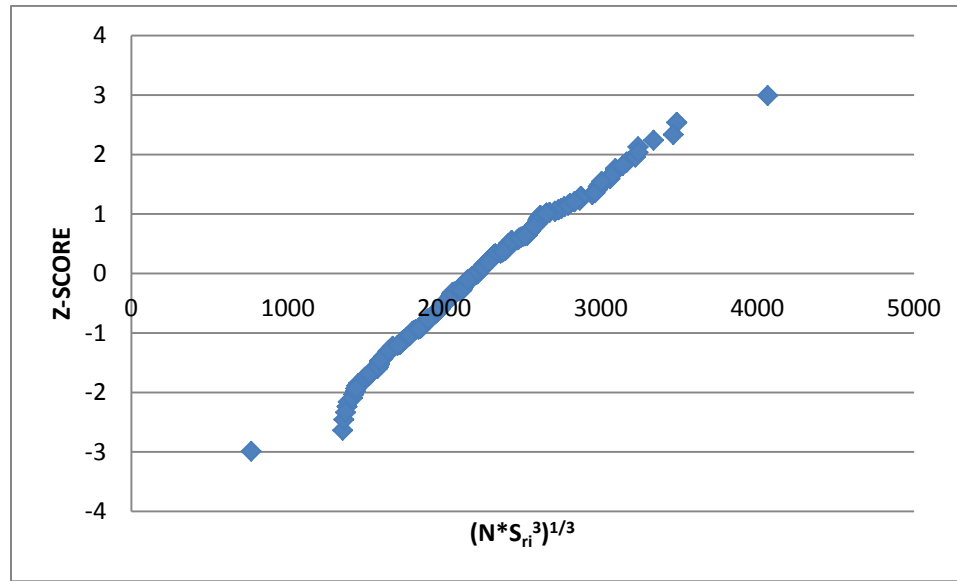


Figure 2.2 Normal probability plot of detail categories C and C' fatigue data.

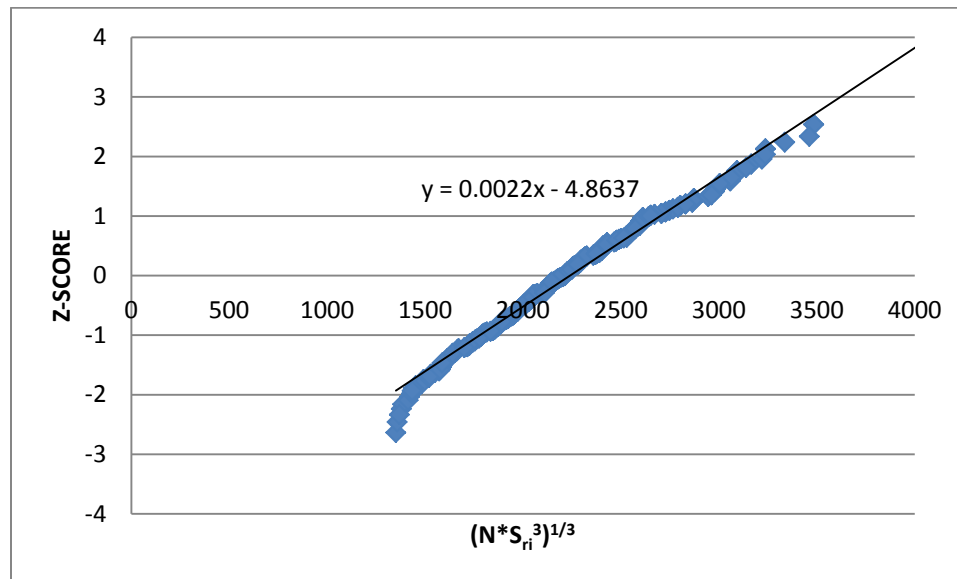


Figure 2.3 Normal probability plot of detail categories C and C' truncated fatigue data with best fit line.

Determining the statistical parameters of the data is relatively straightforward once the data for each detail category was filtered and fitted with a line of best fit using Microsoft Excel software. The mean value of the stress parameter is simply the intersection of the best fit line with the horizontal axis. The standard deviation of the data is taken as the inverse of the slope of the best fit line. More simply stated it is the change in horizontal coordinates divided by the change in the vertical coordinates. Moreover, the coefficient of variation is ratio of the standard deviation to the mean of the data. The resulting statistical parameters can be seen in Table 2.1. The probability plots of the fatigue data and corresponding truncated data can be seen in Figures A.1 – A.14 of the Appendix.

2.2.3 Determination of Nominal Fatigue Parameter and Bias Values

The coefficient of variation and the mean of the fatigue resistance data was determined as described in the previous section. These values along with the nominal fatigue resistance are needed to determine the bias of the data. The nominal value of the chosen fatigue parameter was calculated using AASHTO equation 6.6.1.2.5-2 and rearranged to achieve the relationship in terms of the desired fatigue damage parameter, as seen in the following equation. The resulting nominal resistance values can be seen in Table 2.1.

$$S_{f_AASHTO} = (N * S_r^3)^{1/3} = A^{1/3} \quad (2.5)$$

Where

S_{f_AASHTO} = nominal value of the fatigue parameter using AASHTO

specifications for each detail category

A = constant taken from AASHTO Table 6.6.1.2.5-1 for the various detail categories

The bias value for each category is determined by simply taking the ratio of the mean value to the nominal value of the fatigue parameter as seen in the following equation, Table 2.1 shows the results.

$$\text{Bias} = S_f_Mean / S_f_AASHTO \quad (2.6)$$

Where

S_f_Mean = mean value of the fatigue parameter using the fatigue data for each detail category

Table 2.1 Statistical parameters of the fatigue data for the various detail categories.

Category	Stand. Dev.	C.O.V.	Bias	S_f_Mean	S_f_AASHTO	Cutoff Z-score
A	1000.00	0.24	1.43	4167.40	2924.02	1000.00
B	666.67	0.22	1.34	3077.47	2289.43	666.67
B'	250.00	0.11	1.28	2336.10	1827.16	250.00
C & C'	454.55	0.21	1.35	2210.77	1638.64	454.55
D	185.19	0.10	1.36	1773.69	1300.59	185.19
E	140.85	0.12	1.17	1207.41	1032.28	140.85
E'	232.56	0.20	1.56	1140.28	730.61	232.56

Chapter 3

RELIABILITY ANALYSIS

In the code calibration it is necessary to develop a process by which to express the structural reliability or the probability of the loads on the member being greater than its resistance; in other words, failure of the criteria. The reliability analysis performed within this project is an iterative process that consists of Monte Carlo simulations to select load and resistance factors that achieve reliability close to the target reliability index. The Monte Carlo technique samples load and resistance parameters from selected statistical distributions, such as a normal distribution. The reliability is measured in terms of a reliability index, or safety index, β . β is defined as a function of the probability of failure, P_F , using the following equation. Thus β is the number of standard deviations that the mean safety margin falls on the safe side. The higher the β value, the higher the reliability.

$$\beta = -\Phi^{-1}(P_F) \quad (3.1)$$

Where

Φ^{-1} = the inverse standard normal distribution function

3.1 Monte Carlo Simulation

The following is a description of the calibration procedure applied to bridge structures. The distribution of loads is typically assumed to be normally distributed as the loads are a summation of force effects. The fatigue resistance has also been assumed to follow normal distributions. These distributions for load and resistance are

developed using determined statistical parameters from the available data. The minimum statistical parameters needed for each random variable is the coefficient of variation (V) and the bias (λ). The coefficient of variation is a measure of the scatter of the variable and the bias is the ratio of the mean to the nominal value. The simulation is then run by selecting random values from both the load and resistance distributions and comparing them using the appropriate limit-state function. If the result from the evaluation of the limit-state function is equal to or greater than zero, the function is satisfied and no failure results. Conversely, if the result is negative then a failure is recorded. This process is repeated over a large number of iterations and the number of failures is counted to determine the failure rate. Finally the reliability index is determined by taking the inverse of the standard normal cumulative distribution function using the determined failure rate.[3]

The following is an example of the Monte Carlo simulation using MS Excel®. The loads and resistance have been assumed to be normally distributed.[3]

1. Determine nominal loads and resistance using the *AASHTO LRFD Bridge Design Specifications*.
2. Take $i = 1$.
3. Generate a uniformly distributed random number for the load $0 \leq u_{Li} \leq 1$ using the RAND() function.
4. Calculate the corresponding value of load, L_i (normal random variable), using:

$$L_i = \mu_L + \sigma_L * \Phi^{-1}(u_{Li})$$

Where

Φ^{-1} = the inverse standard normal distribution function calculated using the NORMSINV() function.

$$\mu_L = \text{mean} = \lambda_L L_n$$

$$\sigma_L = \text{standard deviation} = V_L \mu_L$$

$$\lambda_L = \text{bias}$$

$$V_L = \text{coefficient of variation}$$

5. Calculate the corresponding value of resistance, R_i (normal random variable), using:

$$R_i = \mu_R + \sigma_R * \Phi^{-1}(u_{Ri})$$

6. Calculate the limit state function, Y :

$$Y_i = R_i - L_i$$

7. Assume $i = i + 1$ and repeat steps 3 through 6 until the desired number of simulations, N , is obtained.

The current reliability indices inherent for the various fatigue detail categories were determined using the aforementioned Monte Carlo simulation technique with the specifications for the Fatigue I and II limit states as specified in the *AASHTO LRFD Bridge Design Specifications*. The Fatigue I limit state utilizes a load factor of 1.5 which is common to all of the detail types. The coefficient of variation for the fatigue loading within this limit state was determined to be a value of 0.12 through research conducted by Nowak [1]. The resistance parameters for the Monte Carlo simulation were then determined by equating the nominal load and resistance values and then applying the statistical parameters for each of the detail categories which can be found in Table 1.1. Insufficient fatigue data exists for the constant amplitude fatigue threshold (CAFT) portions of the fatigue design curves for the infinite fatigue design life (Fatigue II limit state). In consultation with AASHTO T-14 and the AISI Bridge Task Force it has been accepted to use the statistical parameters for the sloping portions of these curves for the constant amplitude fatigue thresholds of the different

bridge detail categories. In AASHTO LRFD Bridge Design Specifications, the Fatigue II limit state currently has a load factor of 0.75 for all of the detail categories and a coefficient of variation of 0.07 [1]. The nominal resistance values were determined using the following equation which results from setting the AASHTO fatigue resistance equation 6.6.1.2.5-2 equal to the design fatigue load which is normalized to a stress range equal to 1 ksi.

$$R = A / 0.75^3 \quad (3.1)$$

Where

R = resistance

A = constant taken from AASHTO Table 6.6.1.2.5-1 for the various detail categories

The simulations for both limit states were completed using a total of 10,000 replicates to achieve a sufficient number of failures. The resulting reliability indices are reported in Table 3.1. It can be seen that the reliability indices are relatively uniform with using the current AASHTO specifications for the Fatigue I and Fatigue II limit states.

Table 3.1 Current reliability indices using AASHTO Fatigue I and Fatigue II limit states.

Category	β for Fatigue I	β for Fatigue II
A	1.2	1.0
B	1.1	0.9
B'	1.5	1.0
C & C'	1.2	0.9
D	2.0	1.2
E	0.9	0.7
E'	1.7	1.3

3.2 Target Reliability Index

The calculated reliability indices for the wide array of bridge details using the current AASHTO specifications were evaluated to determine the adequacy of the associated current reliability level. These current reliability indices serve as a basis in determining the target reliability index. The target reliability index is selected as to provide a uniform safety margin for all bridge details. The target reliability was selected to be 1.0 for both Fatigue I and Fatigue II limit states based upon the current reliability indices that can be seen in Table 3.1 and engineering judgement.

Chapter 4

LOAD AND RESISTANCE FACTORS

Load and resistance factors were selected to achieve the desired level of safety for bridges. The load factors were selected based on a statistical model using the bias factor and coefficient of variation as the primary statistical parameters within the model. The resistance factors were determined so that the reliability of the various bridge details is close to the target reliability index of 1.0.

Based on the work conducted by Nowak [1] it is suggested that the current load factor of 1.5 for the Fatigue I limit state be increased to 2.0 to account for current and projected truck loads. Similarly, it is proposed that the load factor of 0.75 for the Fatigue II limit state be increased to a value of 0.80. The coefficients of variation are 1.12 and 0.07 for Fatigue I and II limit states respectively [1].

The reliability analysis was then performed as described in the previous chapter using the proposed load factors to calculate the appropriate resistance factors. It was determined that the resistance factors remain a constant value of 1.0 for all of the bridge detail categories. Table 4.1 shows the resulting reliability indices and proposed load and resistance factors for AASHTO.

Table 4.1 Proposed load and resistance factors with the associated reliability indices (Beta).

Category	Fatigue I Limit State			Fatigue II Limit State		
	Beta	Load Factor	Resistance Factor	Beta	Load Factor	Resistance Factor
A	1.20	2.00	1.00	1.00	0.80	1.00
B	1.10	2.00	1.00	0.90	0.80	1.00
B'	1.50	2.00	1.00	1.00	0.80	1.00
C & C'	1.10	2.00	1.00	1.00	0.80	1.00
D	2.00	2.00	1.00	1.30	0.80	1.00
E	0.90	2.00	1.00	1.00	0.80	1.00
E'	1.70	2.00	1.00	1.40	0.80	1.00

Chapter 5

CONCLUSION

The fatigue limit states for steel girder bridges in the current AASHTO LRFD Bridge Design Specifications are calibrated according to the procedure presented in NCHRP Report 368 [4]. This calibration procedure to select load and resistance factors includes load and resistance models, reliability analysis, and finally the development of load and resistance factors.

The fatigue resistance model includes data from a comprehensive database for various welded steel bridge detail types subjected to constant and variable amplitude fatigue loading that was developed by Keating and Fisher [3]. A relationship between the number of cycles to failure and the stress range is developed to more accurately determine the statistical parameters of the data set. This relationship is reflected in the chosen fatigue parameter with the following form:

$$S_{fi} = (N * S_{ri}^3)^{1/3} \quad (2.4)$$

The fatigue data is plotted using the above relationship on normal probability plots, as the data is assumed to be normally distributed. The data within the probability plots are filtered and the statistical parameters for each detail category are determined.

The reliability analyses are performed using these statistical parameters and the current AASHTO specifications to determine the reliability indices and thus choose target reliability indices. New load and resistance factors and their respective

combinations for the Fatigue I and Fatigue II limit states are calculated as to achieve the chosen target reliability indices for the various detail types.

It is proposed that the load factors for the Fatigue I and Fatigue II limit states be changed to 2.0 and 0.80 respectively for all detail categories [1]. The resistance factors for these fatigue limit states should remain a constant value of 1.0 for all detail categories as to achieve the chosen target reliability indices of 1.0.

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Appendix A

NORMAL PROBABILITY PLOTS OF FATIGUE DATA FOR THE VARIOUS DETAIL CATEGORIES

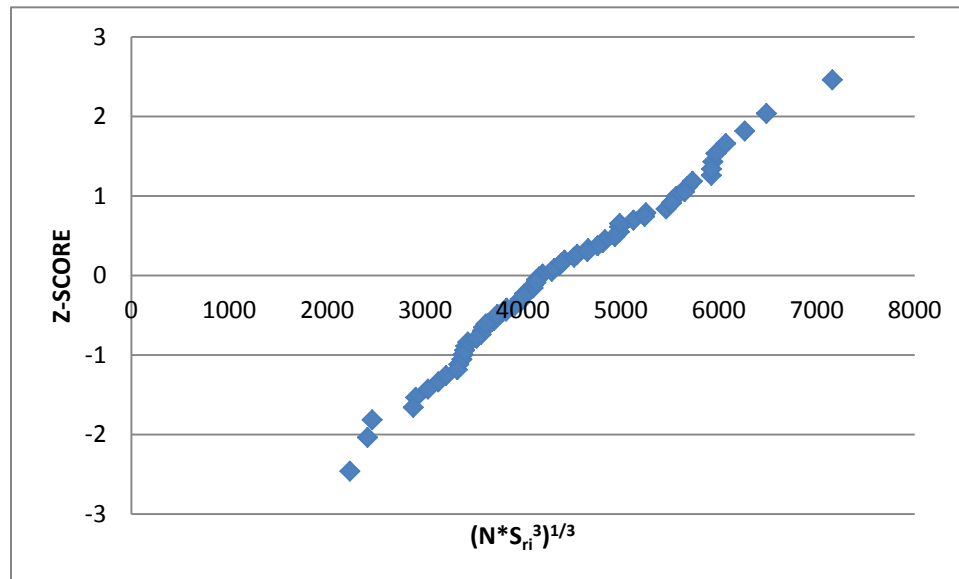


Figure A.1 Normal probability plot of detail category A fatigue data.

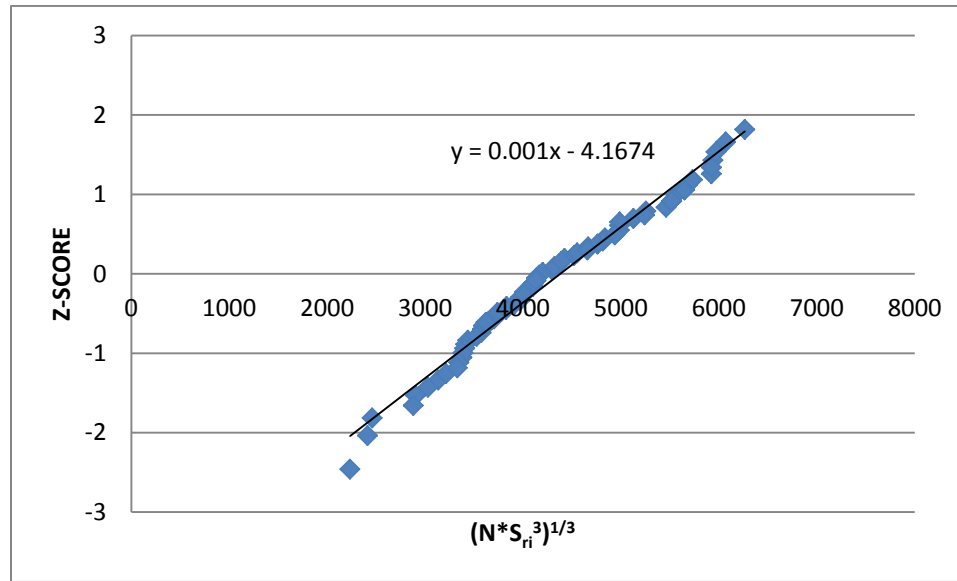


Figure A.2 Normal probability plot of detail category A truncated fatigue data with best fit line.

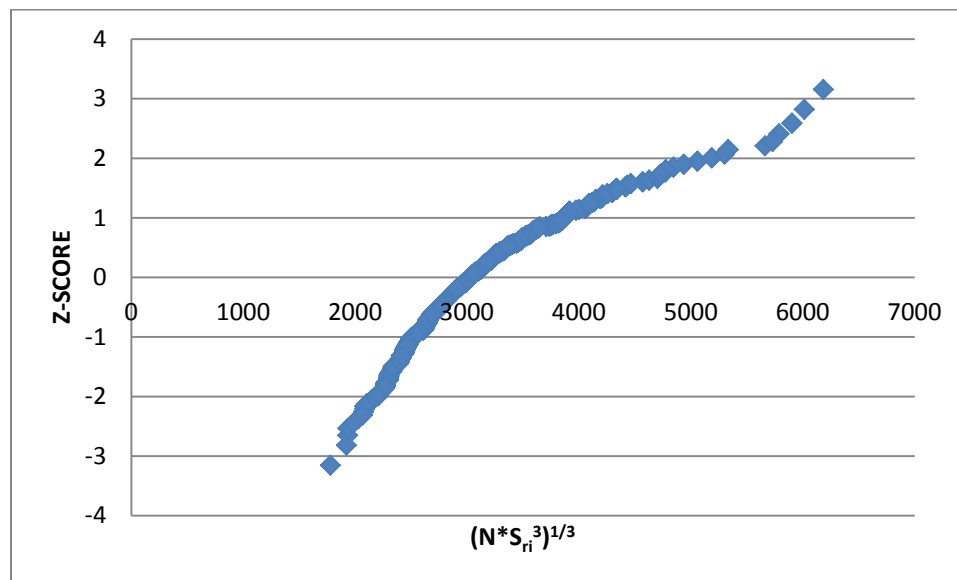


Figure A.3 Normal probability plot of detail category B fatigue data.

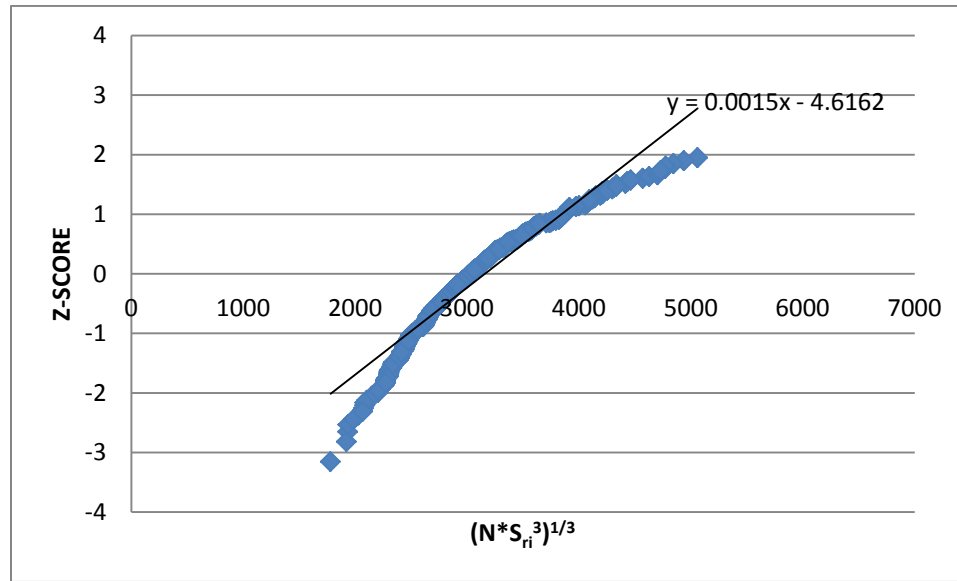


Figure A.4 Normal probability plot of detail category B truncated fatigue data with best fit line.

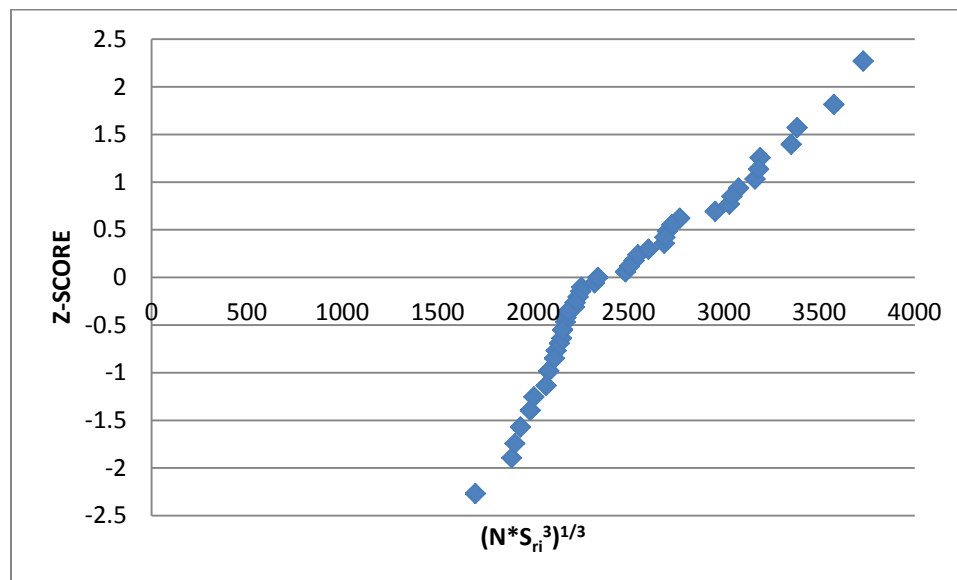


Figure A.5 Normal probability plot of detail category B' fatigue data.

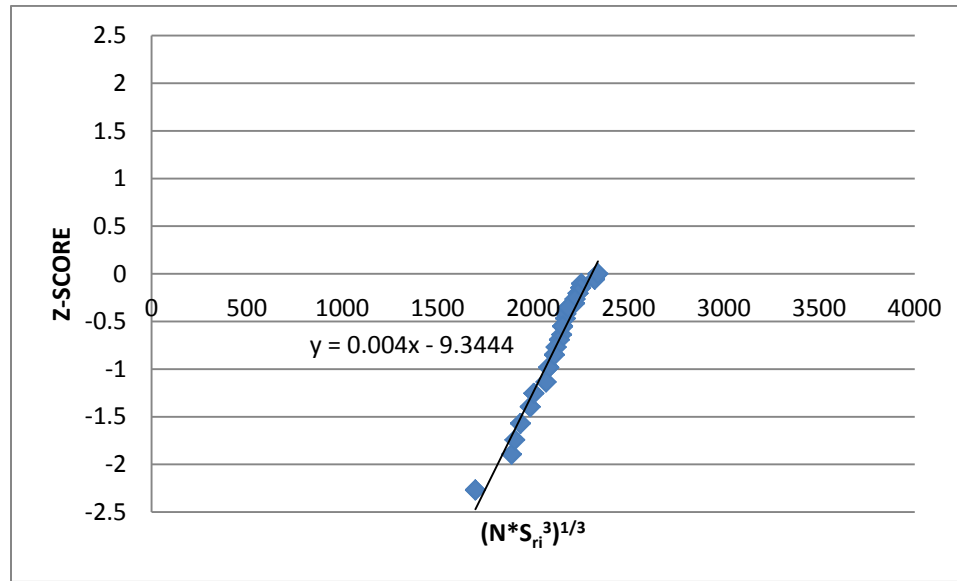


Figure A.6 Normal probability plot of detail category B' truncated fatigue data with best fit line.

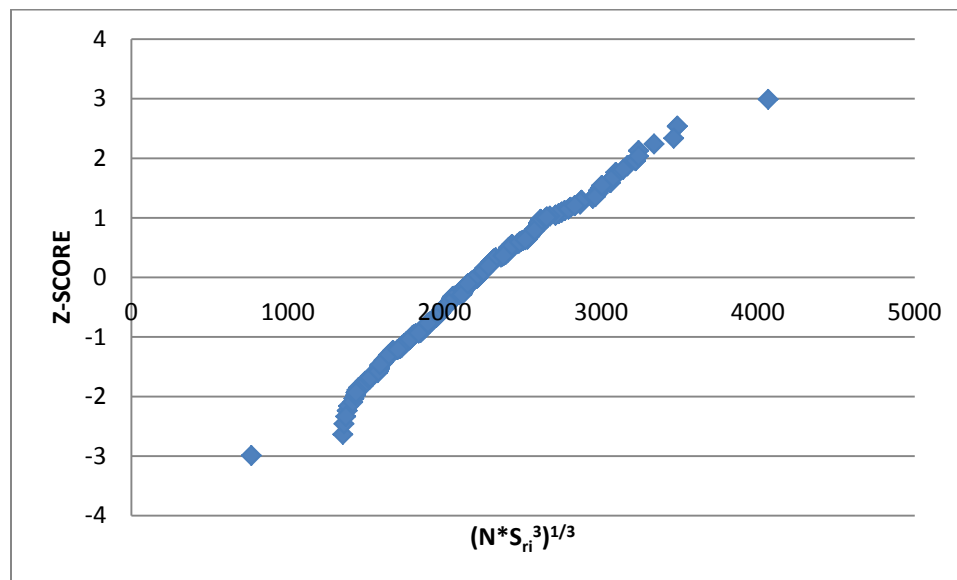


Figure A.7 Normal probability plot of detail categories C and C' fatigue data.

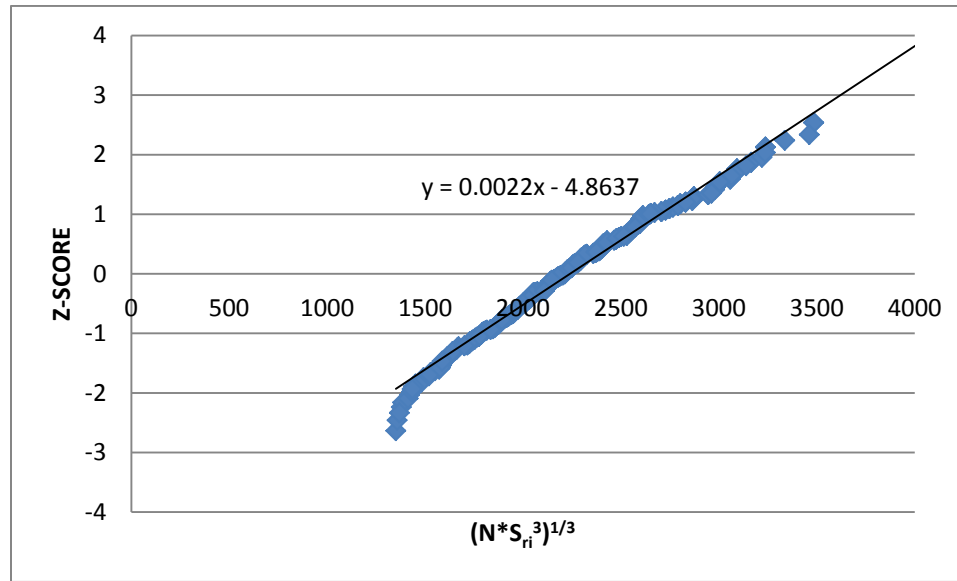


Figure A.8 Normal probability plot of detail categories C and C' truncated fatigue data with best fit line.

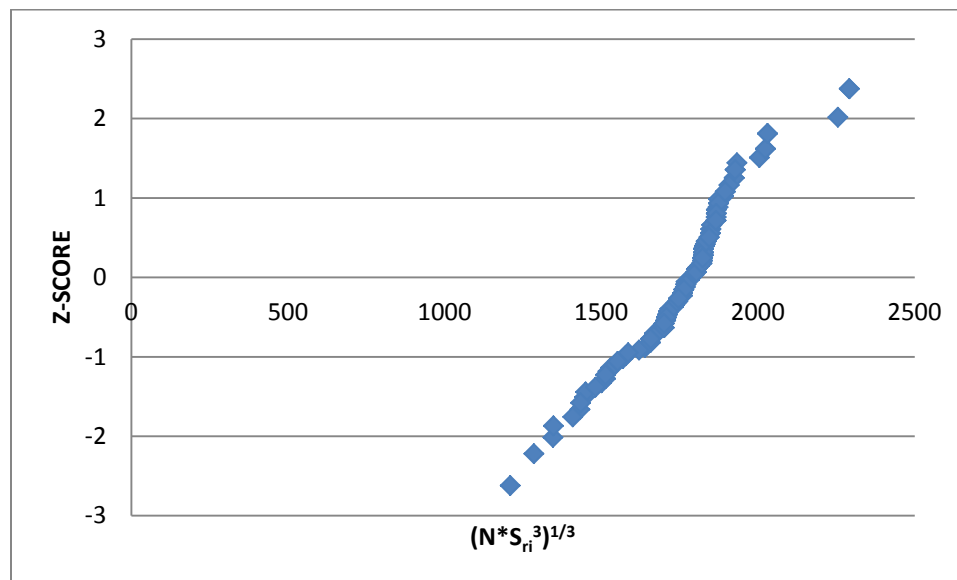


Figure A.9 Normal probability plot of detail category D fatigue data.

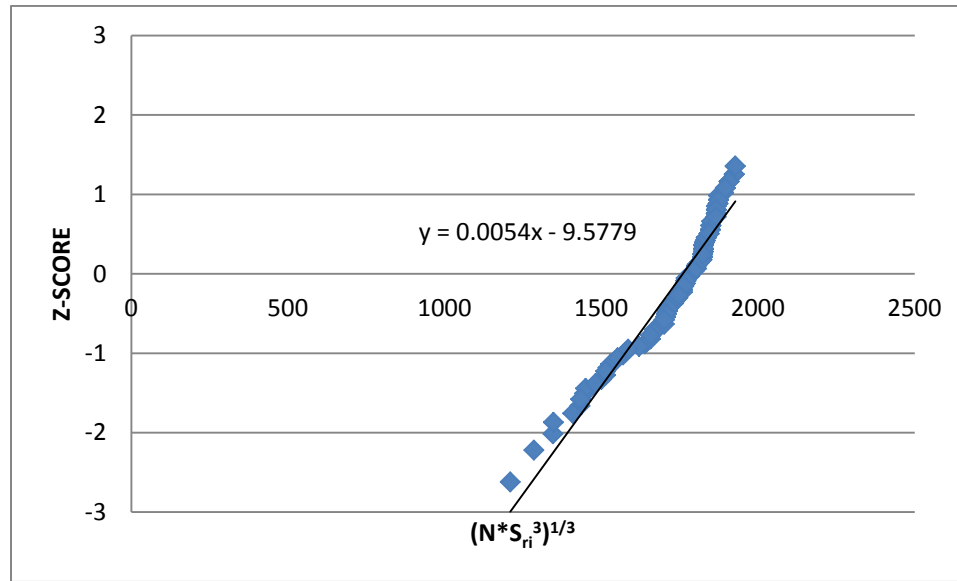


Figure A.10 Normal probability plot of detail category D truncated fatigue data with best fit line.

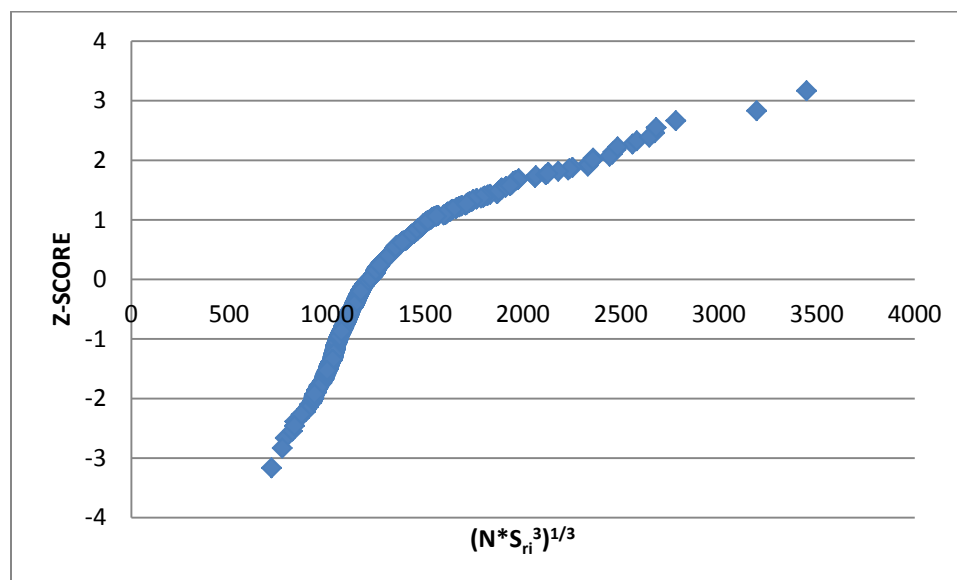


Figure A.11 Normal probability plot of detail category E fatigue data.

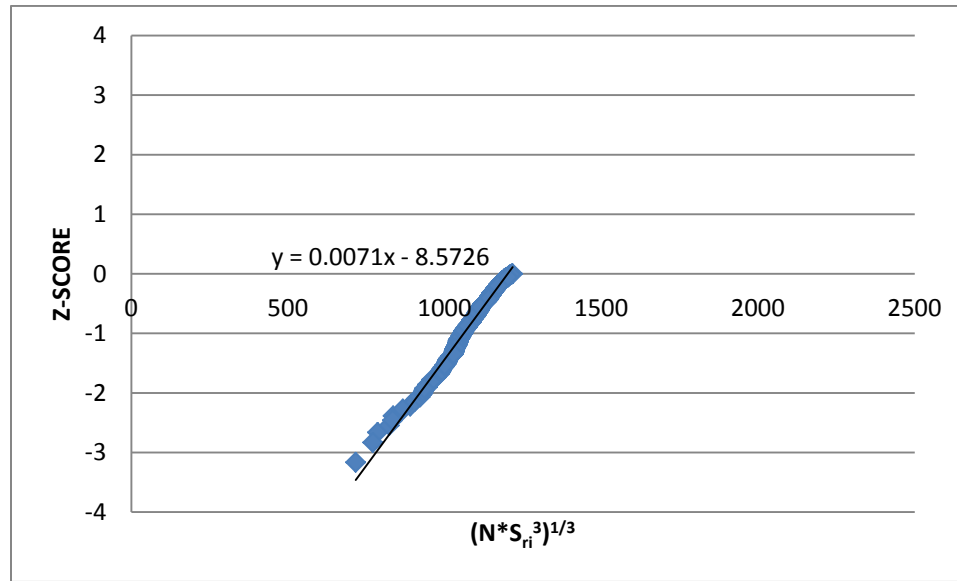


Figure A.12 Normal probability plot of detail category E truncated fatigue data with best fit line.

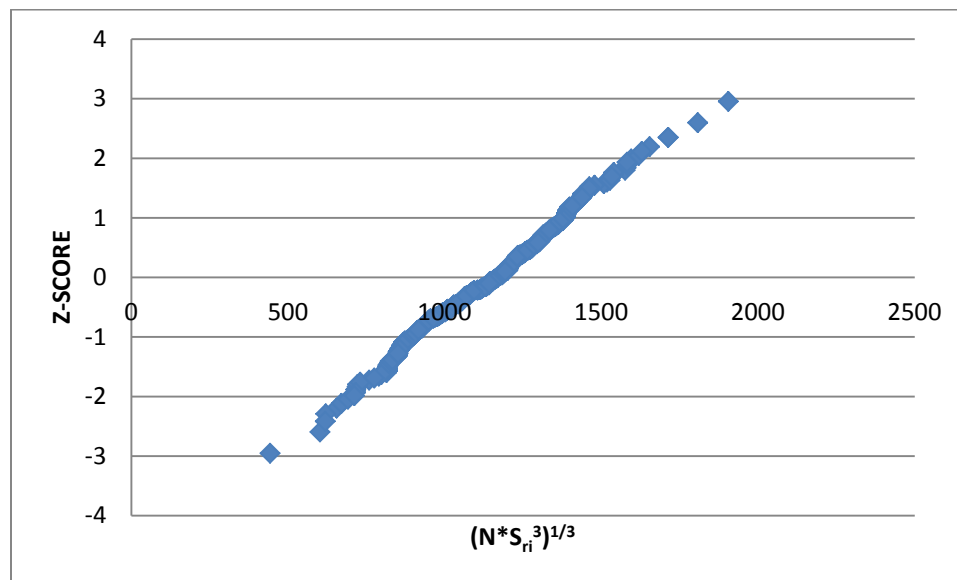


Figure A.13 Normal probability plot of detail category E' fatigue data.

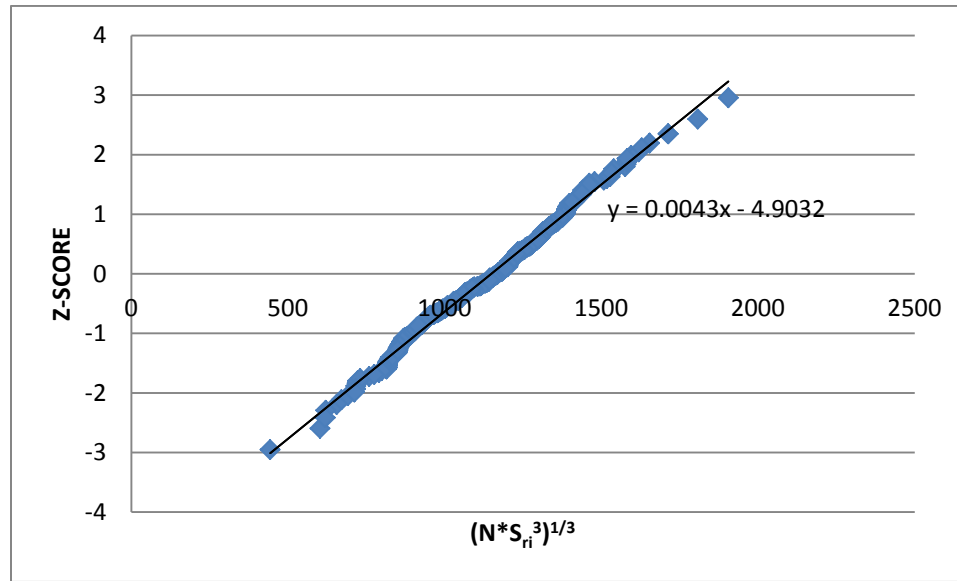


Figure A.14 Normal probability plot of detail category E' truncated fatigue data with best fit line.

Appendix B

S-N CURVES WITH AASHTO FATIGUE DESIGN CURVES FOR THE VARIOUS DETAIL CATEGORIES

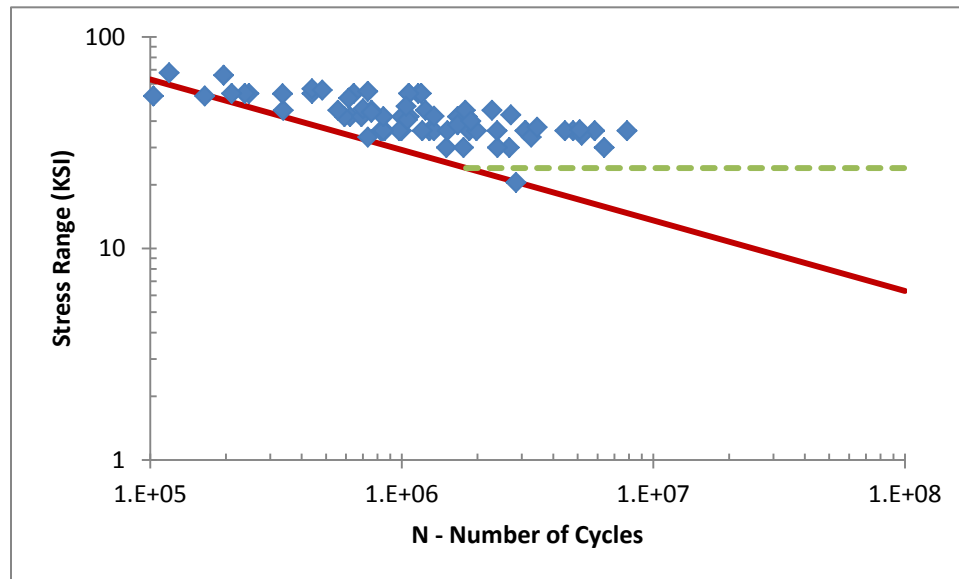


Figure B.1 Stress range versus number of cycles for category A with fatigue design curve

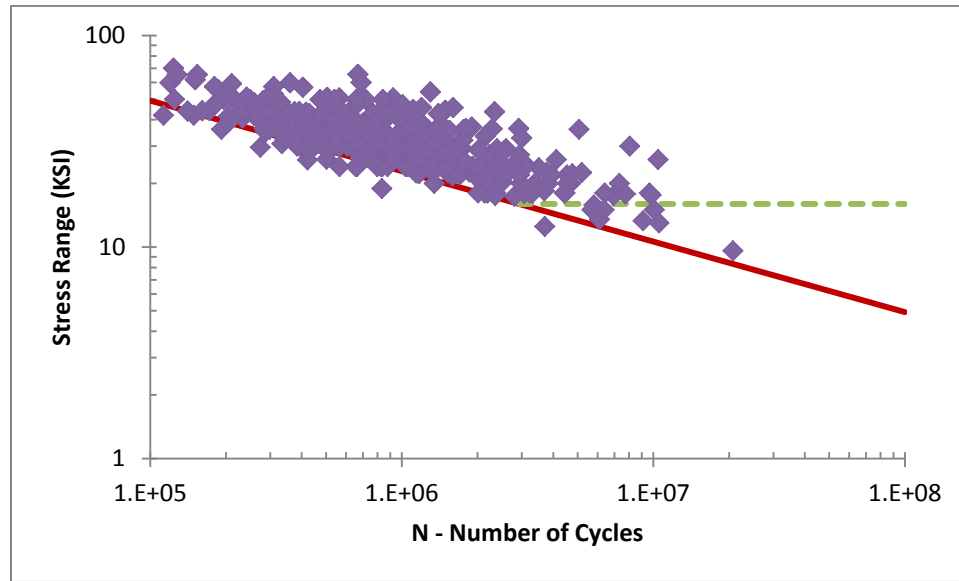


Figure B.2 Stress range versus number of cycles for category B with fatigue design curve

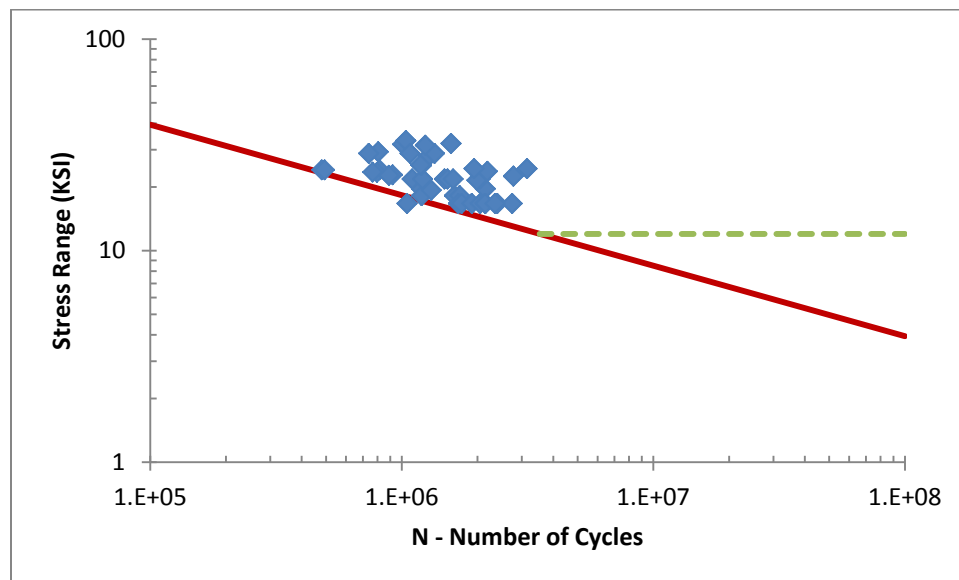


Figure B.3 Stress range versus number of cycles for category B' with fatigue design curve

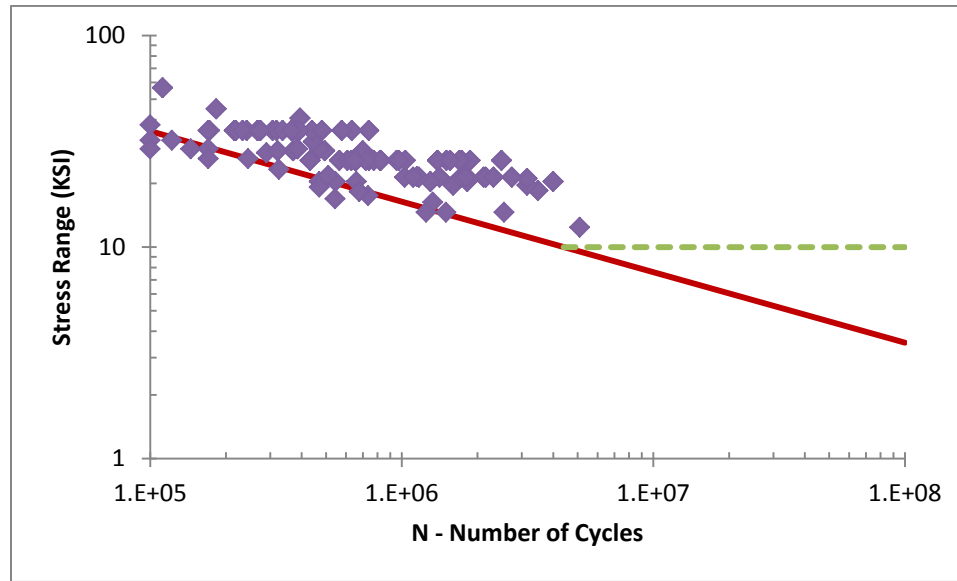


Figure B.4 Stress range versus number of cycles for category C with fatigue design curve

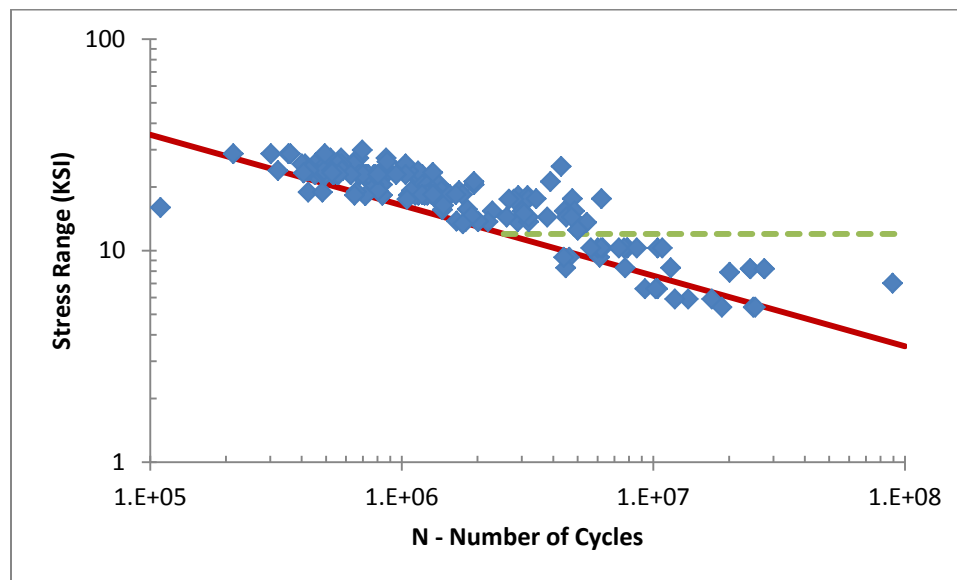


Figure B.5 Stress range versus number of cycles for category C' with fatigue design curve

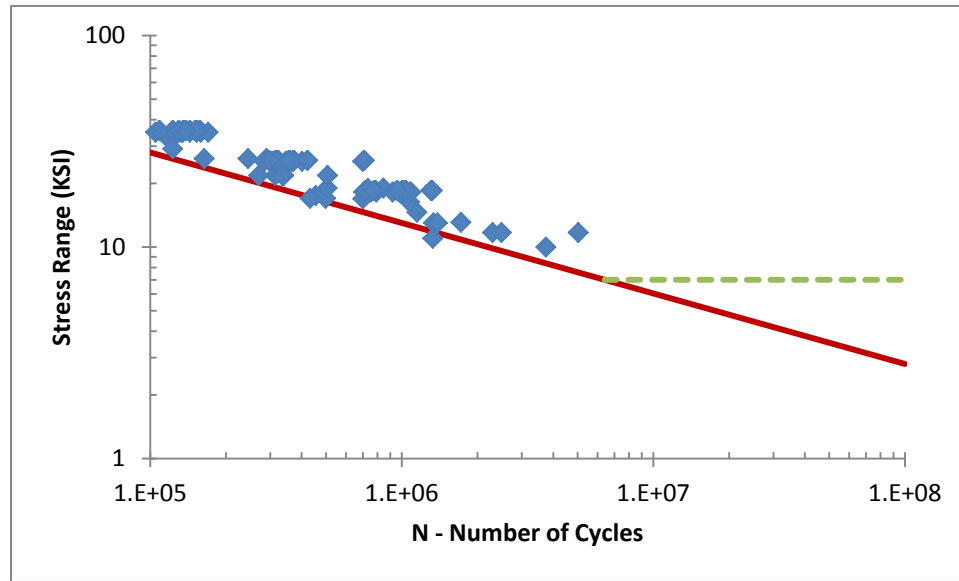


Figure B.6 Stress range versus number of cycles for category D with fatigue design curve

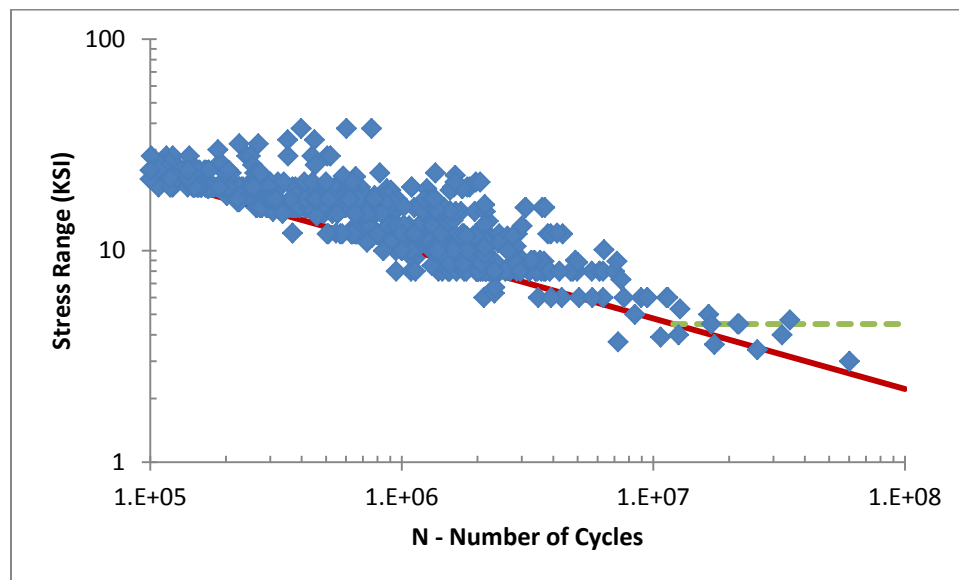


Figure B.7 Stress range versus number of cycles for category E with fatigue design curve

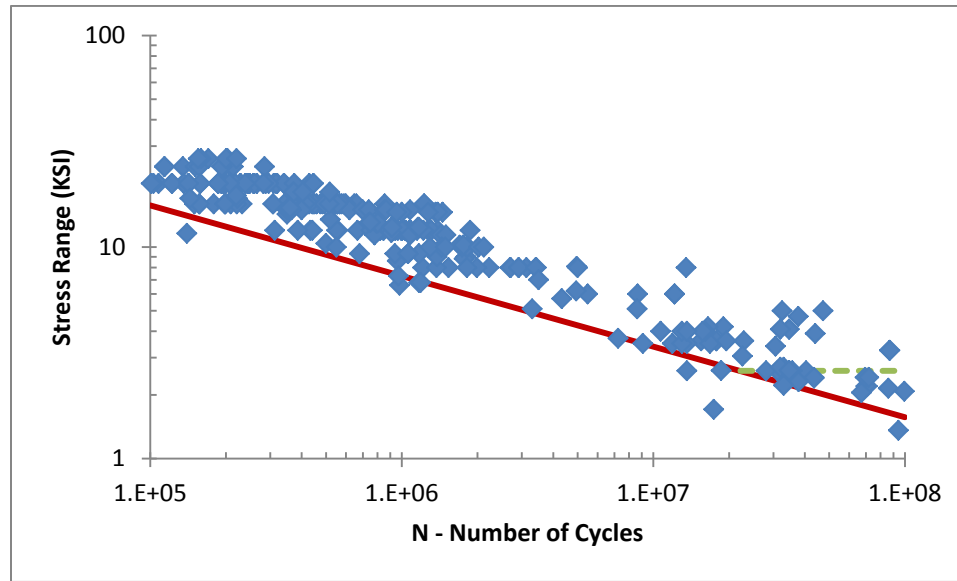


Figure B.8 Stress range versus number of cycles for category E' with fatigue design curve

Appendix C

FATIGUE TEST DATA

Table C.1 Fatigue test data (Continued pp.34-114). [3] [7]

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	40	0NC1CRA131	16	393000	crack	-6	10	36
Imp.	Const.	40	0NC1CWA132	16	393000	crack	-6	10	36
Imp.	Const.	40	0NC1CWA133	16	337000	crack	-6	10	36
Imp.	Const.	40	0NC1CRA141	20	192000	crack	-6	14	36
Imp.	Const.	40	0NC1CWA142	20	168000	crack	-6	14	36
Imp.	Const.	40	0NC1CWA143	20	288000	crack	-6	14	36
Imp.	Const.	40	0NC1CRA144	20	176000	crack	-6	14	36
Imp.	Const.	40	0NC1CRA151	24	114000	crack	-6	18	36
Imp.	Const.	40	0NC1CWA152	24	94000	crack	-6	18	36
Imp.	Const.	40	0NC1CWA153	24	85000	crack	-6	18	36
Imp.	Const.	40	0NC1CRA221	12	798000	crack	2	14	36
Imp.	Const.	40	0NC1CWA222	12	655000	crack	2	14	36
Imp.	Const.	40	0NC1CWA223	12	724000	crack	2	14	36
Imp.	Const.	40	0NC1CRA231	16	277000	crack	2	18	36
Imp.	Const.	40	0NC1CWA232	16	317000	crack	2	18	36
Imp.	Const.	40	0NC1CWA233	16	329000	crack	2	18	36
Imp.	Const.	40	0NC1CRA234	16	325000	crack	2	18	36
Imp.	Const.	40	0NC1CRA241	20	198000	crack	2	18	36
Imp.	Const.	40	0NC1CWA242	20	159000	crack	2	18	36
Imp.	Const.	40	0NC1CWA243	20	148000	crack	2	18	36
Imp.	Const.	40	0NC1CRA311	8	2227000	crack	10	18	36
Imp.	Const.	40	0NC1CWA312	8	2693000	crack	10	18	36
Imp.	Const.	40	0NC1CWA313	8	2453000	crack	10	18	36
Imp.	Const.	40	0NC1CRA321	12	676000	crack	10	22	36
Imp.	Const.	40	0NC1CWA322	12	778000	crack	10	22	36
Imp.	Const.	40	0NC1CWA323	12	658000	crack	10	22	36
Imp.	Const.	40	0NC1CRA324	12	739000	crack	10	22	36
Imp.	Const.	40	0NC1CRA331	16	301000	crack	10	26	36

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	40	0NC1CWA332	16	344000	crack	10	26	36
Imp.	Const.	40	0NC1CWA333	16	297000	crack	10	26	36
Imp.	Const.	40	0NC1CRA341	20	108000	crack	10	30	36
Imp.	Const.	40	0NC1CWA342	20	180000	crack	10	30	36
Imp.	Const.	40	0NC1CWA343	20	172000	crack	10	30	36
Imp.	Const.	40	0NC1CRA344	20	166000	crack	10	30	36
Imp.	Const.	40	0NC1CRB131	16	418000	crack	-6	10	50
Imp.	Const.	40	0NC1CWB132	16	356000	crack	-6	10	50
Imp.	Const.	40	0NC1CWB133	16	290000	crack	-6	10	50
Imp.	Const.	40	0NC1CRB141	20	187000	crack	-6	14	50
Imp.	Const.	40	0NC1CWB142	20	154000	crack	-6	14	50
Imp.	Const.	40	0NC1CBW143	20	171000	crack	-6	14	50
Imp.	Const.	40	0NC1CRB144	20	231000	crack	-6	14	50
Imp.	Const.	40	0NC1CRB151	24	108000	crack	-6	18	50
Imp.	Const.	40	0NC1CRB221	12	842000	crack	2	14	50
Imp.	Const.	40	0NC1CWB222	12	667000	crack	2	14	50
Imp.	Const.	40	0NC1CWB223	12	709000	crack	2	14	50
Imp.	Const.	40	0NC1CRB231	16	366000	crack	2	18	50
Imp.	Const.	40	0NC1CWB232	16	264000	crack	2	18	50
Imp.	Const.	40	0NC1CWB233	16	318000	crack	2	18	50
Imp.	Const.	40	0NC1CRB234	16	369000	crack	2	18	50
Imp.	Const.	40	0NC1CRB241	20	177000	crack	2	22	50
Imp.	Const.	40	0NC1CWB242	20	172000	crack	2	22	50
Imp.	Const.	40	0NC1CWB243	20	149000	crack	2	22	50
Imp.	Const.	40	0NC1CWB251	24	83100	crack	2	26	50
Imp.	Const.	40	0NC1CWB301	6	6317000	crack	10	16	50
Imp.	Const.	40	0NC1CRB311	8	2443000	crack	10	18	50
Imp.	Const.	40	0NC1CWB312	8	1977000	crack	10	18	50
Imp.	Const.	40	0NC1CWC313	8	2278000	crack	10	18	50
Imp.	Const.	40	0NC1CRB321	12	702000	crack	10	22	50
Imp.	Const.	40	0NC1CWB322	12	757000	crack	10	22	50
Imp.	Const.	40	0NC1CWB323	12	747000	crack	10	22	50
Imp.	Const.	40	0NC1CRB324	12	658000	crack	10	22	50
Imp.	Const.	40	0NC1CRB331	16	273000	crack	10	26	50
Imp.	Const.	40	0NC1CWB332	16	314000	crack	10	26	50
Imp.	Const.	40	0NC1CWB333	16	295000	crack	10	26	50

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	40	0NC1CRB341	20	178000	crack	10	30	50
Imp.	Const.	40	0NC1CWB342	20	204000	crack	10	30	50
Imp.	Const.	40	0NC1CWB343	20	160000	crack	10	30	50
Imp.	Const.	40	0NC1CRB344	20	200000	crack	10	30	50
Imp.	Const.	40	0NC1CRC131	16	395000	crack	-6	10	100
Imp.	Const.	40	0NC1CWC132	16	483000	crack	-6	10	100
Imp.	Const.	40	0NC1CWC133	16	547000	crack	-6	10	100
Imp.	Const.	40	0NC1CRC141	20	243000	crack	-6	14	100
Imp.	Const.	40	0NC1CWC142	20	295000	crack	-6	14	100
Imp.	Const.	40	0NC1CWC143	20	254000	crack	-6	14	100
Imp.	Const.	40	0NC1CRC144	20	282000	crack	-6	14	100
Imp.	Const.	40	0NC1CRC151	24	157000	crack	-6	18	100
Imp.	Const.	40	0NC1CWC152	24	137000	crack	-6	18	100
Imp.	Const.	40	0NC1CWC153	24	171000	crack	-6	18	100
Imp.	Const.	40	0NC1CRC221	12	844000	crack	2	14	100
Imp.	Const.	40	0NC1CWC222	12	848000	crack	2	14	100
Imp.	Const.	40	0NC1CWC223	12	1311000	crack	2	14	100
Imp.	Const.	40	0NC1CRC231	16	429000	crack	2	18	100
Imp.	Const.	40	0NC1CWC232	16	382000	crack	2	18	100
Imp.	Const.	40	0NC1CWC233	16	498000	crack	2	18	100
Imp.	Const.	40	0NC1CRC234	16	378000	crack	2	18	100
Imp.	Const.	40	0NC1CRC241	20	192000	crack	2	22	100
Imp.	Const.	40	0NC1CWC242	20	243000	crack	2	22	100
Imp.	Const.	40	0NC1CWC243	20	260000	crack	2	22	100
Imp.	Const.	40	0NC1CWC251	24	154000	crack	2	26	100
Imp.	Const.	40	0NC1CRC311	8	1989000	crack	10	18	100
Imp.	Const.	40	0NC1CWC312	8	5699000	crack	10	18	100
Imp.	Const.	40	0NC1CWC313	8	3409000	crack	10	18	100
Imp.	Const.	40	0NC1CRC321	12	822000	crack	10	22	100
Imp.	Const.	40	0NC1CWC322	12	1005000	crack	10	22	100
Imp.	Const.	40	0NC1CWC323	12	1220000	crack	10	22	100
Imp.	Const.	40	0NC1CRC324	12	755000	crack	10	22	100
Imp.	Const.	40	0NC1CRC331	16	325000	crack	10	26	100
Imp.	Const.	40	0NC1CWC332	16	378000	crack	10	26	100
Imp.	Const.	40	0NC1CWC333	16	441000	crack	10	26	100
Imp.	Const.	40	0NC1CRC341	20	196000	crack	10	30	100

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	40	0NC1CWC342	20	245000	crack	10	30	100
Imp.	Const.	40	0NC1CWC343	20	220000	crack	10	30	100
Imp.	Const.	40	0NC1CRC344	20	174000	crack	10	30	100
Imp.	Const.	30	0NC1CRA131	16	555000	crack	-6	10	36
Imp.	Const.	30	0NC1CWA132	16	553000	crack	-6	10	36
Imp.	Const.	30	0NC1CWA133	16	484000	crack	-6	10	36
Imp.	Const.	30	0NC1CRA141	20	192000	crack	-6	14	36
Imp.	Const.	30	0NC1CWA142	20	228000	crack	-6	14	36
Imp.	Const.	30	0NC1CWA143	20	288000	crack	-6	14	36
Imp.	Const.	30	0NC1CRA144	20	243000	crack	-6	14	36
Imp.	Const.	30	0NC1CRA151	24	114000	crack	-6	18	36
Imp.	Const.	30	0NC1CWA152	24	135000	crack	-6	18	36
Imp.	Const.	30	0NC1CWA153	24	209000	crack	-6	18	36
Imp.	Const.	30	0NC1CRA221	12	1074000	crack	2	14	36
Imp.	Const.	30	0NC1CWA222	12	1272000	crack	2	14	36
Imp.	Const.	30	0NC1CWA223	12	1392000	crack	2	14	36
Imp.	Const.	30	0NC1CRA231	16	364000	crack	2	18	36
Imp.	Const.	30	0NC1CWA232	16	566000	crack	2	18	36
Imp.	Const.	30	0NC1CWA233	16	648000	crack	2	18	36
Imp.	Const.	30	0NC1CRA234	16	546000	crack	2	18	36
Imp.	Const.	30	0NC1CRA241	20	248000	crack	2	22	36
Imp.	Const.	30	0NC1CWA242	20	246000	crack	2	22	36
Imp.	Const.	30	0NC1CWA243	20	310000	crack	2	22	36
Imp.	Const.	30	0NC1CRA311	8	2227000	crack	10	18	36
Imp.	Const.	30	0NC1CWA312	8	2693000	crack	10	18	36
Imp.	Const.	30	0NC1CWA313	8	3428000	crack	10	18	36
Imp.	Const.	30	0NC1CRA321	12	845000	crack	10	22	36
Imp.	Const.	30	0NC1CWA322	12	945000	crack	10	22	36
Imp.	Const.	30	0NC1CWA323	12	1039000	crack	10	22	36
Imp.	Const.	30	0NC1CRA324	12	812000	crack	10	22	36
Imp.	Const.	30	0NC1CRA331	16	379000	crack	10	26	36
Imp.	Const.	30	0NC1CWA332	16	441000	crack	10	26	36
Imp.	Const.	30	0NC1CWA333	16	410000	crack	10	26	36
Imp.	Const.	30	0NC1CRA341	20	108000	crack	10	30	36
Imp.	Const.	30	0NC1CWA342	20	207000	crack	10	30	36
Imp.	Const.	30	0NC1CWA343	20	196000	crack	10	30	36

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	30	0NC1CRA344	20	193000	crack	10	30	36
Imp.	Const.	30	0NC1CRB131	16	660000	crack	-6	10	50
Imp.	Const.	30	0NC1CWB132	16	568000	crack	-6	10	50
Imp.	Const.	30	0NC1CWB133	16	530000	crack	-6	10	50
Imp.	Const.	30	0NC*CRB141	20	187000	crack	-6	14	50
Imp.	Const.	30	0NC1CWB142	20	318000	crack	-6	14	50
Imp.	Const.	30	0NC1CWB143	20	320000	crack	-6	14	50
Imp.	Const.	30	0NC1CRB144	20	317000	crack	-6	14	50
Imp.	Const.	30	0NC1CRB151	24	151000	crack	-6	18	50
Imp.	Const.	30	0NC1CRB221	12	1005000	crack	2	14	50
Imp.	Const.	30	0NC*CWB222	12	667000	crack	2	14	50
Imp.	Const.	30	0NC1CWB223	12	1151000	crack	2	14	50
Imp.	Const.	30	0NC1CRB231	16	366000	crack	2	18	50
Imp.	Const.	30	0NC1CWB232	16	475000	crack	2	18	50
Imp.	Const.	30	0NC1CWB234	16	424000	crack	2	18	50
Imp.	Const.	30	0NC1CRB241	20	257000	crack	2	22	50
Imp.	Const.	30	0NC1CWB242	20	249000	crack	2	22	50
Imp.	Const.	30	0NC1CWB243	20	258000	crack	2	22	50
Imp.	Const.	30	0NC1CWB251	24	114000	crack	2	26	50
Imp.	Const.	30	0NC1CWB301	6	5488000	crack	10	16	50
Imp.	Const.	30	0NC1CRB311	8	2714000	crack	10	18	50
Imp.	Const.	30	0NC1CWB312	8	3132000	crack	10	18	50
Imp.	Const.	30	0NC1CWB313	8	2920000	crack	10	18	50
Imp.	Const.	30	0NC1CRB321	12	966000	crack	10	22	50
Imp.	Const.	30	0NC1CWB322	12	1086000	crack	10	22	50
Imp.	Const.	30	0NC1CWB323	12	994000	crack	10	22	50
Imp.	Const.	30	0NC1CRB324	12	931000	crack	10	22	50
Imp.	Const.	30	0NC1CRB331	16	446000	crack	10	26	50
Imp.	Const.	30	0NC1CWB332	16	459000	crack	10	26	50
Imp.	Const.	30	0NC1CWB333	16	451000	crack	10	26	50
Imp.	Const.	30	0NC1CRB341	20	229000	crack	10	30	50
Imp.	Const.	30	0NC1CWB342	20	266000	crack	10	30	50
Imp.	Const.	30	0NC1CWB343	20	218000	crack	10	30	50
Imp.	Const.	30	0NC1CRB344	20	200000	crack	10	30	50
Imp.	Const.	30	0NC1CRC131	16	515000	crack	-6	10	100
Imp.	Const.	30	0NC1CWC132	16	1228000	crack	-6	10	100

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	30	0NC1CWC133	16	855000	crack	-6	10	100
Imp.	Const.	30	0NC1CRC141	20	341000	crack	-6	14	100
Imp.	Const.	30	0NC1CWC142	20	429000	crack	-6	14	100
Imp.	Const.	30	0NC1CWC143	20	446000	crack	-6	14	100
Imp.	Const.	30	0NC1CRC144	20	282000	crack	-6	14	100
Imp.	Const.	30	0NC1CRC151	24	157000	crack	-6	18	100
Imp.	Const.	30	0NC1CWC152	24	214000	crack	-6	18	100
Imp.	Const.	30	0NC1CWC153	24	285000	crack	-6	18	100
Imp.	Const.	30	0NC1CRC221	12	1031000	crack	2	14	100
Imp.	Const.	30	0NC*CWC222	12	848000	crack	2	14	100
Imp.	Const.	30	0NC1CWC223	12	1311000	crack	2	14	100
Imp.	Const.	30	0NC1CRC231	16	429000	crack	2	18	100
Imp.	Const.	30	0NC1CWC232	16	542000	crack	2	18	100
Imp.	Const.	30	0NC1CWC233	16	599000	crack	2	18	100
Imp.	Const.	30	0NC1CRC234	16	493000	crack	2	18	100
Imp.	Const.	30	0NC1CRC241	20	192000	crack	2	22	100
Imp.	Const.	30	0NC1CWC242	20	340000	crack	2	22	100
Imp.	Const.	30	0NC1CWC243	20	260000	crack	2	22	100
Imp.	Const.	30	0NC1CWC251	24	193000	crack	2	26	100
Imp.	Const.	30	0NC1CRC311	8	1989000	crack	10	18	100
Imp.	Const.	30	0NC1CWC312	8	2916000	crack	10	18	100
Imp.	Const.	30	0NC1CWC313	8	3409000	crack	10	18	100
Imp.	Const.	30	0NC1CRC321	12	822000	crack	10	22	100
Imp.	Const.	30	0NC1CWC322	12	1005000	crack	10	22	100
Imp.	Const.	30	0NC1CWC323	12	1220000	crack	10	22	100
Imp.	Const.	30	0NC1CRC324	12	755000	crack	10	22	100
Imp.	Const.	30	0NC1CRC331	16	413000	crack	10	26	100
Imp.	Const.	30	0NC1CWC332	16	590000	crack	10	26	100
Imp.	Const.	30	0NC1CWC333	16	578000	crack	10	26	100
Imp.	Const.	30	0NC1CRC341	20	239000	crack	10	30	100
Imp.	Const.	30	0NC1CWC342	20	374000	crack	10	30	100
Imp.	Const.	30	0NC1CWC343	20	296000	crack	10	30	100
Imp.	Const.	30	0NC1CRC344	20	207000	crack	10	30	100
Imp.	Const.	40	0NC1CMA131	16	427000	crack	-6	10	36
Imp.	Const.	40	0NC1CMA132	16	412000	crack	-6	10	36
Imp.	Const.	40	0NC1CMA133	16	593000	crack	-6	10	36

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	40	0NC1CMA141	20	150000	crack	-6	14	36
Imp.	Const.	40	0NC1CMA142	20	190000	crack	-6	14	36
Imp.	Const.	40	0NC1CMA143	20	218000	crack	-6	14	36
Imp.	Const.	40	0NC1CMA151	24	112000	crack	-6	18	36
Imp.	Const.	40	0NC1CMA152	24	80800	crack	-6	18	36
Imp.	Const.	40	0NC1CMA153	24	101000	crack	-6	18	36
Imp.	Const.	40	0NC1CMA221	12	904000	crack	2	14	36
Imp.	Const.	40	0NC1CMA222	12	1034000	crack	2	14	36
Imp.	Const.	40	0NC1CMA223	12	755000	crack	2	14	36
Imp.	Const.	40	0NC1CMA231	16	374000	crack	2	18	36
Imp.	Const.	40	0NC1CMA232	16	346000	crack	2	18	36
Imp.	Const.	40	0NC1CMA233	16	481000	crack	2	18	36
Imp.	Const.	40	0NC1CMA241	20	166000	crack	2	22	36
Imp.	Const.	40	0NC1CMA242	20	186000	crack	2	22	36
Imp.	Const.	40	0NC1CMA243	20	188000	crack	2	22	36
Imp.	Const.	40	0NC1CMA251	24	84500	crack	2	26	36
Imp.	Const.	40	0NC1CMA301	6	8946000	crack	10	16	36
Imp.	Const.	40	0NC1CMA311	8	3211000	crack	10	18	36
Imp.	Const.	40	0NC1CMA312	8	4979000	crack	10	18	36
Imp.	Const.	40	0NC1CMA313	8	4798000	crack	10	18	36
Imp.	Const.	40	0NC1CMA321	12	779000	crack	10	22	36
Imp.	Const.	40	0NC1CMA322	12	632000	crack	10	22	36
Imp.	Const.	40	0NC1CMA323	12	919000	crack	10	22	36
Imp.	Const.	40	0NC1CMA331	16	423000	crack	10	26	36
Imp.	Const.	40	0NC1CMA332	16	503000	crack	10	26	36
Imp.	Const.	40	0NC1CMA333	16	371000	crack	10	26	36
Imp.	Const.	40	0NC1CMA341	20	190000	crack	10	30	36
Imp.	Const.	40	0NC1CTA131	16	320000	crack	-6	10	36
Imp.	Const.	40	0NC1CTA132	16	392000	crack	-6	10	36
Imp.	Const.	40	0NC1CTA133	16	266000	crack	-6	10	36
Imp.	Const.	40	0NC1CTA141	20	160000	crack	-6	14	36
Imp.	Const.	40	0NC1CTA142	20	121000	crack	-6	14	36
Imp.	Const.	40	0NC1CTA143	20	123000	crack	-6	14	36
Imp.	Const.	40	0NC1CTA151	24	80700	crack	-6	18	36
Imp.	Const.	40	0NC1CTA152	24	105000	crack	-6	18	36
Imp.	Const.	40	0NC1CTA153	24	83300	crack	-6	18	36

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	40	0NC1CTA221	12	949000	crack	2	14	36
Imp.	Const.	40	0NC1CTA222	12	951000	crack	2	14	36
Imp.	Const.	40	0NC1CTA223	12	977000	crack	2	14	36
Imp.	Const.	40	0NC1CTA231	16	343000	crack	2	18	36
Imp.	Const.	40	0NC1CTA232	16	358000	crack	2	18	36
Imp.	Const.	40	0NC1CTA233	16	473000	crack	2	18	36
Imp.	Const.	40	0NC1CTA241	20	172000	crack	2	22	36
Imp.	Const.	40	0NC1CTA242	20	167000	crack	2	22	36
Imp.	Const.	40	0NC1CTA243	20	226000	crack	2	22	36
Imp.	Const.	40	0NC1CTA311	8	3729000	crack	10	18	36
Imp.	Const.	40	0NC1CTA312	8	3679000	crack	10	18	36
Imp.	Const.	40	0NC1CTA313	8	3218000	crack	10	18	36
Imp.	Const.	40	0NC1CTA321	12	1011000	crack	10	22	36
Imp.	Const.	40	0NC1CTA322	12	856000	crack	10	22	36
Imp.	Const.	40	0NC1CTA323	12	1186000	crack	10	22	36
Imp.	Const.	40	0NC1CTA331	16	334000	crack	10	26	36
Imp.	Const.	40	0NC1CTA332	16	598000	crack	10	26	36
Imp.	Const.	40	0NC1CTA333	16	433000	crack	10	26	36
Imp.	Const.	40	0NC1CTA341	20	185000	crack	10	30	36
Imp.	Const.	40	0NC1CTA342	20	141000	crack	10	30	36
Imp.	Const.	40	0NC1CTA343	20	274000	crack	10	30	36
Imp.	Const.	60	0NC1CBA131	16	353000	crack	-6	10	36
Imp.	Const.	60	0NC*CBA132	16	276000	crack	-6	10	36
Imp.	Const.	60	0NC1CBA133	16	291000	crack	-6	10	36
Imp.	Const.	60	0NC1CBA141	20	186000	crack	-6	14	36
Imp.	Const.	60	0NC1CBA142	20	158000	crack	-6	14	36
Imp.	Const.	60	0NC1CBA143	20	204000	crack	-6	14	36
Imp.	Const.	60	0NC1CBA151	24	89300	crack	-6	18	36
Imp.	Const.	60	0NC1CBA152	24	97000	crack	-6	18	36
Imp.	Const.	60	0NC1CBA153	24	70500	crack	-6	18	36
Imp.	Const.	60	0NC1CBA221	12	1769000	crack	2	14	36
Imp.	Const.	60	0NC1CBA222	12	1139000	crack	2	14	36
Imp.	Const.	60	0NC1CBA223	12	1109000	crack	2	14	36
Imp.	Const.	60	0NC1CBA231	16	500000	crack	2	18	36
Imp.	Const.	60	0NC1CBA232	16	444000	crack	2	18	36
Imp.	Const.	60	0NC1CBA233	16	410000	crack	2	18	36

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	60	0NC1CBA241	20	208000	crack	2	22	36
Imp.	Const.	60	0NC1CBA242	20	176000	crack	2	22	36
Imp.	Const.	60	0NC1CBA243	20	155000	crack	2	22	36
Imp.	Const.	60	0NC1CBA311	8	3589000	crack	10	18	36
Imp.	Const.	60	0NC1CBA312	8	3461000	crack	10	18	36
Imp.	Const.	60	0NC1CBA313	8	4707000	crack	10	18	36
Imp.	Const.	60	0NC1CBA321	12	1113000	crack	10	22	36
Imp.	Const.	60	0NC1CBA322	12	879000	crack	10	22	36
Imp.	Const.	60	0NC1CBA323	12	908000	crack	10	22	36
Imp.	Const.	60	0NC1CBA331	16	278000	crack	10	26	36
Imp.	Const.	60	0NC1CBA332	16	473000	crack	10	26	36
Imp.	Const.	60	0NC1CBA333	16	523000	crack	10	26	36
Imp.	Const.	60	0NC1CBA341	20	120000	crack	10	30	36
Imp.	Const.	60	0NC1CBA342	20	148000	crack	10	30	36
Imp.	Const.	60	0NC1CBA343	20	234000	crack	10	30	36
Imp.	Const.	50	0NC1CBA131	16	308000	crack	-6	10	36
Imp.	Const.	50	0NC1CBA132	16	157000	crack	-6	10	36
Imp.	Const.	50	0NC1CBA133	16	199000	crack	-6	10	36
Imp.	Const.	50	0NC1CBA141	20	186000	crack	-6	14	36
Imp.	Const.	50	0NC1CBA142	20	158000	crack	-6	14	36
Imp.	Const.	50	0NC1CBA143	20	122000	crack	-6	14	36
Imp.	Const.	50	0NC1CBA151	24	77000	crack	-6	18	36
Imp.	Const.	50	0NC1CBA152	24	47500	crack	-6	18	36
Imp.	Const.	50	0NC1CBA153	24	53600	crack	-6	18	36
Imp.	Const.	50	0NC1CBA221	12	558000	crack	2	14	36
Imp.	Const.	50	0NC1CBA222	12	433000	crack	2	14	36
Imp.	Const.	50	0NC1CBA223	12	441000	crack	2	14	36
Imp.	Const.	50	0NC1CBA231	16	232000	crack	2	18	36
Imp.	Const.	50	0NC1CBA232	16	179000	crack	2	18	36
Imp.	Const.	50	0NC1CBA233	16	198000	crack	2	18	36
Imp.	Const.	50	0NC1CBA241	20	99700	crack	2	22	36
Imp.	Const.	50	0NC1CBA242	20	103000	crack	2	22	36
Imp.	Const.	50	0NC1CBA243	20	142000	crack	2	22	36
Imp.	Const.	50	0NC1CBA311	8	1534000	crack	10	18	36
Imp.	Const.	50	0NC1CBA312	8	1212000	crack	10	18	36
Imp.	Const.	50	0NC1CBA313	8	1374000	crack	10	18	36

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	50	0NC1CBA321	12	386000	crack	10	22	36
Imp.	Const.	50	0NC1CBA322	12	313000	crack	10	22	36
Imp.	Const.	50	0NC1CBA323	12	551000	crack	10	22	36
Imp.	Const.	50	0NC1CBA331	16	150000	crack	10	26	36
Imp.	Const.	50	0NC1CBA332	16	209000	crack	10	26	36
Imp.	Const.	50	0NC1CBA333	16	221000	crack	10	26	36
Imp.	Const.	50	0NC1CBA341	20	68700	crack	10	30	36
Imp.	Const.	50	0NC1CBA342	20	101000	crack	10	30	36
Imp.	Const.	50	0NC1CBA343	20	136000	crack	10	30	36
Imp.	Const.	27	0NC1PWA131	30	677000	crack	-10	20	36
Imp.	Const.	26	0NC1PWA132	30	506000	crack	-10	20	36
Imp.	Const.	25	0NC1PWA141	36	413000	crack	-10	26	36
Imp.	Const.	20	0NC1PWA142	36	432000	crack	-10	26	36
Imp.	Const.	27	0NC1PWA151	42	113000	crack	-10	32	36
Imp.	Const.	27	0NC1PWA152	42	258000	crack	-10	32	36
Imp.	Const.	20	0NC1PWA221	24	1577000	crack	2	26	36
Imp.	Const.	20	0NC1PWA222	24	1910000	crack	2	26	36
Imp.	Const.	20	0NC1PWA231	30	705000	crack	2	32	36
Imp.	Const.	25	0NC1PWA232	30	832000	crack	2	32	36
Imp.	Const.	20	0NC1PWA241	36	389000	crack	2	38	36
Imp.	Const.	20	0NC1PWA242	36	546000	crack	2	38	36
Imp.	Const.	20	0NC1PWA311	18	10200000	runout	14	32	36
Imp.	Const.	25	0NC1PWA312	18	9654000	crack	14	32	36
Imp.	Const.	20	0NC1PWA321	24	1490000	crack	14	38	36
Imp.	Const.	20	0NC1PWA322	24	2021000	crack	14	38	36
Imp.	Const.	20	0NC1PWB131	30	855000	crack	-10	20	50
Imp.	Const.	20	0NC1PWB132	30	998000	crack	-10	20	50
Imp.	Const.	20	0NC1PWB141	36	505000	crack	-10	26	50
Imp.	Const.	25	0NC1PWB142	36	514000	crack	-10	26	50
Imp.	Const.	26	0NC1PWB151	42	149000	crack	-10	32	50
Imp.	Const.	20	0NC1PWB152	42	317000	crack	-10	32	50
Imp.	Const.	26	0NC1PWB221	24	1292000	crack	2	26	50
Imp.	Const.	25	0NC1PWB222	24	1593000	crack	2	26	50
Imp.	Const.	20	0NC1PWB231	30	742000	crack	2	32	50
Imp.	Const.	20	0NC1PWB232	30	1129000	crack	2	32	50
Imp.	Const.	20	0NC1PWB241	36	481000	crack	2	38	50

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	20	0NC1PWB242	36	382000	crack	2	38	50
Imp.	Const.	25	0NC1PWB311	18	3080000	crack	14	32	50
Imp.	Const.	20	0NC1PWB312	18	4465000	crack	14	32	50
Imp.	Const.	25	0NC1PWB321	24	1523000	crack	14	38	50
Imp.	Const.	20	0NC1PWB322	24	2054000	crack	14	38	50
Imp.	Const.	20	0NC1PWB331	30	563000	crack	14	44	50
Imp.	Const.	25	0NC1PWB332	30	847000	crack	14	44	50
Imp.	Const.	26	0NC1PWB341	36	192000	crack	14	50	50
Imp.	Const.	25	0NC1PWB342	36	719000	crack	14	50	50
Imp.	Const.	27	0NC1PWC131	30	783000	crack	-10	20	100
Imp.	Const.	27	0NC1PWC132	30	858000	crack	-10	20	100
Imp.	Const.	20	0NC1PWC141	36	486000	crack	-10	26	100
Imp.	Const.	21	0NC1PWC142	36	561000	crack	-10	26	100
Imp.	Const.	21	0NC1PWC151	42	389000	crack	-10	32	100
Imp.	Const.	25	0NC1PWC152	42	397000	crack	-10	32	100
Imp.	Const.	20	0NC1PWC221	24	2228000	crack	2	26	100
Imp.	Const.	20	0NC1PWC222	24	1526000	crack	2	26	100
Imp.	Const.	20	0NC1PWC231	30	693000	crack	2	32	100
Imp.	Const.	20	0NC1PWC232	30	685000	crack	2	32	100
Imp.	Const.	20	0NC1PWC241	36	357000	crack	2	38	100
Imp.	Const.	25	0NC1PWC242	36	452000	crack	2	38	100
Imp.	Const.	20	0NC1PWC311	18	2368000	crack	14	32	100
Imp.	Const.	20	0NC1PWC312	18	2137000	crack	14	32	100
Imp.	Const.	20	0NC1PWC321	24	1319000	crack	14	38	100
Imp.	Const.	20	0NC1PWC322	24	1466000	crack	14	38	100
Imp.	Const.	20	0NC1PWC331	30	670000	crack	14	44	100
Imp.	Const.	20	0NC1PWC332	30	1020000	crack	14	44	100
Imp.	Const.	25	0NC1PWC341	36	319000	crack	14	50	100
Imp.	Const.	25	0NC1PWC342	36	534000	crack	14	50	100
Imp.	Const.	15	0NC1PRA131	30	1505000	crack	-10	20	36
Imp.	Const.	10	0NC1PRA132	30	4910000	runout	-10	20	36
Imp.	Const.	15	0NC1PRA141	36	1290000	crack	-10	26	36
Imp.	Const.	15	0NC1PRA142	36	1343000	crack	-10	26	36
Imp.	Const.	15	0NC1PRA151	42	623000	crack	-10	32	36
Imp.	Const.	10	0NC1PRA152	42	1070000	crack	-10	32	36
Imp.	Const.	10	0NC1PRA231	30	12200000	runout	2	32	36

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	10	0NC1PRA232	30	10500000	runout	2	32	36
Imp.	Const.	10	0NC1PRA241	36	855000	crack	2	38	36
Imp.	Const.	10	0NC1PRA242	36	998000	crack	2	38	36
Imp.	Const.	15	0NC1PRB141	36	1207000	crack	-10	26	50
Imp.	Const.	15	0NC1PRB142	36	826000	crack	-10	26	50
Imp.	Const.	15	0NC1PRB151	42	1001000	crack	-10	32	50
Imp.	Const.	10	0NC1PRB152	42	1820000	crack	-10	32	50
Imp.	Const.	10	0NC1PRB231	30	2677000	crack	2	32	50
Imp.	Const.	10	0NC1PRB241	36	1519000	crack	2	38	50
Imp.	Const.	15	0NC1PRB242	36	978000	crack	2	38	50
Imp.	Const.	10	0NC1PRB251	42	592000	crack	2	44	50
Imp.	Const.	10	0NC1PRB252	42	692000	crack	2	44	50
Imp.	Const.	15	0NC1PRB331	30	2401000	crack	14	44	50
Imp.	Const.	15	0NC1PRB341	36	5850000	crack	14	50	50
Imp.	Const.	15	0NC1PRB342	36	846000	crack	14	50	50
Imp.	Const.	20	0NC1FSA221	15.8	5808000	crack	1.7	-1	36
Imp.	Const.	20	0NC1FSA211	17.5	6953000	crack	1.9	-1	36
Imp.	Const.	20	0NC1FSA212	13.5	6117000	crack	1.5	-1	36
Imp.	Const.	20	0NC1FSA212	17.8	7754000	crack	2	-1	36
Imp.	Const.	20	0NC1FSA213	18	6413000	crack	2	-1	36
Imp.	Const.	20	0NC1FSA213	13.3	9105000	crack	1.5	-1	36
Imp.	Const.	20	0NC1FSA311	18	10500000	runout	14	-1	36
Imp.	Const.	20	0NC1FSA312	18	12200000	runout	14	-1	36
Imp.	Const.	20	0NC1FSA313	18	11400000	runout	14	-1	36
Imp.	Const.	20	0NC1FSA121	22.7	2908000	crack	-9.5	-1	36
Imp.	Const.	21	0NC1FSA121	18.4	3687000	crack	7.7	-1	36
Imp.	Const.	21	0NC1FSA122	23.7	3508000	crack	9.9	-1	36
Imp.	Const.	21	0NC1FSA123	21.8	1945000	crack	9.1	-1	36
Imp.	Const.	21	0NC1FSA123	23.3	2897000	crack	9.7	-1	36
Imp.	Const.	20	0NC1FSA221	23.7	2255000	crack	2	-1	36
Imp.	Const.	21	0NC1FSA221	20.6	2255000	crack	-1.8	-1	36
Imp.	Const.	20	0NC1FSA223	25.7	1575000	crack	2.1	-1	36
Imp.	Const.	20	0NC1FSA223	23.5	2257000	crack	2	-1	36
Imp.	Const.	20	0NC1FSA322	24.3	2539000	crack	14.2	-1	36
Imp.	Const.	20	0NC1FSA323	22.2	4769000	crack	12.9	-1	36
Imp.	Const.	20	0NC1FSA131	27.3	2227000	crack	-9.1	-1	36

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	20	0NC1FSA132	28.9	1217000	crack	-9.6	-1	36
Imp.	Const.	20	0NC1FSA132	29.2	1516000	crack	-9.7	-1	36
Imp.	Const.	20	0NC1FSA133	27.5	965000	crack	-9.2	-1	36
Imp.	Const.	20	0NC1FSA133	28.7	1135000	crack	-9.6	-1	36
Imp.	Const.	20	0NC1FSA231	29.6	1205000	crack	2	-1	36
Imp.	Const.	20	0NC1FSA232	30.7	782000	crack	2	-1	36
Imp.	Const.	20	0NC1FSA232	29.6	782000	crack	2	-1	36
Imp.	Const.	21	0NC1FSA141	34	883000	crack	9.4	-1	36
Imp.	Const.	20	0NC1FSA141	34.5	1185000	crack	-9.6	-1	36
Imp.	Const.	20	0NC1FSA142	35.3	1160000	crack	-9.8	-1	36
Imp.	Const.	20	0NC1FSA143	31	914000	crack	-8.6	-1	36
Imp.	Const.	20	0NC1FSA143	31	914000	crack	-8.6	-1	36
Imp.	Const.	20	0NC1FSA241	30.8	334000	crack	1.7	-1	36
Imp.	Const.	20	0NC1FSA241	26.6	749000	crack	1.5	-1	36
Imp.	Const.	20	0NC1FSA243	35.3	691000	crack	1.9	-1	36
Imp.	Const.	20	0NC1FSB312	13	10550000	crack	10.2	-1	50
Imp.	Const.	20	0NC1FSB221	22.6	1859000	crack	1.9	-1	50
Imp.	Const.	20	0NC1FSB222	24	1917000	crack	2	-1	50
Imp.	Const.	20	0NC1FSB223	24.1	1035000	crack	2	-1	50
Imp.	Const.	20	0NC1FSB321	22.3	2289000	crack	13.1	-1	50
Imp.	Const.	20	0NC1FSB322	20.3	2520000	crack	11.8	-1	50
Imp.	Const.	20	0NC1FSB322	24	10500000	runout	14	-1	50
Imp.	Const.	21	0NC1FSB132	29.2	1491000	crack	9.8	-1	50
Imp.	Const.	21	0NC1FSB133	24.5	1201000	crack	8.2	-1	50
Imp.	Const.	20	0NC1FSB133	27.9	1523000	crack	-9.3	-1	50
Imp.	Const.	20	0NC1FSB231	29	970000	crack	1.9	-1	50
Imp.	Const.	20	0NC1FSB232	30	949000	crack	2	-1	50
Imp.	Const.	20	0NC1FSB232	27.5	1498000	crack	1.8	-1	50
Imp.	Const.	20	0NC1FSB233	27.9	1091000	crack	1.9	-1	50
Imp.	Const.	20	0NC1FSB233	28.6	1375000	crack	1.9	-1	50
Imp.	Const.	20	0NC1FSB331	30.6	560000	crack	14.3	-1	50
Imp.	Const.	20	0NC1FSB332	28.1	818000	crack	13.1	-1	50
Imp.	Const.	20	0NC1FSB332	30.8	1414000	crack	14.4	-1	50
Imp.	Const.	21	0NC1FSB141	36	425000	crack	10	-1	50
Imp.	Const.	20	0NC1FSB142	34.2	776000	crack	-9.5	-1	50
Imp.	Const.	21	0NC1FSB143	35.5	636000	crack	9.9	-1	50

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	20	0NC1FSB143	33.2	961000	crack	-9.2	-1	50
Imp.	Const.	20	0NC1FSB241	36.4	821000	crack	2	-1	50
Imp.	Const.	20	0NC1FSB242	35	288000	crack	1.9	-1	50
Imp.	Const.	20	0NC1FSB243	35.4	775000	crack	2	-1	50
Imp.	Const.	20	0NC1FSB341	35.8	543000	crack	14	-1	50
Imp.	Const.	20	0NC1FSB341	35	989000	crack	13.6	-1	50
Imp.	Const.	20	0NC1FSB342	30.8	471000	crack	12	-1	50
Imp.	Const.	20	0NC1FSB343	34.3	511000	crack	7.9	-1	50
Imp.	Const.	20	0NC1FSC311	12.5	3704000	crack	9.7	-1	100
Imp.	Const.	20	0NC1FSC311	17.6	9807000	crack	13.7	-1	100
Imp.	Const.	20	0NC1FSC313	17.4	2807000	crack	13.5	-1	100
Imp.	Const.	20	0NC1FSC221	22.8	2021000	crack	1.9	-1	100
Imp.	Const.	20	0NC1FSC222	24.7	2479000	crack	2	-1	100
Imp.	Const.	20	0NC1FSC223	23.1	1302000	crack	1.9	-1	100
Imp.	Const.	20	0NC1FSC223	15	5706000	crack	1.2	-1	100
Imp.	Const.	20	0NC1FSC321	24.2	1031000	crack	14.2	-1	100
Imp.	Const.	20	0NC1FSC323	24	1102000	crack	14	-1	100
Imp.	Const.	21	0NC1FSC131	27.5	1259000	crack	9.2	-1	100
Imp.	Const.	21	0NC1FSC132	30	1263000	crack	10	-1	100
Imp.	Const.	21	0NC1FSC132	21.7	1592000	crack	7.2	-1	100
Imp.	Const.	20	0NC1FSC133	29.2	887000	crack	-9.7	-1	100
Imp.	Const.	20	0NC1FSC231	29.2	658000	crack	1.9	-1	100
Imp.	Const.	20	0NC1FSC232	23.8	1211000	crack	1.6	-1	100
Imp.	Const.	20	0NC1FSC233	27.9	1112000	crack	1.9	-1	100
Imp.	Const.	20	0NC1FSC333	29.2	1184000	crack	13.6	-1	100
Imp.	Const.	21	0NC1FSC141	35	562000	crack	9.7	-1	100
Imp.	Const.	21	0NC1FSC142	34.3	483000	crack	9.5	-1	100
Imp.	Const.	20	0NC1FSC241	33	341000	crack	1.8	-1	100
Imp.	Const.	20	0NC1FSC241	36.4	562000	crack	2	-1	100
Imp.	Const.	20	0NC1FSC242	34.4	403000	crack	1.9	-1	100
Imp.	Const.	20	0NC1FSC242	29.1	403000	crack	1.6	-1	100
Imp.	Const.	20	0NC1FSC341	36	334000	crack	14	-1	100
Imp.	Const.	20	0NC1FSC343	35.9	1001000	crack	12.3	-1	100
Imp.	Const.	80	0NC1FSA122	22.6	3778000	crack	-9.4	-1	36
Imp.	Const.	80	0NC1FSA222	24	10300000	runout	2	-1	36
Imp.	Const.	70	0NC1FSA222	24	10300000	runout	2	-1	36

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	80	0NC1FSA321	24	1834000	crack	14	-1	36
Imp.	Const.	80	0NC1FSA322	24	10900000	runout	14	-1	36
Imp.	Const.	70	0NC1FSA322	24	10900000	runout	14	-1	36
Imp.	Const.	70	0NC1FSA323	24.3	3137000	crack	14.2	-1	36
Imp.	Const.	80	0NC1FSA131	28	989000	crack	-9.3	-1	36
Imp.	Const.	80	0NC1FSA231	30	3910000	runout	2	-1	36
Imp.	Const.	70	0NC1FSA231	30	3910000	runout	2	-1	36
Imp.	Const.	70	0NC1FSA233	30.3	803000	crack	2	-1	36
Imp.	Const.	80	0NC1FSA233	29.2	1743000	crack	1.9	-1	36
Imp.	Const.	80	0NC1FSA142	36	734000	crack	-10	-1	36
Imp.	Const.	70	0NC1FSA241	34.2	749000	crack	1.9	-1	36
Imp.	Const.	80	0NC1FSA242	36	456000	crack	2	-1	36
Imp.	Const.	70	0NC1FSA242	35.3	1039000	crack	2	-1	36
Imp.	Const.	80	0NC1FSA243	36	427000	crack	2	-1	36
Imp.	Const.	80	0NC1FSB313	18	3068000	crack	14	-1	50
Imp.	Const.	80	0NC1FSB221	22.3	2627000	crack	1.8	-1	50
Imp.	Const.	80	0NC1FSB222	24	1592000	crack	2	-1	50
Imp.	Const.	80	0NC1FSB223	24	828000	crack	2	-1	50
Imp.	Const.	80	0NC1FSB321	24	1239000	crack	14	-1	50
Imp.	Const.	80	0NC1FSB323	24	1366000	crack	14	-1	50
Imp.	Const.	70	0NC1FSB323	24.3	3056000	crack	14.2	-1	50
Imp.	Const.	70	0NC1FSB131	29.9	1147000	crack	-9.9	-1	50
Imp.	Const.	80	0NC1FSB131	28	1288000	crack	-9.3	-1	50
Imp.	Const.	70	0NC1FSB132	29.6	1321000	crack	-9.9	-1	50
Imp.	Const.	80	0NC1FSB231	25.8	422000	crack	1.7	-1	50
Imp.	Const.	80	0NC1FSB331	30	514000	crack	14	-1	50
Imp.	Const.	80	0NC1FSB333	30	521000	crack	14.4	-1	50
Imp.	Const.	70	0NC1FSB333	30	1354000	crack	14.4	-1	50
Imp.	Const.	80	0NC1FSB141	36	839000	crack	-10	-1	50
Imp.	Const.	80	0NC1FSB142	36	733000	crack	-10	-1	50
Imp.	Const.	80	0NC1FSB241	35.7	505000	crack	2	-1	50
Imp.	Const.	80	0NC1FSB242	36	288000	crack	2	-1	50
Imp.	Const.	80	0NC1FSB243	36	299000	crack	2	-1	50
Imp.	Const.	80	0NC1FSB342	36	333000	crack	14	-1	50
Imp.	Const.	80	0NC1FSB343	36	325000	crack	14	-1	50
Imp.	Const.	80	0NC1FSC312	18.9	835000	crack	14.8	-1	100

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	70	0NC1FSC312	18.4	9840000	runout	14	-1	100
Imp.	Const.	70	0NC1FSC313	18	12200000	runout	14	-1	100
Imp.	Const.	80	0NC1FSC313	18	12200000	runout	14	-1	100
Imp.	Const.	80	0NC1FSC221	24	1500000	crack	2	-1	100
Imp.	Const.	80	0NC1FSC222	22.2	1170000	crack	1.9	-1	100
Imp.	Const.	80	0NC1FSC321	24	657000	crack	14	-1	100
Imp.	Const.	80	0NC1FSC322	24	658000	crack	14	-1	100
Imp.	Const.	70	0NC1FSC322	24	800000	crack	14	-1	100
Imp.	Const.	80	0NC1FSC323	24	566000	crack	14	-1	100
Imp.	Const.	70	0NC1FSC131	29.6	1259000	crack	-9.8	-1	100
Imp.	Const.	80	0NC1FSC132	26	1592000	crack	-8.7	-1	100
Imp.	Const.	80	0NC1FSC133	30	1239000	crack	-10	-1	100
Imp.	Const.	80	0NC1FSC231	29.6	759000	crack	2	-1	100
Imp.	Const.	80	0NC1FSC232	30	953000	crack	2	-1	100
Imp.	Const.	80	0NC1FSC233	30	532000	crack	2	-1	100
Imp.	Const.	80	0NC1FSC331	29.8	406000	crack	13.9	-1	100
Imp.	Const.	70	0NC1FSC331	30.3	907000	crack	14.2	-1	100
Imp.	Const.	80	0NC1FSC332	27.8	764000	crack	13	-1	100
Imp.	Const.	70	0NC1FSC332	30.8	1310000	crack	14.4	-1	100
Imp.	Const.	80	0NC1FSC333	28.8	511000	crack	13.4	-1	100
Imp.	Const.	80	0NC1FSC141	35.1	700000	crack	-9.7	-1	100
Imp.	Const.	80	0NC1FSC142	36	483000	crack	-10	-1	100
Imp.	Const.	70	0NC1FSC143	35.8	463000	crack	-10	-1	100
Imp.	Const.	80	0NC1FSC143	34.9	811000	crack	-9.7	-1	100
Imp.	Const.	80	0NC1FSC243	36	333000	crack	2	-1	100
Imp.	Const.	70	0NC1FSC243	36	731000	crack	2	-1	100
Imp.	Const.	70	0NC1FSC341	29.6	274000	crack	11.6	-1	100
Imp.	Const.	80	0NC1FSC342	35.5	335000	crack	13.8	-1	100
Imp.	Const.	70	0NC1FSC342	35.5	619000	crack	13.8	-1	100
Imp.	Const.	80	0NC1FSC343	32.5	343000	crack	14	-1	100
Imp.	Const.	17	0NC1PRB141	36	4799000	crack	-10	-1	50
Imp.	Const.	11	0NC1PRB142	36	4456000	crack	-10	-1	50
Imp.	Const.	15	0NC1PRB151	42	1670000	crack	-10	-1	50
Imp.	Const.	15	0NC1PRB151	42	1670000	crack	-10	-1	50
Imp.	Const.	10	0NC1PRB231	30	10800000	runout	2	-1	50
Imp.	Const.	10	0NC1PRB241	36	1857000	crack	2	-1	50

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	10	0NC1PRB251	42	845000	crack	2	-1	50
Imp.	Const.	10	0NC1PRB331	30	6382000	crack	14	-1	50
Imp.	Const.	10	0NC1PRB341	36	7866000	crack	14	-1	50
Imp.	Const.	90	0NC2SCB211	13.7	2893000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SCB212	13.7	9740000	runout	1.5	-1	50
Imp.	Const.	90	0NC2SCB213	13.7	7040000	runout	1.5	-1	50
Imp.	Const.	90	0NC2SCB311	13.7	13100000	runout	10.6	-1	50
Imp.	Const.	90	0NC2SCB312	13.7	3197000	crack	10.6	-1	50
Imp.	Const.	90	0NC2SCB221	18.2	2907000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SCB222	18.2	3165000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SCB223	18.2	2320000	runout	1.5	-1	50
Imp.	Const.	90	0NC2SCB321	18.2	1830000	runout	10.6	-1	50
Imp.	Const.	90	0NC2SCB322	18.2	1481000	crack	10.6	-1	50
Imp.	Const.	90	0NC2SCB131	22.8	1119000	crack	-7.6	-1	50
Imp.	Const.	90	0NC2SCB132	22.8	1210000	crack	-7.6	-1	50
Imp.	Const.	90	0NC2SCB231	22.8	774000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SCB232	22.8	860000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SCB233	22.8	1030000	runout	1.5	-1	50
Imp.	Const.	90	0NC2SCB331	22.8	1150000	crack	10.6	-1	50
Imp.	Const.	90	0NC2SCB332	22.8	819000	crack	10.6	-1	50
Imp.	Const.	90	0NC2SCB141	27.4	867000	crack	-7.6	-1	50
Imp.	Const.	90	0NC2SCB142	27.4	574000	crack	-7.6	-1	50
Imp.	Const.	90	0NC2SCB241	27.4	521000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SCB242	27.4	676000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SCB243	27.4	669000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SAB111	17.6	4770000	crack	4.4	-1	50
Imp.	Const.	90	0NC2SAB112	17.6	3190000	crack	4.4	-1	50
Imp.	Const.	90	0NC2SAB113	17.6	3425000	crack	4.4	-1	50
Imp.	Const.	90	0NC2SAB114	17.6	6227000	crack	4.4	-1	50
Imp.	Const.	90	0NC2SAB221	23.8	883000	crack	6.9	-1	50
Imp.	Const.	90	0NC2SAB222	23.8	1017000	crack	6.9	-1	50
Imp.	Const.	90	0NC2SAB223	23.8	1161000	crack	6.9	-1	50
Imp.	Const.	90	0NC2SAB224	23.8	1064000	crack	6.9	-1	50
Imp.	Const.	90	0NC2SGB211	15.4	4433000	crack	1.7	-1	50
Imp.	Const.	90	0NC2SGC212	15.4	3016000	crack	1.7	-1	100
Imp.	Const.	90	0NC2SGB311	15.4	4869000	crack	12	-1	50

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	90	0NC2SGB312	15.4	2293000	crack	12	-1	50
Imp.	Const.	90	0NC2SGB221	20.5	1939000	crack	1.7	-1	50
Imp.	Const.	90	0NC2SGC222	20.5	838000	crack	1.7	-1	100
Imp.	Const.	90	0NC2SGB321	20.5	769000	crack	12	-1	50
Imp.	Const.	90	0NC2SGB322	20.5	1210000	crack	12	-1	50
Imp.	Const.	90	0NC2SGB323	20.5	774000	crack	12	-1	50
Imp.	Const.	90	0NC2SGB231	25.7	643000	crack	1.7	-1	50
Imp.	Const.	90	0NC2SGC232	25.7	452000	crack	1.7	-1	100
Imp.	Const.	90	0NC2SGB331	25.7	413000	crack	12	-1	50
Imp.	Const.	90	0NC2SGB332	25.7	500000	crack	12	-1	50
Imp.	Const.	90	0NC2SGC333	25.7	401000	crack	12	-1	100
Imp.	Const.	90	0NC2SBB221	20.5	1264000	crack	1.7	-1	50
Imp.	Const.	90	0NC2SBB222	20.5	1409000	crack	1.7	-1	50
Imp.	Const.	90	0NC2SBB321	20.5	1388000	crack	1.7	-1	50
Imp.	Const.	90	0NC2SBB322	20.5	1401000	crack	1.7	-1	50
Imp.	Const.	90	0NC2SBB231	25.7	1037000	crack	1.7	-1	50
Imp.	Const.	90	0NC2SBB232	25.7	561000	crack	1.7	-1	50
Imp.	Const.	90	0NC2SBB331	25.7	577000	crack	1.7	-1	50
Imp.	Const.	90	0NC2SBB332	25.7	555000	crack	1.7	-1	50
Imp.	Const.	90	0NC2SGB211	13.7	4430000	runout	1.5	-1	50
Imp.	Const.	90	0NC2SGC212	13.7	1790000	crack	1.5	-1	100
Imp.	Const.	90	0NC2SGC212	13.7	1790000	crack	1.5	-1	100
Imp.	Const.	90	0NC2SGB311	13.7	5230000	runout	10.7	-1	50
Imp.	Const.	90	0NC2SGB312	13.7	2204000	crack	10.7	-1	50
Imp.	Const.	90	0NC2SGB312	13.7	2012000	crack	10.7	-1	50
Imp.	Const.	90	0NC2SGB221	18.3	1165000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SGC222	18.3	838000	crack	1.5	-1	100
Imp.	Const.	90	0NC2SGC222	18.3	838000	crack	1.5	-1	100
Imp.	Const.	90	0NC2SGB321	18.3	1063000	crack	10.7	-1	50
Imp.	Const.	90	0NC2SGB322	18.3	1553000	crack	10.7	-1	50
Imp.	Const.	90	0NC2SGB323	18.3	1131000	crack	10.7	-1	50
Imp.	Const.	90	0NC2SGB231	22.9	552000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SGC232	22.9	452000	crack	1.5	-1	100
Imp.	Const.	90	0NC2SGC232	22.9	452000	crack	1.5	-1	100
Imp.	Const.	90	0NC2SGB332	22.9	786000	crack	10.7	-1	50
Imp.	Const.	90	0NC2SGB332	22.9	481000	crack	10.7	-1	50

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	90	0NC2SGC333	22.9	537000	crack	10.7	-1	100
Imp.	Const.	90	0NC2SBB221	18.3	1264000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SBB222	18.3	1234000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SBB321	18.3	1388000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SBB321	18.3	1388000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SBB322	18.3	1329000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SBB322	18.3	1401000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SBB231	22.9	718000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SBB231	22.9	718000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SBB232	22.9	533000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SBB232	22.9	533000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SBB331	22.9	684000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SBB331	22.9	684000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SBB332	22.9	499000	crack	1.5	-1	50
Imp.	Const.	90	0NC2SBB332	22.9	725000	crack	1.5	-1	50
Imp.	Const.	100	0NC2SCB211	14.4	2616000	crack	1.6	-1	50
Imp.	Const.	100	0NC2SCB212	14.4	3787000	crack	1.6	-1	50
Imp.	Const.	100	0NC2SCB213	14.4	4512000	crack	1.6	-1	50
Imp.	Const.	100	0NC2SCB311	14.4	4741000	crack	11.2	-1	50
Imp.	Const.	100	0NC2SCB312	14.4	3197000	crack	11.2	-1	50
Imp.	Const.	100	0NC2SCB221	19.2	1691000	crack	1.6	-1	50
Imp.	Const.	100	0NC2SCB222	19.2	1329000	crack	1.6	-1	50
Imp.	Const.	100	0NC2SCB223	19.2	807000	crack	1.6	-1	50
Imp.	Const.	100	0NC2SCB321	19.2	1438000	crack	11.2	-1	50
Imp.	Const.	100	0NC2SCB322	19.2	1092000	crack	11.2	-1	50
Imp.	Const.	100	0NC2SCB131	23.9	584000	crack	-8	-1	50
Imp.	Const.	100	0NC2SCB132	23.9	579000	crack	-8	-1	50
Imp.	Const.	100	0NC2SCB231	23.9	492000	crack	1.6	-1	50
Imp.	Const.	100	0NC2SCB232	23.9	527000	crack	1.6	-1	50
Imp.	Const.	100	0NC2SCB233	23.9	421000	crack	1.6	-1	50
Imp.	Const.	100	0NC2SCB331	23.9	322000	crack	11.2	-1	50
Imp.	Const.	100	0NC2SCB332	23.9	428000	crack	11.2	-1	50
Imp.	Const.	100	0NC2SCB141	28.7	355000	crack	-8	-1	50
Imp.	Const.	100	0NC2SCB142	28.7	302000	crack	-8	-1	50
Imp.	Const.	100	0NC2SCB241	28.7	214000	crack	1.6	-1	50
Imp.	Const.	100	0NC2SCB242	28.7	361000	crack	1.6	-1	50

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	100	0NC2SCB243	28.7	495000	crack	1.6	-1	50
Imp.	Const.	100	0NC2SGB211	13.8	6620000	runout	1.5	-1	50
Imp.	Const.	100	0NC2SGC212	13.8	3850000	runout	1.5	-1	100
Imp.	Const.	100	0NC2SGB311	13.8	6060000	runout	10.7	-1	50
Imp.	Const.	100	0NC2SGB312	13.8	2012000	crack	10.7	-1	50
Imp.	Const.	100	0NC2SGB221	18.4	1742000	crack	1.5	-1	50
Imp.	Const.	100	0NC2SGC222	18.4	1366000	crack	1.5	-1	100
Imp.	Const.	100	0NC2SGB321	18.4	1316000	crack	10.7	-1	50
Imp.	Const.	100	0NC2SGB322	18.4	1553000	crack	10.7	-1	50
Imp.	Const.	100	0NC2SGB323	18.4	1261000	crack	10.7	-1	50
Imp.	Const.	100	0NC2SGB231	22.9	676000	crack	1.5	-1	50
Imp.	Const.	100	0NC2SGC232	22.9	737000	crack	1.5	-1	100
Imp.	Const.	100	0NC2SGB331	22.9	786000	crack	10.7	-1	50
Imp.	Const.	100	0NC2SGB332	22.9	700000	crack	10.7	-1	50
Imp.	Const.	100	0NC2SGC333	22.9	627000	crack	10.7	-1	100
Imp.	Const.	100	0NC2SGC333	22.9	627000	crack	10.7	-1	100
Imp.	Const.	100	0NC2SBB221	18.4	1264000	crack	1.5	-1	50
Imp.	Const.	100	0NC2SBB222	18.4	1641000	crack	1.5	-1	50
Imp.	Const.	100	0NC2SBB321	18.4	1206000	crack	1.5	-1	50
Imp.	Const.	100	0NC2SBB322	18.4	1329000	crack	1.5	-1	50
Imp.	Const.	100	0NC2SBB231	22.9	1037000	crack	1.5	-1	50
Imp.	Const.	100	0NC2SBB232	22.9	561000	crack	1.5	-1	50
Imp.	Const.	100	0NC2SBB331	22.9	804000	crack	1.5	-1	50
Imp.	Const.	100	0NC2SBB332	22.9	950000	crack	1.5	-1	50
Imp.	Const.	130	0NC2AQB221	12	10800000	runout	2	-1	50
Imp.	Const.	130	0NC2AQB321	12	15600000	runout	2	-1	50
Imp.	Const.	130	0NC2AQB131	16	3095000	crack	-6	-1	50
Imp.	Const.	130	0NC2AQB131	16	3619000	crack	-6	-1	50
Imp.	Const.	130	0NC2AQB231	16	3113000	crack	2	-1	50
Imp.	Const.	130	0NC2AQB331	16	3703000	crack	10	-1	50
Imp.	Const.	130	0NC2AQB141	20	1096000	crack	-6	-1	50
Imp.	Const.	130	0NC2AQB141	20	1096000	crack	-6	-1	50
Imp.	Const.	130	0NC2AQB241	20	1616000	crack	2	-1	50
Imp.	Const.	130	0NC2AQB241	20	1861000	crack	2	-1	50
Imp.	Const.	130	0NC2AQB341	20	1593000	crack	10	-1	50
Imp.	Const.	130	0NC2AQB341	20	1821000	crack	10	-1	50

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	130	0NC2AQB161	28	353000	crack	-6	-1	50
Imp.	Const.	130	0NC2AQB161	28	440000	crack	-6	-1	50
Imp.	Const.	130	0NC2AQB261	28	506000	crack	2	-1	50
Imp.	Const.	130	0NC2AQB261	28	521000	crack	2	-1	50
Imp.	Const.	130	0NC2A2B221	12	3812000	crack	2	-1	50
Imp.	Const.	130	0NC2A2B221	12	3911000	crack	2	-1	50
Imp.	Const.	130	0NC2A2B321	12	2881000	crack	10	-1	50
Imp.	Const.	130	0NC2A2B321	12	4368000	crack	10	-1	50
Imp.	Const.	130	0NC2A2B231	16	1121000	crack	2	-1	50
Imp.	Const.	130	0NC2A2B231	16	1258000	crack	2	-1	50
Imp.	Const.	130	0NC2A2B331	16	1168000	crack	10	-1	50
Imp.	Const.	130	0NC2A2B331	16	1476000	crack	10	-1	50
Imp.	Const.	130	0NC2A2B241	20	658000	crack	2	-1	50
Imp.	Const.	130	0NC2A2B241	20	685000	crack	2	-1	50
Imp.	Const.	130	0NC2A2B341	20	543000	crack	10	-1	50
Imp.	Const.	130	0NC2A2B341	20	627000	crack	10	-1	50
Imp.	Const.	130	0NC2A2B261	28	242000	crack	2	-1	50
Imp.	Const.	130	0NC2A2B261	28	250000	crack	2	-1	50
Imp.	Const.	130	0NC2A8B211	8	6111000	crack	2	-1	50
Imp.	Const.	130	0NC2A8B211	8	6317000	crack	2	-1	50
Imp.	Const.	130	0NC2A8B311	8	2866000	crack	10	-1	50
Imp.	Const.	130	0NC2A8B311	8	7004000	crack	10	-1	50
Imp.	Const.	130	0NC2A8B221	8.9	2960000	crack	1.5	-1	50
Imp.	Const.	130	0NC2A8B221	8.9	3681000	crack	1.5	-1	50
Imp.	Const.	130	0NC2A8B221	12	808000	crack	2	-1	50
Imp.	Const.	130	0NC2A8B321	12	1147000	crack	10	-1	50
Imp.	Const.	130	0NC2A8B321	12	1225000	crack	10	-1	50
Imp.	Const.	130	0NC2A8B131	16	595000	crack	-6	-1	50
Imp.	Const.	130	0NC2A8B131	16	714000	crack	-6	-1	50
Imp.	Const.	130	0NC2A8B231	16	491000	crack	2	-1	50
Imp.	Const.	130	0NC2A8B231	16	885000	crack	2	-1	50
Imp.	Const.	130	0NC2A8B331	16	518000	crack	10	-1	50
Imp.	Const.	130	0NC2A8B331	16	714000	crack	10	-1	50
Imp.	Const.	130	0NC2A8B141	20	279000	crack	-6	-1	50
Imp.	Const.	130	0NC2A8B141	20	279000	crack	-6	-1	50
Imp.	Const.	130	0NC2A8B241	20	192000	crack	2	-1	50

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	130	0NC2A8B241	20	213000	crack	2	-1	50
Imp.	Const.	130	0NC2A8B341	14.9	786000	crack	7.4	-1	50
Imp.	Const.	130	0NC2A8B341	14.9	855000	crack	7.4	-1	50
Imp.	Const.	130	0NC2A8B341	20	175000	crack	10	-1	50
Imp.	Const.	130	0NC2A8B341	20	190000	crack	10	-1	50
Imp.	Const.	130	0NC2A8B151	24	165000	crack	-6	-1	50
Imp.	Const.	130	0NC2A8B151	24	165000	crack	-6	-1	50
Imp.	Const.	130	0NC2A8B251	24	167000	crack	2	-1	50
Imp.	Const.	135	0NC2A4B211	8	6023000	crack	2	-1	50
Imp.	Const.	135	0NC2A4B212	8	5621000	crack	2	-1	50
Imp.	Const.	135	0NC2A4B311	5.9	13600000	runout	7.4	-1	50
Imp.	Const.	135	0NC2A4B312	8	9057000	crack	10	-1	50
Imp.	Const.	135	0NC2A4B221	12	2439000	crack	2	-1	50
Imp.	Const.	135	0NC2A4B222	8.9	4844000	crack	1.5	-1	50
Imp.	Const.	135	0NC2A4B321	12	1208000	crack	10	-1	50
Imp.	Const.	135	0NC2A4B322	12	2154000	crack	10	-1	50
Imp.	Const.	135	0NC2A4B131	16	850000	crack	-6	-1	50
Imp.	Const.	135	0NC2A4B132	16	931000	crack	-6	-1	50
Imp.	Const.	135	0NC2A4B231	16	785000	crack	2	-1	50
Imp.	Const.	135	0NC2A4B232	16	760000	crack	2	-1	50
Imp.	Const.	135	0NC2A4B331	16	732000	crack	10	-1	50
Imp.	Const.	135	0NC2A4B332	11.9	2205000	crack	7.4	-1	50
Imp.	Const.	135	0NC2A4B141	20	589000	crack	-6	-1	50
Imp.	Const.	135	0NC2A4B142	20	491000	crack	-6	-1	50
Imp.	Const.	135	0NC2A4B241	20	593000	crack	2	-1	50
Imp.	Const.	135	0NC2A4B242	20	486000	crack	2	-1	50
Imp.	Const.	135	0NC2A4B341	20	526000	crack	10	-1	50
Imp.	Const.	135	0NC2A4B342	20	440000	crack	10	-1	50
Imp.	Const.	135	0NC1A4B161	28	181000	crack	-6	-1	50
Imp.	Const.	135	0NC2A4B162	28	161000	crack	-6	-1	50
Imp.	Const.	135	0NC2A4B261	28	175000	crack	2	-1	50
Imp.	Const.	135	0NC2A4B262	28	227000	crack	2	-1	50
Imp.	Const.	135	0NC2A4B221	12	1858000	crack	2	-1	50
Imp.	Const.	130	0NC2A4B222	8.9	7177000	crack	1.5	-1	50
Imp.	Const.	130	0NC2A4B222	12	1124000	crack	2	-1	50
Imp.	Const.	130	0NC2A4B321	12	1509000	crack	10	-1	50

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	130	0NC2A4B322	12	1743000	crack	10	-1	50
Imp.	Const.	130	0NC2A4B131	16	793000	crack	-6	-1	50
Imp.	Const.	130	0NC2A4B132	16	801000	crack	-6	-1	50
Imp.	Const.	130	0NC2A4B231	16	819000	crack	2	-1	50
Imp.	Const.	130	0NC2A4B232	16	652000	crack	2	-1	50
Imp.	Const.	130	0NC2A4B331	16	882000	crack	10	-1	50
Imp.	Const.	130	0NC2A4B332	11.9	2205000	crack	7.4	-1	50
Imp.	Const.	130	0NC2A4B332	16	499000	crack	10	-1	50
Imp.	Const.	130	0NC1A4B332	16	536000	crack	10	-1	50
Imp.	Const.	130	0NC1A4B141	20	310000	crack	-6	-1	50
Imp.	Const.	130	0NC1A4B142	20	378000	crack	-6	-1	50
Imp.	Const.	130	0NC2A4B241	20	305000	crack	2	-1	50
Imp.	Const.	130	0NC2A4B242	20	400000	crack	2	-1	50
Imp.	Const.	130	0NC2A4B341	20	401000	crack	10	-1	50
Imp.	Const.	130	0NC2A4B342	20	368000	crack	10	-1	50
Imp.	Const.	130	0NC2A4B161	28	116000	crack	-6	-1	50
Imp.	Const.	130	0NC2A4B162	28	123000	crack	-6	-1	50
Imp.	Const.	130	0NC2A4B161	28	101000	crack	2	-1	50
Imp.	Const.	130	0NC2A4B262	28	143000	crack	2	-1	50
Imp.	Const.	11	0NC2PRC041	36	3113000	crack	-22	-1	100
Imp.	Const.	10	0NC2PRC061	45	759000	crack	-22	-1	100
Imp.	Const.	10	0NC2PRC241	34.3	10000000	runout	1.9	-1	100
Imp.	Const.	10	0NC2PRC242	34.3	10000000	runout	1.9	-1	100
Imp.	Const.	10	0NC2PRC261	45.7	702000	crack	1.9	-1	100
Imp.	Const.	16	0NC2PRC262	45	338000	crack	2	-1	100
Imp.	Const.	10	0NC2PRC342	34.3	10000000	runout	13.3	-1	100
Imp.	Const.	15	0NC2PRC441	34.3	5194000	crack	24.8	-1	100
Imp.	Const.	17	0NC2PRC042	36	1983000	crack	-22	-1	100
Imp.	Const.	18	0NC2PRC062	45	1789000	crack	-22	-1	100
Imp.	Const.	17	0NC2PRC081	54	247000	crack	-22	-1	100
Imp.	Const.	17	0NC2PRC083	54	1067000	crack	-22	-1	100
Imp.	Const.	15	0NC2PRC082	54	1164000	crack	-22	-1	100
Imp.	Const.	10	0NC2PRC243	36	10000000	runout	2	-1	100
Imp.	Const.	18	0NC2PRC244	36	3090000	crack	2	-1	100
Imp.	Const.	15	0NC2PRC263	45	2284000	crack	2	-1	100
Imp.	Const.	15	0NC2PRC264	45	1242000	crack	2	-1	100

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	15	0NC2PRC281	54	440000	crack	2	-1	100
Imp.	Const.	18	0NC2PRC282	54	238000	crack	2	-1	100
Imp.	Const.	18	0NC2PRC283	54	645000	crack	2	-1	100
Imp.	Const.	15	0NC2PRC343	36	2396000	crack	14	-1	100
Imp.	Const.	10	0NC2PRC344	36	10000000	runout	14	-1	100
Imp.	Const.	16	0NC2PRC381	54	211000	crack	14	-1	100
Imp.	Const.	15	0NC2PRC382	51.4	615000	crack	13.3	-1	100
Imp.	Const.	15	0NC2PRC383	54	1196000	crack	14	-1	100
Imp.	Const.	16	0NC2PRC442	20.5	2846000	crack	26	-1	100
Imp.	Const.	10	0NC2PRC461	45	558000	crack	26	-1	100
Imp.	Const.	10	0NC2PRC462	42.8	2717000	crack	24.8	-1	100
Imp.	Const.	20	0NC2SGB211	18	4433000	crack	2	-1	50
Imp.	Const.	20	0NC2SGC212	18	2194000	crack	2	-1	100
Imp.	Const.	20	0NC2SGB311	18	3230000	crack	14	-1	50
Imp.	Const.	20	0NC2SGB312	18	2012000	crack	14	-1	50
Imp.	Const.	20	0NC2SGB221	24	1046000	crack	2	-1	50
Imp.	Const.	20	0NC2SGC222	24	838000	crack	2	-1	100
Imp.	Const.	20	0NC2SGB321	24	1063000	crack	14	-1	50
Imp.	Const.	20	0NC2SGB322	24	1052000	crack	14	-1	50
Imp.	Const.	20	0NC2SGB323	24	1131000	crack	14	-1	50
Imp.	Const.	20	0NC2SGB231	30	520000	crack	2	-1	50
Imp.	Const.	20	0NC2SGC232	30	452000	crack	2	-1	100
Imp.	Const.	20	0NC2SGB331	30	746000	crack	14	-1	50
Imp.	Const.	20	0NC2SGB332	30	539000	crack	14	-1	50
Imp.	Const.	20	0NC2SGC333	30	627000	crack	14	-1	100
Imp.	Const.	20	0NC2SBB221	24	1197000	crack	2	-1	50
Imp.	Const.	20	0NC2SBB222	24	1061000	crack	2	-1	50
Imp.	Const.	20	0NC2SBB321	24	1388000	crack	2	-1	50
Imp.	Const.	20	0NC2SBB322	24	1401000	crack	2	-1	50
Imp.	Const.	20	0NC2SBB231	30	718000	crack	2	-1	50
Imp.	Const.	20	0NC2SBB232	30	533000	crack	2	-1	50
Imp.	Const.	20	0NC2SBB331	30	684000	crack	2	-1	50
Imp.	Const.	20	0NC2SBB332	30	725000	crack	2	-1	50
Imp.	Const.	17	0NC2PRC083	54	1067000	crack	-22	-1	100
Imp.	Const.	40	1NC3010002	8	950000	crack	-1	-1	50
Imp.	Const.	40	1NC3010003	8	1090000	crack	-1	-1	100

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	40	1NC3010004	8	1400000	crack	-1	-1	36
Imp.	Const.	40	1NC3010005	8	1450000	crack	-1	-1	36
Imp.	Const.	40	1NC3010006	8	1530000	crack	-1	-1	36
Imp.	Const.	40	1NC3010007	8	1550000	crack	-1	-1	50
Imp.	Const.	40	1NC3010008	8	1650000	crack	-1	-1	50
Imp.	Const.	40	1NC3010009	8	1770000	crack	-1	-1	100
Imp.	Const.	40	1NC3010010	8	2010000	crack	-1	-1	50
Imp.	Const.	40	1NC3010011	8	2150000	crack	-1	-1	50
Imp.	Const.	40	1NC3010012	8	2060000	crack	-1	-1	50
Imp.	Const.	40	1NC3010013	8	2100000	crack	-1	-1	36
Imp.	Const.	40	1NC3010014	6	2120000	crack	-1	-1	36
Imp.	Const.	40	1NC3010015	8	2360000	crack	-1	-1	50
Imp.	Const.	40	1NC3010016	8	2580000	crack	-1	-1	50
Imp.	Const.	40	1NC3010017	8	2970000	crack	-1	-1	36
Imp.	Const.	40	1NC3010018	8	3880000	crack	-1	-1	50
Imp.	Const.	40	1NC3010019	6	3490000	crack	-1	-1	50
Imp.	Const.	40	1NC3010020	6	5070000	crack	-1	-1	36
Imp.	Const.	40	1NC3010021	6	7650000	crack	-1	-1	50
Imp.	Const.	40	1NC3010022	6	9480000	crack	-1	-1	50
Imp.	Const.	40	1NC3010023	6	11300000	crack	-1	-1	50
Imp.	Const.	40	1NC3010024	4	12600000	crack	-1	-1	50
Imp.	Const.	40	1NC3010025	6	21500000	runout	-1	-1	50
Imp.	Const.	40	1NC3010026	6	23800000	runout	-1	-1	36
Imp.	Const.	40	1NC3010027	6	27200000	runout	-1	-1	50
Imp.	Const.	40	1NC3010028	4	32500000	crack	-1	-1	36
Imp.	Const.	40	1NC3010029	4	41700000	runout	-1	-1	50
Imp.	Const.	40	1NC3010030	4	48100000	runout	-1	-1	50
Imp.	Const.	40	1NC3010031	4	48500000	runout	-1	-1	50
Imp.	Const.	40	1NC3010032	4	58000000	runout	-1	-1	36
Imp.	Const.	40	1NC3010033	4	58500000	runout	-1	-1	36
Imp.	Const.	40	1NC3010034	4	66300000	runout	-1	-1	36
Imp.	Const.	230	1NC4A10101	21	160000	crack	-1	-1	36
Imp.	Const.	230	1NC4A10102	21	170000	crack	-1	-1	36
Imp.	Const.	230	1NC4A10103	15	850000	crack	-1	-1	36
Imp.	Const.	230	1NC4A10104	15	920000	crack	-1	-1	36
Imp.	Const.	230	1NC4A10105	12	930000	crack	-1	-1	36

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	230	1NC4A10106	12	1060000	crack	-1	-1	36
Imp.	Const.	230	1NC4A10107	9	4900000	crack	-1	-1	36
Imp.	Const.	230	1NC4A10108	9	9480000	runout	-1	-1	36
Imp.	Const.	230	1NC4A10201	12	1240000	crack	-1	-1	36
Imp.	Const.	230	1NC4A10202	12	1970000	crack	-1	-1	36
Imp.	Const.	230	1NC4A10203	12	2190000	crack	-1	-1	36
Imp.	Const.	230	1NC4A10204	12	2440000	crack	-1	-1	36
Imp.	Const.	230	1NC4A20101	15	490000	crack	-1	-1	36
Imp.	Const.	230	1NC4A20102	15	530000	crack	-1	-1	36
Imp.	Const.	230	1NC4A20103	12	1150000	crack	-1	-1	36
Imp.	Const.	230	1NC4A20104	12	1280000	crack	-1	-1	36
Imp.	Const.	230	1NC4A20105	9	1430000	crack	-1	-1	36
Imp.	Const.	230	1NC4A20106	9	1510000	crack	-1	-1	36
Imp.	Const.	230	1NC4A20107	12	2040000	crack	-1	-1	36
Imp.	Const.	230	1NC4A20108	12	2060000	crack	-1	-1	36
Imp.	Const.	230	1NC4A20109	9	3550000	crack	-1	-1	36
Imp.	Const.	230	1NC4A20110	9	4020000	runout	-1	-1	36
Imp.	Const.	230	1NC4A20111	6	12000000	runout	-1	-1	36
Imp.	Const.	230	1NC4A20112	6	13000000	runout	-1	-1	36
Imp.	Const.	120	1NC4A30101	15	400000	crack	-1	-1	36
Imp.	Const.	120	1NC4A30102	15	620000	crack	-1	-1	36
Imp.	Const.	120	1NC4A30103	15	700000	crack	-1	-1	36
Imp.	Const.	120	1NC4A30104	15	740000	crack	-1	-1	36
Imp.	Const.	120	1NC4A30105	9	1380000	crack	-1	-1	36
Imp.	Const.	120	1NC4A30106	9	1800000	crack	-1	-1	36
Imp.	Const.	120	1NC4A30107	12	1870000	crack	-1	-1	36
Imp.	Const.	120	1NC4A30108	12	2230000	runout	-1	-1	36
Imp.	Const.	120	1NC4A30109	6	8670000	crack	-1	-1	36
Imp.	Const.	120	1NC4A30110	6	9480000	runout	-1	-1	36
Imp.	Const.	120	1NC4A30111	6	13500000	runout	-1	-1	36
Imp.	Const.	251	1NC4A50101	21	160000	crack	-1	-1	36
Imp.	Const.	251	1NC4A50102	12	970000	runout	-1	-1	36
Imp.	Const.	251	1NC4A50103	15	1160000	runout	-1	-1	36
Imp.	Const.	251	1NC4A50104	12	1610000	runout	-1	-1	36
Imp.	Const.	251	1NC4A50105	12	1870000	runout	-1	-1	36
Imp.	Const.	251	1NC4A50106	10	9710000	runout	-1	-1	36

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	256	1NC4A50201	15	860000	runout	-1	-1	36
Imp.	Const.	256	1NC4A50202	15	1390000	runout	-1	-1	36
Imp.	Const.	256	1NC4A50203	12.2	2380000	runout	-1	-1	36
Imp.	Const.	256	1NC4A50204	12.2	3510000	runout	-1	-1	36
Imp.	Const.	256	1NC4A50205	9	4020000	runout	-1	-1	36
Imp.	Const.	256	1NC4A50206	9	7310000	runout	-1	-1	36
Imp.	Const.	256	1NC4A50207	6	18200000	runout	-1	-1	36
Imp.	Const.	256	1NC4A50301	15	760000	crack	-1	-1	36
Imp.	Const.	256	1NC4A50302	12.2	2000000	runout	-1	-1	36
Imp.	Const.	256	1NC4A50303	10	2680000	runout	-1	-1	36
Imp.	Const.	256	1NC4A50304	6	9280000	runout	-1	-1	36
Imp.	Const.	256	1NC4A50305	6	13100000	runout	-1	-1	36
Imp.	Const.	120	1NC4A60301	5.7	4330000	crack	-1	-1	36
Imp.	Const.	120	1NC4A60201	11.4	780000	crack	-1	-1	36
Imp.	Const.	120	1NC4A60401	8.8	1770000	crack	-1	-1	36
Imp.	Const.	120	1NC4A60402	11.4	1430000	crack	-1	-1	36
Imp.	Const.	121	1NC4A70901	11.4	1500000	crack	-1	-1	36
Imp.	Const.	125	1NC4A80901	11.4	1080000	crack	-1	-1	36
Imp.	Const.	120	1NC4A61801	6.2	4940000	crack	-1	-1	36
Imp.	Const.	120	1NC4A61802	8.1	4960000	crack	-1	-1	36
Imp.	Const.	121	1NC4A71001	8.6	960000	crack	-1	-1	36
Imp.	Const.	121	1NC4A71002	6.6	980000	crack	-1	-1	36
Imp.	Const.	125	1NC4A81301	11.7	910000	crack	-1	-1	36
Imp.	Const.	125	1NC4A81101	14.3	350000	crack	-1	-1	36
Imp.	Const.	125	1NC4A81601	10.4	500000	crack	-1	-1	36
Imp.	Const.	125	1NC4A81602	13.5	520000	crack	-1	-1	36
Imp.	Const.	120	1NC4A60601	9.3	680000	crack	-1	-1	36
Imp.	Const.	120	1NC4A60602	9.3	940000	crack	-1	-1	36
Imp.	Const.	121	1NC4A70701	5.1	3300000	crack	-1	-1	36
Imp.	Const.	121	1NC4A70702	7	3500000	crack	-1	-1	36
Imp.	Const.	121	1NC4A70801	6.8	1170000	crack	-1	-1	36
Imp.	Const.	121	1NC4A70802	9.3	1170000	crack	-1	-1	36
Imp.	Const.	121	1NC4A70803	9.3	1060000	crack	-1	-1	36
Imp.	Const.	125	1NC4A80801	6.8	1190000	crack	-1	-1	36
Imp.	Const.	125	1NC4A80801	9.3	1060000	crack	-1	-1	36
Imp.	Const.	125	1NC4A81201	7.3	970000	crack	-1	-1	36

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	125	1NC4A81201	10	550000	crack	-1	-1	36
Imp.	Const.	125	1NC4A81501	11.6	140000	crack	-1	-1	36
Imp.	Const.	125	1NC4A81701	5.1	8630000	crack	-1	-1	36
Imp.	Const.	334	1NC4A50101	14	340000	crack	-1	-1	36
Imp.	Const.	334	1NC4A50102	12.2	350000	crack	-1	-1	36
Imp.	Const.	334	1NC4A50103	12.2	420000	crack	-1	-1	36
Imp.	Const.	334	1NC4A50104	12.2	560000	crack	-1	-1	36
Imp.	Const.	334	1NC4A50105	10.6	1220000	crack	-1	-1	36
Imp.	Const.	334	1NC4A50106	5	350000	crack	-1	-1	36
Imp.	Const.	334	1NC4A50201	12.8	70000	crack	-1	-1	36
Imp.	Var.	120	1NC600A1WW	3.6	22900000	crack	-2	-1	50
Imp.	Var.	120	1NC600A1MW	3.6	17800000	crack	-2	-1	50
Imp.	Var.	120	1NC600A1EW	3.6	17800000	crack	-2	-1	50
Imp.	Var.	120	1NC600A1EE	3.6	15500000	crack	-2	-1	50
Imp.	Var.	120	1NC600A2WE	4.2	19000000	crack	-2	-1	50
Imp.	Var.	120	1NC600A2EE	4.2	16500000	crack	-2	-1	50
Imp.	Var.	120	1NC600B1WW	2.2	71000000	crack	-2	-1	50
Imp.	Var.	120	1NC600B1EE	2.2	70000000	crack	-2	-1	50
Imp.	Var.	120	1NC600B2WW	2.6	40500000	crack	-2	-1	50
Imp.	Var.	120	1NC600B2WE	2.6	31200000	crack	-2	-1	50
Imp.	Var.	120	1NC600B2MW	2.6	31200000	crack	-2	-1	50
Imp.	Var.	120	1NC600B2ME	2.6	35700000	crack	-2	-1	50
Imp.	Var.	120	1NC600B2EW	2.6	28100000	crack	-2	-1	50
Imp.	Var.	120	1NC600C1WW	2.6	13600000	crack	-2	-1	50
Imp.	Var.	120	1NC600C1WW	3.5	13600000	crack	-1	-1	50
Imp.	Var.	120	1NC600C1WE	3.5	11900000	crack	-1	-1	50
Imp.	Var.	120	1NC600C1MW	3.5	9100000	crack	-1	-1	50
Imp.	Var.	120	1NC600C1EW	3.5	13000000	crack	-1	-1	50
Imp.	Var.	120	1NC600C1EE	3.5	16800000	crack	-1	-1	50
Imp.	Var.	120	1NC600C2WW	4	16100000	crack	-1	-1	50
Imp.	Var.	120	1NC600C2WE	4	15700000	crack	-1	-1	50
Imp.	Var.	120	1NC600C2MW	4	13000000	crack	-1	-1	50
Imp.	Var.	120	1NC600C2EW	4	13600000	crack	-1	-1	50
Imp.	Var.	120	1NC600C2EE	4	10700000	crack	-1	-1	50
Imp.	Var.	120	1NC600D1WW	2.9	103600000	crack	-1	-1	50
Imp.	Var.	120	1NC600D1WE	2.9	116200000	crack	-1	-1	50

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Var.	120	1NC600D1MW	2.9	112200000	crack	-1	-1	50
Imp.	Var.	120	1NC600D1ME	2.9	112200000	crack	-1	-1	50
Imp.	Var.	120	1NC600D1EE	2.9	103600000	crack	-1	-1	50
Imp.	Var.	120	1NC600D1EW	2.9	127000000	crack	-1	-1	50
Imp.	Var.	120	1NC600D2WW	2.9	110000000	crack	-1	-1	50
Imp.	Var.	120	1NC600D2WE	2.9	110000000	crack	-1	-1	50
Imp.	Var.	120	1NC600D2MW	2.9	110000000	crack	-1	-1	50
Imp.	Var.	120	1NC600D2ME	2.9	110000000	crack	-1	-1	50
Imp.	Var.	120	1NC600D2EW	2.9	110000000	crack	-1	-1	50
Imp.	Var.	120	1NC600D2EE	2.9	110000000	crack	-1	-1	50
Imp.	Var.	40	1NC600A101	3.4	25900000	crack	-2	-1	50
Imp.	Var.	40	1NC600A201	3.6	17500000	crack	-2	-1	50
Imp.	Var.	40	1NC600B101	2.1	200000000	crack	-2	-1	50
Imp.	Var.	40	1NC600B201	2.2	120000000	crack	-2	-1	50
Imp.	Var.	40	1NC600C101	3.7	7250000	crack	-2	-1	50
Imp.	Var.	40	1NC600C201	3.9	10700000	crack	-2	-1	50
Imp.	Var.	40	1NC600D101	2.8	150000000	crack	-2	-1	50
Imp.	Var.	40	1NC600D201	2.8	130000000	crack	-2	-1	50
Imp.	Var.	30	1NC600A102	3.4	30600000	crack	-2	-1	50
Imp.	Var.	30	1NC600A202	3.6	19500000	crack	-2	-1	50
Imp.	Var.	30	1NC600B102	2.1	200000000	crack	-2	-1	50
Imp.	Var.	30	1NC600B202	2.2	150000000	crack	-2	-1	50
Imp.	Var.	30	1NC600C102	3.7	7250000	crack	-2	-1	50
Imp.	Var.	30	1NC600C202	3.9	44000000	crack	-2	-1	50
Imp.	Var.	30	1NC600D102	2.8	140000000	crack	-2	-1	50
Imp.	Var.	30	1NC600D202	2.8	130000000	crack	-2	-1	50
S.I.	Const.	150	1JPN01N022	408	211000	crack	20	-1	600
S.I.	Const.	150	1JPN01N008	343	474000	crack	20	-1	600
S.I.	Const.	150	1JPN01N007	300	2000000	runout	20	-1	600
S.I.	Const.	150	1JPN01N018	313	848000	crack	20	-1	600
S.I.	Const.	150	1JPN01N017	305	1490000	crack	20	-1	600
S.I.	Const.	150	1JPN01N009	352	1610000	runout	20	-1	600
S.I.	Const.	150	1JPN01N014	450	154000	crack	20	-1	600
S.I.	Const.	150	1JPN01N006	287	2040000	runout	20	-1	600
S.I.	Const.	150	1JPN01N010	349	565000	crack	20	-1	600
S.I.	Const.	150	1JPN01S014	303	878000	crack	20	-1	600

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	150	1JPN01S085	300	2340000	crack	20	-1	600
S.I.	Const.	150	1JPN01S087	349	924000	crack	20	-1	600
S.I.	Const.	150	1JPN01S100	351	506000	crack	20	-1	600
S.I.	Const.	150	1JPN01SA33	300	819000	crack	20	-1	600
S.I.	Const.	150	1JPN01M005	302	290000	crack	20	-1	600
S.I.	Const.	150	1JPN01M036	300	555000	crack	20	-1	600
S.I.	Const.	150	1JPN01M043	301	392000	crack	20	-1	600
S.I.	Const.	150	1JPN01M068	254	1900000	crack	20	-1	600
S.I.	Const.	150	1JPN01M069	254	1050000	crack	20	-1	600
S.I.	Const.	150	1JPN01M0A1	249	2290000	crack	20	-1	600
S.I.	Const.	150	1JPN01M0A2	300	1050000	crack	20	-1	600
S.I.	Const.	150	1JPN01M0B5	250	1490000	crack	20	-1	600
S.I.	Const.	150	1JPN01M096	305	172000	crack	20	-1	600
S.I.	Const.	150	1JPN01M0B4	281	233000	crack	20	-1	600
S.I.	Const.	150	1JPN01M0B7	243	537000	crack	20	-1	600
S.I.	Const.	150	1JPN01M0B8	280	268000	crack	20	-1	600
S.I.	Const.	150	1JPN01MC18	284	332000	crack	20	-1	600
S.I.	Const.	150	1JPN01M0C5	236	696000	crack	20	-1	600
S.I.	Const.	150	1JPN01LB18	300	348000	crack	20	-1	600
S.I.	Const.	150	1JPN01LB19	301	258000	crack	20	-1	600
S.I.	Const.	150	1JPN01LB20	301	236000	crack	20	-1	600
S.I.	Const.	150	1JPN01L0C7	250	456000	crack	20	-1	600
S.I.	Const.	150	1JPN01L0C9	249	567000	crack	20	-1	600
S.I.	Const.	150	1JPN01LC21	251	530000	crack	20	-1	600
S.I.	Const.	150	1JPN01LC22	200	1210000	crack	20	-1	600
S.I.	Const.	150	1JPN01LC23	200	1690000	crack	20	-1	600
S.I.	Const.	150	1JPN01LB14	182	687000	crack	20	-1	600
S.I.	Const.	150	1JPN01LB17	210	548000	crack	20	-1	600
S.I.	Const.	150	1JPN01LC11	184	1110000	crack	20	-1	600
S.I.	Const.	150	1JPN01LC12	234	470000	crack	20	-1	600
S.I.	Const.	150	1JPN01LC15	183	901000	crack	20	-1	600
S.I.	Const.	150	1JPN01LC20	286	205000	crack	20	-1	600
S.I.	Const.	150	1JPN01L0B6	181	1180000	crack	20	-1	600
S.I.	Const.	150	1JPN01LB11	231	408000	crack	20	-1	600
S.I.	Const.	150	1JPN01LC13	230	602000	crack	20	-1	600
S.I.	Const.	150	1JPN01LC19	278	273000	crack	20	-1	600

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	150	1JPN01SBA1	140	2200000	crack	20	-1	600
S.I.	Const.	150	1JPN01SBA2	120	4800000	runout	20	-1	600
S.I.	Const.	150	1JPN01SBA3	181	922000	crack	20	-1	600
S.I.	Const.	150	1JPN01SBA4	219	378000	crack	20	-1	600
S.I.	Const.	150	1JPN01SBA5	250	284000	crack	20	-1	600
S.I.	Const.	150	1JPN01SBA6	302	141000	crack	20	-1	600
S.I.	Const.	150	1JPN01SBB1	300	266000	crack	20	-1	600
S.I.	Const.	150	1JPN01SBB2	200	2390000	crack	20	-1	600
S.I.	Const.	150	1JPN01SBC1	299	417000	crack	20	-1	600
S.I.	Const.	150	1JPN01SBC2	250	2920000	crack	20	-1	600
S.I.	Const.	150	1JPN01N023	482	124000	crack	20	-1	600
S.I.	Const.	150	1JPN01N024	426	151000	crack	20	-1	600
S.I.	Const.	150	1JPN01N025	381	187000	crack	20	-1	600
S.I.	Const.	150	1JPN01N037	338	281000	crack	20	-1	600
S.I.	Const.	150	1JPN01N038	308	1110000	crack	20	-1	600
S.I.	Const.	150	1JPN01N039	282	2300000	runout	20	-1	600
S.I.	Const.	160	1JPN1100S1	196	370000	crack	-98	-1	580
S.I.	Const.	160	1JPN1100S2	196	495000	crack	-131	-2	580
S.I.	Const.	160	1JPN1100S3	196	700000	crack	-164	-5	580
S.I.	Const.	160	1JPN1100S4	196	321000	crack	0	0	580
S.I.	Const.	160	1JPN1100S5	127	3480000	crack	-64	-1	580
S.I.	Const.	160	1JPN1100S6	147	1028000	crack	-74	-1	580
S.I.	Const.	160	1JPN1100S7	147	1792000	crack	-98	-2	580
S.I.	Const.	160	1JPN1100S8	147	1414000	crack	1	0	580
S.I.	Const.	160	1JPN1100S9	147	4700000	runout	-123	-5	580
S.I.	Const.	150	1JPN0200T1	247	1762000	crack	10	-1	800
S.I.	Const.	150	1JPN0200T2	245	1249000	crack	10	-1	800
S.I.	Const.	150	1JPN0200T3	267	527000	crack	10	-1	800
S.I.	Const.	150	1JPN0200T4	220	555000	crack	10	-1	800
S.I.	Const.	150	1JPN0200T5	222	1224000	crack	10	-1	800
S.I.	Const.	150	1JPN0200T7	197	2567000	crack	10	-1	800
S.I.	Const.	150	1JPN0200T8	216	1708000	crack	10	-1	800
S.I.	Const.	150	1JPN0200T9	267	400000	crack	10	-1	800
S.I.	Const.	150	1JPN020T10	199	1243000	crack	10	-1	800
S.I.	Const.	170	1JPN05AB01	135	1200000	crack	-1	-1	800
S.I.	Const.	170	1JPN05AB02	135	1200000	crack	-1	-1	800

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	170	1JPN05AB03	135	2150000	crack	-1	-1	800
S.I.	Const.	170	1JPN05AB04	125	1200000	crack	-1	-1	800
S.I.	Const.	170	1JPN05AB05	125	1620000	crack	-1	-1	800
S.I.	Const.	170	1JPN05AB06	125	1700000	crack	-1	-1	800
S.I.	Const.	170	1JPN5DEF01	150	1100000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF02	150	1210000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF03	150	1480000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF04	150	1520000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF05	150	1600000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF06	150	2050000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF07	115	1050000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF08	115	1680000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF09	115	1730000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF10	115	1900000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF11	115	2050000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF12	115	2150000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF13	115	2400000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF14	115	2750000	crack	-1	-1	580
S.I.	Const.	170	1JPN05G001	115	2150000	crack	-1	-1	800
S.I.	Const.	170	1JPN05G002	115	2350000	crack	-1	-1	800
S.I.	Const.	150	1JPN09SB01	395	180000	crack	10	1	800
S.I.	Const.	150	1JPN09SB02	395	310000	crack	10	1	800
S.I.	Const.	150	1JPN09SB03	300	375000	crack	10	1	800
S.I.	Const.	150	1JPN09SB04	300	570000	crack	10	1	800
S.I.	Const.	150	1JPN09SB05	290	620000	crack	10	1	800
S.I.	Const.	150	1JPN09SB06	250	1200000	crack	10	1	800
S.I.	Const.	150	1JPN09SB07	250	2100000	runout	10	1	800
S.I.	Const.	150	1JPN09SB08	230	2150000	crack	10	1	800
S.I.	Const.	150	1JPN09SB09	290	500000	crack	10	0	800
S.I.	Const.	150	1JPN09SB10	290	520000	crack	10	0	800
S.I.	Const.	150	1JPN09SB11	290	765000	crack	10	0	800
S.I.	Const.	150	1JPN09SB12	230	760000	crack	10	0	800
S.I.	Const.	150	1JPN09SB13	230	1120000	crack	10	0	800
S.I.	Const.	150	1JPN09SB14	190	1600000	crack	10	0	800
S.I.	Const.	160	1JPN05JS01	200	470000	crack	300	0.6	800
S.I.	Const.	160	1JPN05JS02	132	4000000	runout	198	0.6	800

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	160	1JPN05JS03	310	183000	crack	0	0	800
S.I.	Const.	160	1JPN05JS04	217	445000	crack	0	0	800
S.I.	Const.	160	1JPN05JS05	148	1150000	crack	0	0	800
S.I.	Const.	160	1JPN05JS06	140	1300000	crack	0	0	800
S.I.	Const.	160	1JPN05JS07	135	1600000	crack	0	0	800
S.I.	Const.	160	1JPN05JS08	140	1820000	crack	0	0	800
S.I.	Const.	160	1JPN05JS09	135	3200000	runout	0	0	800
S.I.	Const.	160	1JPN05JS10	140	4000000	crack	0	0	800
S.I.	Const.	160	1JPN05JS11	390	112000	crack	-195	-1	800
S.I.	Const.	160	1JPN05JS12	280	394000	crack	-140	-1	800
S.I.	Const.	160	1JPN05JS13	200	385000	crack	0	0	800
S.I.	Const.	160	1JPN05JS14	135	3150000	crack	0	0	800
S.I.	Const.	160	1JPN05JS15	145	3150000	crack	0	0	800
S.I.	Const.	170	1JPN05BA01	156	890000	crack	0	0	800
S.I.	Const.	170	1JPN05BA02	133	1310000	crack	0	0	800
S.I.	Const.	170	1JPN05BA03	155	2780000	crack	0	0	800
S.I.	Const.	150	1JPN05JS16	270	400000	crack	0	0	800
S.I.	Const.	150	1JPN05JS17	270	530000	crack	0	0	800
S.I.	Const.	150	1JPN05JS18	222	555000	crack	0	0	800
S.I.	Const.	150	1JPN05JS19	248	1270000	crack	0	0	800
S.I.	Const.	150	1JPN05JS20	223	1250000	crack	0	0	800
S.I.	Const.	150	1JPN05JS21	200	1270000	crack	0	0	800
S.I.	Const.	150	1JPN05JS22	250	1800000	crack	0	0	800
S.I.	Const.	150	1JPN05JS23	220	1750000	crack	0	0	800
S.I.	Const.	150	1JPN05JS24	200	2600000	crack	0	0	800
S.I.	Const.	170	1JPN05BB01	174	1200000	crack	0	0	800
S.I.	Const.	170	1JPN05BB02	148	1990000	crack	0	0	800
S.I.	Const.	170	1JPN05BB03	127	3000000	runout	0	0	800
S.I.	Const.	170	1JPN05BE01	219	1010000	crack	0	0	800
S.I.	Const.	170	1JPN05BE02	192	1280000	crack	0	0	800
S.I.	Const.	170	1JPN05BE03	163	2190000	crack	0	0	800
S.I.	Const.	171	1JPN05BD01	228	1040000	crack	0	0	800
S.I.	Const.	171	1JPN05BD02	198	1080000	crack	0	0	800
S.I.	Const.	171	1JPN05BD03	168	1940000	crack	0	0	800
S.I.	Const.	172	1JPN05BF01	202	807000	crack	0	0	800
S.I.	Const.	172	1JPN05BF02	198	740000	crack	0	0	800

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	172	1JPN05BF03	198	1350000	crack	0	0	800
S.I.	Const.	172	1JPN05BF04	168	3150000	crack	0	0	800
S.I.	Const.	170	1JPN05BG01	175	1190000	crack	-1	-1	500
S.I.	Const.	170	1JPN05BG02	182	3000000	runout	-1	-1	500
S.I.	Const.	170	1JPN05BG02	217	1240000	crack	-1	-1	500
S.I.	Const.	170	1JPN05BG03	221	1570000	crack	-1	-1	500
S.I.	Const.	150	1JPN100201	392	405000	crack	10	-1	800
S.I.	Const.	150	1JPN100202	343	842000	crack	10	-1	800
S.I.	Const.	150	1JPN100203	324	1010000	crack	10	-1	800
S.I.	Const.	150	1JPN100204	284	2000000	runout	10	-1	800
S.I.	Const.	150	1JPN100205	343	540000	crack	10	-1	800
S.I.	Const.	150	1JPN100206	275	860000	crack	10	-1	800
S.I.	Const.	150	1JPN100207	294	960000	crack	10	-1	800
S.I.	Const.	150	1JPN100208	255	1100000	crack	10	-1	800
S.I.	Const.	150	1JPN100301	333	305000	crack	10	-1	500
S.I.	Const.	150	1JPN100302	314	510000	crack	10	-1	500
S.I.	Const.	150	1JPN100303	294	870000	crack	10	-1	500
S.I.	Const.	150	1JPN100304	265	1100000	crack	10	-1	500
S.I.	Const.	150	1JPN100305	255	1400000	crack	10	-1	500
S.I.	Const.	150	1JPN100306	353	210000	crack	10	-1	500
S.I.	Const.	150	1JPN100307	294	590000	crack	10	-1	500
S.I.	Const.	150	1JPN100308	275	620000	crack	10	-1	500
S.I.	Const.	150	1JPN100309	265	1020000	crack	10	-1	500
S.I.	Const.	150	1JPN100401	343	290000	crack	10	-1	800
S.I.	Const.	150	1JPN100402	265	700000	crack	10	-1	800
S.I.	Const.	150	1JPN100403	314	1200000	crack	10	-1	800
S.I.	Const.	150	1JPN100404	294	1400000	crack	10	-1	800
S.I.	Const.	150	1JPN100405	245	1550000	crack	10	-1	800
S.I.	Const.	150	1JPN100406	294	430000	crack	10	-1	800
S.I.	Const.	150	1JPN100407	245	1050000	crack	10	-1	800
S.I.	Const.	150	1JPN100408	265	1200000	crack	10	-1	800
S.I.	Const.	150	1JPN100409	226	3000000	crack	10	-1	800
S.I.	Const.	150	1JPN100410	294	350000	crack	10	-1	800
S.I.	Const.	150	1JPN100411	235	610000	crack	10	-1	800
S.I.	Const.	150	1JPN100412	255	750000	crack	10	-1	800
S.I.	Const.	150	1JPN100413	235	840000	crack	10	-1	800

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	150	1JPN100414	216	1500000	crack	10	-1	800
S.I.	Const.	150	1JPN100501	343	250000	crack	10	-1	500
S.I.	Const.	150	1JPN100502	294	480000	crack	10	-1	500
S.I.	Const.	150	1JPN100503	324	660000	crack	10	-1	500
S.I.	Const.	150	1JPN100504	255	1100000	crack	10	-1	500
S.I.	Const.	150	1JPN100505	343	95000	crack	10	-1	500
S.I.	Const.	150	1JPN100506	324	180000	crack	10	-1	500
S.I.	Const.	150	1JPN100507	294	770000	crack	10	-1	500
S.I.	Const.	150	1JPN100508	265	780000	crack	10	-1	500
S.I.	Const.	150	1JPN100509	265	2000000	runout	10	-1	500
S.I.	Const.	150	1JPN100510	314	260000	crack	10	-1	500
S.I.	Const.	150	1JPN100511	294	270000	crack	10	-1	500
S.I.	Const.	150	1JPN100512	255	300000	crack	10	-1	500
S.I.	Const.	150	1JPN100513	216	870000	crack	10	-1	500
S.I.	Const.	150	1JPN100514	206	2000000	runout	10	-1	500
S.I.	Const.	151	1JPN100601	373	81000	crack	10	-1	800
S.I.	Const.	151	1JPN100602	412	120000	crack	10	-1	800
S.I.	Const.	151	1JPN100603	412	360000	crack	10	-1	800
S.I.	Const.	151	1JPN100604	451	670000	crack	10	-1	800
S.I.	Const.	151	1JPN100605	343	720000	crack	10	-1	800
S.I.	Const.	151	1JPN100606	373	1300000	crack	10	-1	800
S.I.	Const.	151	1JPN100607	314	1600000	crack	10	-1	800
S.I.	Const.	151	1JPN100701	363	310000	crack	10	-1	500
S.I.	Const.	151	1JPN100702	333	330000	crack	10	-1	500
S.I.	Const.	151	1JPN100703	343	660000	crack	10	-1	500
S.I.	Const.	151	1JPN100704	324	180000	crack	10	-1	500
S.I.	Const.	150	1JPN12T102	449	128000	crack	10	0	800
S.I.	Const.	150	1JPN12T103	198	2022000	crack	10	0	800
S.I.	Const.	150	1JPN12T104	303	288000	crack	10	0	800
S.I.	Const.	150	1JPN12T105	191	696000	crack	10	0	800
S.I.	Const.	150	1JPN12T106	413	690000	crack	10	0	800
S.I.	Const.	150	1JPN12T107	209	1503000	crack	10	0	800
S.I.	Const.	150	1JPN12T108	216	799000	crack	10	0	800
S.I.	Const.	150	1JPN12T109	222	930000	crack	10	0	800
S.I.	Const.	150	1JPN12T201	191	1468000	crack	10	0	800
S.I.	Const.	150	1JPN12T202	212	663000	crack	10	0	800

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	150	1JPN12T203	304	161000	crack	10	0	800
S.I.	Const.	150	1JPN12T204	279	212000	crack	10	0	800
S.I.	Const.	150	1JPN12T301	174	1781000	crack	10	0	800
S.I.	Const.	150	1JPN12T302	194	2535000	crack	10	0	800
S.I.	Const.	150	1JPN12T303	270	535000	crack	10	0	800
S.I.	Const.	150	1JPN12T304	352	242000	crack	10	0	800
S.I.	Const.	150	1JPN12T401	215	1356000	crack	10	0	800
S.I.	Const.	150	1JPN12T402	278	643000	crack	10	0	800
S.I.	Const.	150	1JPN12T403	349	292000	crack	10	0	800
S.I.	Const.	160	1JPN130P01	245	172000	crack	27	-1	370
S.I.	Const.	160	1JPN130P02	245	216000	crack	27	-1	370
S.I.	Const.	160	1JPN130P03	245	307000	crack	27	-1	370
S.I.	Const.	160	1JPN130P04	177	565000	crack	27	-1	370
S.I.	Const.	160	1JPN130P05	177	821000	crack	27	-1	370
S.I.	Const.	160	1JPN130P06	177	741000	crack	27	-1	370
S.I.	Const.	160	1JPN130P07	147	2117000	crack	27	-1	370
S.I.	Const.	160	1JPN130P08	127	10000000	runout	27	-1	370
S.I.	Const.	160	1JPN130P09	127	5340000	runout	27	-1	370
S.I.	Const.	160	1JPN130W01	245	242000	crack	27	-1	370
S.I.	Const.	160	1JPN130W02	245	217000	crack	27	-1	370
S.I.	Const.	160	1JPN130W03	245	274000	crack	27	-1	370
S.I.	Const.	160	1JPN130W04	177	774000	crack	27	-1	370
S.I.	Const.	160	1JPN130W05	177	432000	crack	27	-1	370
S.I.	Const.	160	1JPN130W06	177	822000	crack	27	-1	370
S.I.	Const.	160	1JPN130W07	147	2160000	crack	27	-1	370
S.I.	Const.	160	1JPN130W08	147	1820000	crack	27	-1	370
S.I.	Const.	160	1JPN130W09	147	5030000	runout	27	-1	370
S.I.	Const.	160	1JPN130W10	147	5340000	runout	27	-1	370
S.I.	Const.	160	1JPN130N01	245	268000	crack	27	-1	370
S.I.	Const.	160	1JPN130N02	245	170000	crack	27	-1	370
S.I.	Const.	160	1JPN130N03	245	219000	crack	27	-1	370
S.I.	Const.	160	1JPN130N04	177	660000	crack	27	-1	370
S.I.	Const.	160	1JPN130N05	177	826000	crack	27	-1	370
S.I.	Const.	160	1JPN130N06	177	608000	crack	27	-1	370
S.I.	Const.	160	1JPN130N07	147	5480000	runout	27	-1	370
S.I.	Const.	160	1JPN130N08	147	1170000	crack	27	-1	370

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	160	1JPN130N09	147	1720000	crack	27	-1	370
S.I.	Const.	165	1JPN132W01	245	379000	crack	27	-1	370
S.I.	Const.	165	1JPN132W02	245	318000	crack	27	-1	370
S.I.	Const.	165	1JPN132W03	245	267000	crack	27	-1	370
S.I.	Const.	165	1JPN132W04	177	955000	crack	27	-1	370
S.I.	Const.	165	1JPN132W05	177	1869000	crack	27	-1	370
S.I.	Const.	165	1JPN132W06	177	1034000	crack	27	-1	370
S.I.	Const.	165	1JPN132W07	147	3250000	runout	27	-1	370
S.I.	Const.	165	1JPN132W08	147	3030000	runout	27	-1	370
S.I.	Const.	165	1JPN132W09	147	2740000	crack	27	-1	370
S.I.	Const.	165	1JPN132N01	245	379000	crack	27	-1	370
S.I.	Const.	165	1JPN132N02	245	634000	crack	27	-1	370
S.I.	Const.	165	1JPN132N03	245	440000	crack	27	-1	370
S.I.	Const.	165	1JPN132N04	177	631000	crack	27	-1	370
S.I.	Const.	165	1JPN132N05	177	2210000	runout	27	-1	370
S.I.	Const.	165	1JPN132N06	177	720000	crack	27	-1	370
S.I.	Const.	165	1JPN132N07	147	3470000	runout	27	-1	370
S.I.	Const.	165	1JPN132N08	147	1790000	crack	27	-1	370
S.I.	Const.	165	1JPN132N09	147	3620000	runout	27	-1	370
S.I.	Const.	165	1JPN134W01	245	740000	crack	27	-1	370
S.I.	Const.	165	1JPN134W02	245	233000	crack	27	-1	370
S.I.	Const.	165	1JPN134W03	245	578000	crack	27	-1	370
S.I.	Const.	165	1JPN134W04	177	1733000	crack	27	-1	370
S.I.	Const.	165	1JPN134W05	177	4470000	runout	27	-1	370
S.I.	Const.	165	1JPN134W06	177	652000	crack	27	-1	370
S.I.	Const.	165	1JPN134W07	177	1506000	crack	27	-1	370
S.I.	Const.	165	1JPN134W08	147	4750000	runout	27	-1	370
S.I.	Const.	165	1JPN134W09	147	4710000	runout	27	-1	370
S.I.	Const.	165	1JPN134W10	147	3930000	runout	27	-1	370
S.I.	Const.	165	1JPN134N01	245	482000	crack	27	-1	370
S.I.	Const.	165	1JPN134N02	245	368000	crack	27	-1	370
S.I.	Const.	165	1JPN134N03	245	392000	crack	27	-1	370
S.I.	Const.	165	1JPN134N04	177	974000	crack	27	-1	370
S.I.	Const.	165	1JPN134N05	177	1694000	crack	27	-1	370
S.I.	Const.	165	1JPN134N06	177	4750000	runout	27	-1	370
S.I.	Const.	165	1JPN134N07	177	1386000	crack	27	-1	370

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	165	1JPN134N08	147	4490000	runout	27	-1	370
S.I.	Const.	165	1JPN134N09	147	4510000	runout	27	-1	370
S.I.	Const.	165	1JPN134N10	147	4680000	runout	27	-1	370
S.I.	Const.	165	1JPN135W01	245	336000	crack	27	-1	370
S.I.	Const.	165	1JPN135W02	245	364000	crack	27	-1	370
S.I.	Const.	165	1JPN135W03	245	274000	crack	27	-1	370
S.I.	Const.	165	1JPN135W04	177	2493000	crack	27	-1	370
S.I.	Const.	165	1JPN135W05	177	5210000	runout	27	-1	370
S.I.	Const.	165	1JPN135W06	177	1387000	crack	27	-1	370
S.I.	Const.	165	1JPN135W07	177	1558000	crack	27	-1	370
S.I.	Const.	165	1JPN135W08	147	2315000	crack	27	-1	370
S.I.	Const.	165	1JPN135W09	147	3940000	runout	27	-1	370
S.I.	Const.	165	1JPN135W10	147	1110000	crack	27	-1	370
S.I.	Const.	200	1JPN130P01	245	123000	crack	27	-1	370
S.I.	Const.	200	1JPN130P02	245	109000	crack	27	-1	370
S.I.	Const.	200	1JPN130P03	245	158000	crack	27	-1	370
S.I.	Const.	200	1JPN130P04	177	359000	crack	27	-1	370
S.I.	Const.	200	1JPN130P05	177	373000	crack	27	-1	370
S.I.	Const.	200	1JPN130P06	177	321000	crack	27	-1	370
S.I.	Const.	200	1JPN130P07	127	1040000	crack	27	-1	370
S.I.	Const.	200	1JPN130P08	127	1005000	crack	27	-1	370
S.I.	Const.	200	1JPN130P09	127	720000	crack	27	-1	370
S.I.	Const.	200	1JPN130P10	127	1310000	crack	27	-1	370
S.I.	Const.	200	1JPN130W01	245	135000	crack	27	-1	370
S.I.	Const.	200	1JPN130W02	245	130000	crack	27	-1	370
S.I.	Const.	200	1JPN130W03	245	154000	crack	27	-1	370
S.I.	Const.	200	1JPN130W04	177	323000	crack	27	-1	370
S.I.	Const.	200	1JPN130W05	177	314000	crack	27	-1	370
S.I.	Const.	200	1JPN130W06	177	372000	crack	27	-1	370
S.I.	Const.	200	1JPN130W07	177	297000	crack	27	-1	370
S.I.	Const.	200	1JPN130W08	127	1322000	crack	27	-1	370
S.I.	Const.	200	1JPN130W09	127	5330000	runout	27	-1	370
S.I.	Const.	200	1JPN130W10	127	1028000	crack	27	-1	370
S.I.	Const.	200	1JPN130W11	127	5340000	runout	27	-1	370
S.I.	Const.	200	1JPN130N01	245	144000	crack	27	-1	370
S.I.	Const.	200	1JPN130N02	245	137000	crack	27	-1	370

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	200	1JPN130N03	245	151000	crack	27	-1	370
S.I.	Const.	200	1JPN130N04	245	139000	crack	27	-1	370
S.I.	Const.	200	1JPN130N05	177	422000	crack	27	-1	370
S.I.	Const.	200	1JPN130N06	177	709000	crack	27	-1	370
S.I.	Const.	200	1JPN130N07	177	356000	crack	27	-1	370
S.I.	Const.	200	1JPN130N08	127	958000	crack	27	-1	370
S.I.	Const.	200	1JPN130N09	127	787000	crack	27	-1	370
S.I.	Const.	200	1JPN130N10	127	777000	crack	27	-1	370
S.I.	Const.	205	1JPN132W01	245	195000	crack	27	-1	370
S.I.	Const.	205	1JPN132W02	245	168000	crack	27	-1	370
S.I.	Const.	205	1JPN132W03	245	154000	crack	27	-1	370
S.I.	Const.	205	1JPN132W04	177	360000	crack	27	-1	370
S.I.	Const.	205	1JPN132W05	177	377000	crack	27	-1	370
S.I.	Const.	205	1JPN132W06	177	348000	crack	27	-1	370
S.I.	Const.	205	1JPN132W07	147	2370000	runout	27	-1	370
S.I.	Const.	205	1JPN132W08	147	705000	crack	27	-1	370
S.I.	Const.	205	1JPN132W09	147	1100000	crack	27	-1	370
S.I.	Const.	205	1JPN132W10	127	2990000	runout	27	-1	370
S.I.	Const.	205	1JPN132W11	127	1179000	crack	27	-1	370
S.I.	Const.	205	1JPN132W12	127	1056000	crack	27	-1	370
S.I.	Const.	205	1JPN134W01	245	177000	crack	27	-1	370
S.I.	Const.	205	1JPN134W02	245	166000	crack	27	-1	370
S.I.	Const.	205	1JPN134W03	245	213000	crack	27	-1	370
S.I.	Const.	205	1JPN134W04	177	668000	crack	27	-1	370
S.I.	Const.	205	1JPN134W05	177	327000	crack	27	-1	370
S.I.	Const.	205	1JPN134W06	177	357000	crack	27	-1	370
S.I.	Const.	205	1JPN134W07	147	662000	crack	27	-1	370
S.I.	Const.	205	1JPN134W08	147	915000	crack	27	-1	370
S.I.	Const.	205	1JPN134W09	147	4470000	runout	27	-1	370
S.I.	Const.	205	1JPN134W10	127	1624000	crack	27	-1	370
S.I.	Const.	205	1JPN134N01	245	150000	crack	27	-1	370
S.I.	Const.	205	1JPN134N02	245	248000	crack	27	-1	370
S.I.	Const.	205	1JPN134N03	245	130000	crack	27	-1	370
S.I.	Const.	205	1JPN134N04	177	415000	crack	27	-1	370
S.I.	Const.	205	1JPN134N05	177	532000	crack	27	-1	370
S.I.	Const.	205	1JPN134N06	177	631000	crack	27	-1	370

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	205	1JPN134N07	127	1086000	crack	27	-1	370
S.I.	Const.	205	1JPN134N08	127	968000	crack	27	-1	370
S.I.	Const.	205	1JPN134N09	127	623000	crack	27	-1	370
S.I.	Const.	26	1ORE11156	188	2940000	crack	9	-1	331
S.I.	Const.	20	1ORE11157	154	774000	runout	7	-1	331
S.I.	Const.	26	1ORE11155S	166	666000	crack	6	-1	331
S.I.	Const.	26	1ORE11157S	158	1153000	crack	6	-1	331
S.I.	Const.	140	1ORE11155	185	747000	crack	9	-1	331
S.I.	Const.	140	1ORE11157	173	774000	crack	8	-1	331
S.I.	Const.	145	1ORE1156S	179	503000	crack	8	-1	331
S.I.	Const.	145	1ORE11157S	181	1150000	runout	8	-1	331
S.I.	Const.	170	1ORE212321	166	818000	crack	-1	-1	331
S.I.	Const.	170	1ORE212322	166	481000	crack	-1	-1	331
S.I.	Const.	170	1ORE212323	161	797000	crack	-1	-1	331
S.I.	Const.	170	1ORE212324	157	921000	crack	-1	-1	331
S.I.	Const.	170	1ORE212325	166	494000	crack	-1	-1	331
S.I.	Const.	170	1ORE212326	162	766000	crack	-1	-1	331
S.I.	Const.	20	1ORE312571	154	1142000	crack	-1	-1	331
S.I.	Const.	20	1ORE312571	154	1530000	crack	-1	-1	331
S.I.	Const.	20	1ORE312571	154	1640000	crack	-1	-1	331
S.I.	Var.	20	1ORE312572	155	5200000	crack	-1	-1	331
S.I.	Var.	25	1ORE312573	178	4118000	crack	-1	-1	331
S.I.	Var.	20	1ORE312574	93	10500000	runout	-1	-1	331
S.I.	Var.	140	1ORE312574	178	10450000	crack	-1	-1	331
S.I.	Const.	132	1ORE50A201	156	1633000	crack	-1	-1	331
S.I.	Const.	132	1ORE50A301	154	656000	crack	-1	-1	331
S.I.	Const.	132	1ORE50A401	155	585000	crack	-1	-1	331
S.I.	Const.	132	1ORE50B101	134	618000	crack	-1	-1	331
S.I.	Const.	132	1ORE50B201	135	873000	crack	-1	-1	331
S.I.	Const.	132	1ORE50B301	133	1558000	crack	-1	-1	331
S.I.	Const.	190	1ORE60R101	103	3121000	crack	10	-1	331
S.I.	Const.	190	1ORE60R102	118	1702000	crack	10	-1	331
S.I.	Const.	190	1ORE60R103	118	1593000	crack	10	-1	331
S.I.	Const.	190	1ORE60R104	118	1818000	crack	10	-1	331
S.I.	Const.	190	1ORE60R105	118	1921000	crack	10	-1	331
S.I.	Const.	190	1ORE60R106	118	1402000	crack	10	-1	331

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Var.	100	1ORE80A601	55.9	24300000	crack	-1	-1	331
S.I.	Var.	100	1ORE80A602	55.9	27620000	crack	-1	-1	331
S.I.	Var.	140	1ORE712811	74.7	38500000	runout	-1	-1	331
S.I.	Var.	140	1ORE712812	74.7	19100000	runout	-1	-1	331
S.I.	Var.	140	1ORE712813	74.7	18200000	runout	-1	-1	331
S.I.	Var.	20	1ORE712811	65.6	38500000	runout	-1	-1	331
S.I.	Var.	21	1ORE712811	65.6	20750000	crack	-1	-1	331
S.I.	Var.	20	1ORE712812	65.6	19100000	runout	-1	-1	331
S.I.	Var.	20	1ORE712813	65.6	18200000	runout	-1	-1	331
S.I.	Var.	132	1ORE712811	36.5	12770000	crack	-1	-1	331
S.I.	Var.	132	1ORE712812	43.3	2335000	crack	-1	-1	331
S.I.	Var.	132	1ORE712813	45.6	2345000	crack	-1	-1	331
S.I.	Var.	132	1ORE712812	69	6367000	crack	-1	-1	331
S.I.	Const.	27	10RE11156	160	2833000	crack	-5	-1	331
S.I.	Const.	20	1ORE11156S	160	503000	runout	5	-1	331
S.I.	Const.	170	1ORE212324	175	921000	runout	-1	-1	331
S.I.	Const.	160	1ENG014301	200	145000	crack	0	-1	262
S.I.	Const.	160	1ENG014302	140	470000	crack	0	-1	262
S.I.	Const.	160	1ENG014303	100	10000000	runout	0	-1	262
S.I.	Const.	160	1ENG015001	220	100000	crack	0	-1	727
S.I.	Const.	160	1ENG015002	200	170000	crack	0	-1	727
S.I.	Const.	160	1ENG015003	192	290000	crack	0	-1	727
S.I.	Const.	160	1ENG015004	180	245000	crack	0	-1	727
S.I.	Const.	160	1ENG015005	140	545000	crack	0	-1	727
S.I.	Const.	160	1ENG015006	140	660000	crack	0	-1	727
S.I.	Const.	160	1ENG015007	132	470000	crack	0	-1	727
S.I.	Const.	160	1ENG015008	112	1330000	crack	0	-1	727
S.I.	Const.	160	1ENG015009	100	1500000	crack	0	-1	727
S.I.	Const.	160	1ENG015010	100	2550000	crack	0	-1	727
S.I.	Const.	160	1ENG015011	90	10500000	runout	0	-1	727
S.I.	Const.	160	1ENG015012	80	12500000	runout	0	-1	727
S.I.	Const.	160	1ENG015013	260	100000	crack	-130	-1	727
S.I.	Const.	160	1ENG015014	220	122000	crack	-110	-1	727
S.I.	Const.	160	1ENG015015	180	170000	crack	-90	-1	727
S.I.	Const.	160	1ENG015016	150	510000	crack	-75	-1	727
S.I.	Const.	160	1ENG015017	120	735000	crack	-60	-1	727

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	160	1ENG015018	200	100000	crack	200	-1	727
S.I.	Const.	160	1ENG015019	160	325000	crack	160	-1	727
S.I.	Const.	160	1ENG015020	126	678000	crack	126	-1	727
S.I.	Const.	160	1ENG015021	116	543000	crack	116	-1	727
S.I.	Const.	160	1ENG015022	100	1250000	crack	100	-1	727
S.I.	Const.	160	1ENG015023	85	5100000	crack	85	-1	727
S.I.	Const.	160	1ENG015024	70	12000000	runout	70	-1	727
S.I.	Const.	200	1ENG01F301	220	120000	crack	0	-1	392
S.I.	Const.	200	1ENG01F302	200	123000	crack	0	-1	392
S.I.	Const.	200	1ENG01F303	180	245000	crack	0	-1	392
S.I.	Const.	200	1ENG01F304	180	290000	crack	0	-1	392
S.I.	Const.	200	1ENG01F305	150	340000	crack	0	-1	392
S.I.	Const.	200	1ENG01F306	130	735000	crack	0	-1	392
S.I.	Const.	200	1ENG01F307	120	455000	crack	0	-1	392
S.I.	Const.	200	1ENG01F309	100	1150000	crack	0	-1	392
S.I.	Const.	200	1ENG01F310	90	1720000	crack	0	-1	392
S.I.	Const.	200	1ENG01F311	80	2300000	crack	0	-1	392
S.I.	Const.	200	1ENG01F312	70	7800000	runout	0	-1	392
S.I.	Const.	256	1GDR010301	220	226000	crack	-1	-1	-1
S.I.	Const.	256	1GDR010302	220	400000	crack	-1	-1	-1
S.I.	Const.	256	1GDR010303	175	354000	crack	-1	-1	-1
S.I.	Const.	256	1GDR010304	175	376000	crack	-1	-1	-1
S.I.	Const.	256	1GDR010305	175	410000	crack	-1	-1	-1
S.I.	Const.	256	1GDR010306	175	673000	crack	-1	-1	-1
S.I.	Const.	256	1GDR010307	175	707000	crack	-1	-1	-1
S.I.	Const.	256	1GDR010308	145	683000	crack	-1	-1	-1
S.I.	Const.	256	1GDR010309	135	539000	crack	-1	-1	-1
S.I.	Const.	256	1GDR010310	135	1280000	crack	-1	-1	-1
S.I.	Const.	256	1GDR010311	135	2180000	crack	-1	-1	-1
S.I.	Const.	256	1GDR010312	135	4100000	runout	-1	-1	-1
S.I.	Const.	256	1GDR010313	110	771000	crack	-1	-1	-1
S.I.	Const.	256	1GDR010314	110	1560000	crack	-1	-1	-1
S.I.	Const.	256	1GDR010315	110	4640000	runout	-1	-1	-1
S.I.	Const.	256	1GDR010316	80	4530000	runout	-1	-1	-1
S.I.	Const.	256	1GDR010317	80	4750000	runout	-1	-1	-1
S.I.	Const.	256	1GDR010318	145	336000	crack	-1	0.5	-1

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	256	1GDR010319	145	420000	crack	-1	0.5	-1
S.I.	Const.	251	1GDR010320	125	500000	crack	-1	0.5	-1
S.I.	Const.	256	1GDR010321	125	862000	crack	-1	0.5	-1
S.I.	Const.	256	1GDR010322	105	1540000	crack	-1	0.5	-1
S.I.	Const.	256	1GDR010323	105	1770000	crack	-1	0.5	-1
S.I.	Const.	256	1GDR010324	105	2260000	crack	-1	0.5	-1
S.I.	Const.	256	1GDR010325	105	2790000	crack	-1	0.5	-1
S.I.	Const.	256	1GDR010326	105	3280000	runout	-1	0.5	-1
S.I.	Const.	256	1GDR010327	105	5000000	runout	-1	0.5	-1
S.I.	Const.	256	1GDR010328	95	880000	crack	-1	0.5	-1
S.I.	Const.	256	1GDR010328	95	1130000	crack	-1	0.5	-1
S.I.	Const.	256	1GDR010329	95	1560000	crack	-1	0.5	-1
S.I.	Const.	256	1GDR010330	95	1720000	crack	-1	0.5	-1
S.I.	Const.	256	1GDR010331	95	3230000	crack	-1	0.5	-1
S.I.	Const.	256	1GDR010332	95	3900000	runout	-1	0.5	-1
S.I.	Const.	256	1GDR010333	85	4530000	runout	-1	0.5	-1
S.I.	Const.	251	1GDR010401	175	98000	crack	-1	-1	-1
S.I.	Const.	251	1GDR010402	175	118000	crack	-1	-1	-1
S.I.	Const.	251	1GDR010403	135	226000	crack	-1	-1	-1
S.I.	Const.	251	1GDR010404	135	259000	crack	-1	-1	-1
S.I.	Const.	251	1GDR010405	90	654000	crack	-1	-1	-1
S.I.	Const.	251	1GDR010406	90	905000	crack	-1	-1	-1
S.I.	Const.	251	1GDR010407	61	1490000	crack	-1	-1	-1
S.I.	Const.	251	1GDR010408	61	2340000	crack	-1	-1	-1
S.I.	Const.	251	1GDR010409	125	202000	crack	-1	0.5	-1
S.I.	Const.	251	1GDR010410	125	223000	crack	-1	0.5	-1
S.I.	Const.	251	1GDR010411	125	228000	crack	-1	0.5	-1
S.I.	Const.	251	1GDR010412	125	246000	crack	-1	0.5	-1
S.I.	Const.	251	1GDR010413	105	308000	crack	-1	0.5	-1
S.I.	Const.	251	1GDR010414	105	449000	crack	-1	0.5	-1
S.I.	Const.	251	1GDR010415	83	368000	crack	-1	0.5	-1
S.I.	Const.	251	1GDR010416	83	548000	crack	-1	0.5	-1
S.I.	Const.	251	1GDR010417	83	722000	crack	-1	0.5	-1
S.I.	Const.	251	1GDR010418	83	798000	crack	-1	0.5	-1
S.I.	Const.	251	1GDR010419	73	1150000	crack	-1	0.5	-1
S.I.	Const.	251	1GDR010420	63	1130000	crack	-1	0.5	-1

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	251	1GDR010421	63	1920000	crack	-1	0.5	-1
S.I.	Const.	251	1GDR010422	63	2000000	crack	-1	0.5	-1
S.I.	Const.	251	1GDR010423	63	2170000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010501	220	226000	crack	-1	-1	-1
S.I.	Const.	40	1GDR010502	220	269000	crack	-1	-1	-1
S.I.	Const.	40	1GDR010503	175	256000	crack	-1	-1	-1
S.I.	Const.	40	1GDR010504	175	453000	crack	-1	-1	-1
S.I.	Const.	40	1GDR010505	133	453000	crack	-1	-1	-1
S.I.	Const.	40	1GDR010506	133	633000	crack	-1	-1	-1
S.I.	Const.	40	1GDR010507	133	906000	crack	-1	-1	-1
S.I.	Const.	40	1GDR010508	95	2210000	crack	-1	-1	-1
S.I.	Const.	40	1GDR010509	90	2000000	runout	-1	-1	-1
S.I.	Const.	40	1GDR010510	90	3010000	crack	-1	-1	-1
S.I.	Const.	40	1GDR010511	83	4150000	crack	-1	-1	-1
S.I.	Const.	40	1GDR010512	145	410000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010513	145	442000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010514	145	500000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010515	145	640000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010516	125	464000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010517	125	725000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010518	125	780000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010519	125	884000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010520	105	1220000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010521	105	1720000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010522	105	1950000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010523	105	2150000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010524	95	1400000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010525	80	2630000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010601	180	119000	crack	-1	-1	-1
S.I.	Const.	40	1GDR010602	180	190000	crack	-1	-1	-1
S.I.	Const.	40	1GDR010603	135	170000	crack	-1	-1	-1
S.I.	Const.	40	1GDR010604	135	220000	crack	-1	-1	-1
S.I.	Const.	40	1GDR010605	135	303000	crack	-1	-1	-1
S.I.	Const.	40	1GDR010606	90	669000	crack	-1	-1	-1
S.I.	Const.	40	1GDR010607	90	1480000	crack	-1	-1	-1
S.I.	Const.	40	1GDR010608	60	2130000	runout	-1	-1	-1

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	40	1GDR010609	60	2780000	runout	-1	-1	-1
S.I.	Const.	40	1GDR010610	145	252000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010611	145	322000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010612	135	322000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010613	125	464000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010614	125	578000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010615	105	637000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010616	105	699000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010617	105	720000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010618	105	875000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010619	90	885000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010620	90	941000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010621	90	1170000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010622	90	1280000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010623	72	1310000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010624	72	2080000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010625	72	2210000	crack	-1	0.5	-1
S.I.	Const.	40	1GDR010626	72	2850000	crack	-1	0.5	-1
S.I.	Const.	256	1GDR020201	145	802000	crack	-1	0.5	-1
S.I.	Const.	256	1GDR020202	145	882000	crack	-1	0.5	-1
S.I.	Const.	256	1GDR020203	145	1153000	crack	-1	0.5	-1
S.I.	Const.	256	1GDR020204	145	1480000	runout	-1	0.5	-1
S.I.	Const.	256	1GDR020205	125	777000	crack	-1	0.5	-1
S.I.	Const.	256	1GDR020206	125	854000	crack	-1	0.5	-1
S.I.	Const.	256	1GDR020207	125	1134000	crack	-1	0.5	-1
S.I.	Const.	256	1GDR020208	125	1287000	crack	-1	0.5	-1
S.I.	Const.	256	1GDR020209	105	2033000	crack	-1	0.5	-1
S.I.	Const.	256	1GDR020210	105	3940000	crack	-1	0.5	-1
S.I.	Const.	130	1GDR020301	230	352000	crack	-1	-1	-1
S.I.	Const.	130	1GDR020302	230	450000	crack	-1	-1	-1
S.I.	Const.	130	1GDR020303	260	398000	crack	-1	-1	-1
S.I.	Const.	130	1GDR020304	260	603000	crack	-1	-1	-1
S.I.	Const.	130	1GDR020305	260	759000	crack	-1	-1	-1
S.I.	Const.	130	1GDR020306	160	819000	crack	-1	-1	-1
S.I.	Const.	130	1GDR020307	160	1360000	crack	-1	-1	-1
S.I.	Const.	130	1GDR020308	135	1260000	crack	-1	-1	-1

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	130	1GDR020309	135	1740000	crack	-1	-1	-1
S.I.	Const.	130	1GDR020310	112	4100000	runout	-1	-1	-1
S.I.	Const.	130	1GDR020311	120	960000	crack	-1	0.5	-1
S.I.	Const.	130	1GDR020312	120	1260000	crack	-1	0.5	-1
S.I.	Const.	130	1GDR020313	120	1360000	crack	-1	0.5	-1
S.I.	Const.	130	1GDR020314	145	1630000	crack	-1	0.5	-1
S.I.	Const.	130	1GDR020315	145	1970000	crack	-1	0.5	-1
S.I.	Const.	130	1GDR020316	145	2050000	crack	-1	0.5	-1
S.I.	Const.	130	1GDR020317	125	3630000	runout	-1	0.5	-1
S.I.	Const.	130	1GDR020318	125	3920000	runout	-1	0.5	-1
S.I.	Const.	130	1GDR020319	125	4370000	runout	-1	0.5	-1
S.I.	Const.	130	1GDR020401	175	110000	crack	-1	-1	-1
S.I.	Const.	130	1GDR020402	135	210000	crack	-1	-1	-1
S.I.	Const.	130	1GDR020403	135	230000	crack	-1	-1	-1
S.I.	Const.	130	1GDR020404	110	570000	crack	-1	-1	-1
S.I.	Const.	130	1GDR020405	90	970000	crack	-1	-1	-1
S.I.	Const.	130	1GDR020406	90	1070000	crack	-1	-1	-1
S.I.	Const.	130	1GDR020407	67	1480000	crack	-1	-1	-1
S.I.	Const.	130	1GDR020408	67	1660000	crack	-1	-1	-1
S.I.	Const.	130	1GDR020409	55	4040000	runout	-1	-1	-1
S.I.	Const.	130	1GDR020410	55	4840000	runout	-1	-1	-1
S.I.	Const.	130	1GDR020411	170	130000	crack	-1	0.5	-1
S.I.	Const.	130	1GDR020412	170	150000	crack	-1	0.5	-1
S.I.	Const.	130	1GDR020413	145	300000	crack	-1	0.5	-1
S.I.	Const.	130	1GDR020414	145	340000	crack	-1	0.5	-1
S.I.	Const.	130	1GDR020415	125	310000	crack	-1	0.5	-1
S.I.	Const.	130	1GDR020416	125	380000	crack	-1	0.5	-1
S.I.	Const.	130	1GDR020417	90	1170000	crack	-1	0.5	-1
S.I.	Const.	130	1GDR020418	90	1330000	crack	-1	0.5	-1
S.I.	Const.	130	1GDR020419	75	1660000	crack	-1	0.5	-1
S.I.	Const.	130	1GDR020420	75	2130000	crack	-1	0.5	-1
S.I.	Const.	130	1GDR020421	75	2420000	crack	-1	0.5	-1
S.I.	Const.	130	1GDR020422	62	1460000	crack	-1	0.5	-1
S.I.	Const.	130	1GDR020423	62	1560000	crack	-1	0.5	-1
S.I.	Const.	130	1GDR020424	62	1740000	crack	-1	0.5	-1
S.I.	Const.	130	1GDR020425	62	1850000	crack	-1	0.5	-1

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	130	1GDR020426	62	3020000	crack	-1	0.5	-1
Imp.	Const.	41	0NC1CWA133	16	336700	crack	-10	-1	36
Imp.	Const.	41	0NC1CRA141	20	192200	crack	-14	-1	36
Imp.	Const.	41	0NC1CRA144	20	176100	crack	-14	-1	36
Imp.	Const.	41	0NC1CRA151	24	114400	crack	-18	-1	36
Imp.	Const.	41	0NC1CRB131	16	418100	crack	-10	-1	50
Imp.	Const.	41	0NC1CWB132	16	356300	crack	-10	-1	50
Imp.	Const.	41	0NC1CRB141	20	186600	crack	-14	-1	50
Imp.	Const.	41	0NC1CWB142	20	154200	crack	-14	-1	50
Imp.	Const.	41	0NC1CWB143	20	170500	crack	-14	-1	50
Imp.	Const.	41	0NC1CRB151	24	108200	crack	-18	-1	50
Imp.	Const.	41	0NC1CRC131	16	394700	crack	-10	-1	100
Imp.	Const.	41	0NC1CWC132	16	482800	crack	-10	-1	100
Imp.	Const.	41	0NC1CRC141	20	242700	crack	-14	-1	100
Imp.	Const.	41	0NC1CWC142	20	295000	crack	-14	-1	100
Imp.	Const.	41	0NC1CWC143	20	254300	crack	-14	-1	100
Imp.	Const.	41	0NC1CRC151	24	156600	crack	-18	-1	100
Imp.	Const.	41	0NC1CWC152	24	137400	crack	-18	-1	100
Imp.	Const.	41	0NC1CWC153	24	170700	crack	-18	-1	100
Imp.	Const.	41	0NC1CRC231	16	428500	crack	-18	-1	100
Imp.	Const.	41	0NC1CWC242	20	242800	crack	-22	-1	100
Imp.	Const.	41	0NC1CWC251	24	154100	crack	-26	-1	100
Imp.	Const.	41	0NC1CRC341	20	196400	crack	-30	-1	100
Imp.	Const.	31	0NC1CRA131	16	555000	crack	-10	-1	36
Imp.	Const.	31	0NC1CRC131	16	514800	crack	-10	-1	100
Imp.	Const.	31	0NC1CWC132	16	1228000	crack	-10	-1	100
Imp.	Const.	31	0NC1CRC141	16	341300	crack	-10	-1	100
Imp.	Const.	31	0NC1CWC143	20	445900	crack	-14	-1	100
Imp.	Const.	31	0NC1CRC144	20	282300	crack	-14	-1	100
Imp.	Const.	31	0NC1CWC251	24	192500	crack	-26	-1	100
Imp.	Const.	41	0NC1CTA141	20	160300	crack	-14	-1	36
Imp.	Const.	41	0NC1CTA243	20	226400	crack	-22	-1	36
Imp.	Const.	61	0NC1CBA132	16	275700	crack	-10	-1	36
Imp.	Const.	61	0NC1CBA143	20	204000	crack	-14	-1	36
Imp.	Const.	51	0NC1CBA131	16	308200	crack	-10	-1	36
Imp.	Const.	51	0NC1CBA132	16	156700	crack	-10	-1	36

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	51	0NC1CBA133	16	198600	crack	-10	-1	36
Imp.	Const.	51	0NC1CBA141	20	186300	crack	-14	-1	36
Imp.	Const.	51	0NC1CBA142	20	158200	crack	-14	-1	36
Imp.	Const.	51	0NC1CBA143	20	122400	crack	-14	-1	36
Imp.	Const.	51	0NC1CBA151	24	77400	crack	-18	-1	36
Imp.	Const.	51	0NC1CBA152	24	47500	crack	-18	-1	36
Imp.	Const.	51	0NC1CBA243	20	142200	crack	-22	-1	36
S.I.	Const.	220	1MAR01F111	104	3517000	crack	3	107	345
S.I.	Const.	220	1MAR01F112	104	2065000	crack	3	107	345
S.I.	Const.	220	1MAR01F113	104	10000000	runout	3	107	345
S.I.	Const.	220	1MAR01F114	104	2046000	crack	3	107	345
S.I.	Const.	220	1MAR01F115	104	2178000	crack	3	107	345
S.I.	Const.	220	1MAR01F211	145	1209000	crack	3	148	345
S.I.	Const.	220	1MAR01F212	145	706000	crack	3	148	345
S.I.	Const.	220	1MAR01F213	145	1075000	crack	3	148	345
S.I.	Const.	220	1MAR01F214	145	1523000	crack	3	148	345
S.I.	Const.	220	1MAR01F215	145	967000	crack	3	148	345
S.I.	Const.	220	1MAR01F311	207	410000	crack	3	210	345
S.I.	Const.	220	1MAR01F312	207	292000	crack	3	210	345
S.I.	Const.	220	1MAR01F313	207	260000	crack	3	210	345
S.I.	Const.	220	1MAR01F314	207	289000	crack	3	210	345
S.I.	Const.	220	1MAR01F315	207	255000	crack	3	210	345
S.I.	Const.	220	1MAR01F411	290	86000	crack	3	293	345
S.I.	Const.	220	1MAR01F412	290	102000	crack	3	293	345
S.I.	Const.	220	1MAR01F413	290	79000	crack	3	293	345
S.I.	Const.	220	1MAR01F414	290	120000	crack	3	193	345
S.I.	Const.	220	1MAR01F415	290	111000	crack	3	293	345
S.I.	Const.	225	1MAR01F121	104	4476000	crack	3	107	345
S.I.	Const.	225	1MAR01F122	104	3502000	crack	3	107	345
S.I.	Const.	225	1MAR01F123	104	2922000	crack	3	107	345
S.I.	Const.	225	1MAR01F124	104	3498000	crack	3	107	345
S.I.	Const.	225	1MAR01F125	104	3159000	crack	3	107	345
S.I.	Const.	225	1MAR01F221	145	959000	crack	3	148	345
S.I.	Const.	225	1MAR01F222	145	805000	crack	3	148	345
S.I.	Const.	225	1MAR01F223	145	668000	crack	3	148	345
S.I.	Const.	225	1MAR01F224	145	832000	crack	3	148	345

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	225	1MAR01F225	145	879000	crack	3	148	345
S.I.	Const.	225	1MAR01F321	207	294000	crack	3	210	345
S.I.	Const.	225	1MAR01F322	207	398000	crack	3	210	345
S.I.	Const.	225	1MAR01F323	207	269000	crack	3	210	345
S.I.	Const.	225	1MAR01F324	207	327000	crack	3	210	345
S.I.	Const.	225	1MAR01F325	207	366000	crack	3	210	345
S.I.	Const.	225	1MAR01F131	104	5754000	crack	3	107	345
S.I.	Const.	225	1MAR01F132	104	1830000	crack	3	107	345
S.I.	Const.	225	1MAR01F133	104	3442000	crack	3	107	345
S.I.	Const.	225	1MAR01F134	104	1598000	crack	3	107	345
S.I.	Const.	225	1MAR01F231	145	891000	crack	3	148	345
S.I.	Const.	225	1MAR01F231	145	1184000	crack	3	148	345
S.I.	Const.	225	1MAR01F233	145	1062000	crack	3	148	345
S.I.	Const.	225	1MAR01F234	145	1569000	crack	3	148	345
S.I.	Const.	225	1MAR01F141	104	3273000	crack	3	107	345
S.I.	Const.	225	1MAR01F142	104	4189000	crack	3	107	345
S.I.	Const.	225	1MAR01F143	104	2288000	crack	3	107	345
S.I.	Const.	225	1MAR01F144	104	2415000	crack	3	107	345
S.I.	Const.	225	1MAR01F145	104	1477000	crack	3	107	345
S.I.	Const.	225	1MAR01F241	145	891000	crack	3	148	345
S.I.	Const.	225	1MAR01F242	145	862000	crack	3	148	345
S.I.	Const.	225	1MAR01F243	145	1024000	crack	3	148	345
S.I.	Const.	225	1MAR01F244	145	890000	crack	3	148	345
S.I.	Const.	225	1MAR01F245	145	1019000	crack	3	148	345
S.I.	Const.	225	1MAR01F341	207	319000	crack	3	210	345
S.I.	Const.	225	1MAR01F342	207	272000	crack	3	210	345
S.I.	Const.	225	1MAR01F343	207	264000	crack	3	210	345
S.I.	Const.	225	1MAR01F344	207	202000	crack	3	210	345
S.I.	Const.	225	1MAR01F345	207	281000	crack	3	210	345
S.I.	Const.	225	1MAR01F441	290	95000	crack	3	293	345
S.I.	Const.	225	1MAR01F442	290	82000	crack	3	293	345
S.I.	Const.	225	1MAR01F443	290	126000	crack	3	293	345
S.I.	Const.	225	1MAR01F444	290	96000	crack	3	293	345
S.I.	Const.	225	1MAR01F445	290	84000	crack	3	293	345
S.I.	Const.	225	1MAR01F151	104	5570000	crack	3	107	345
S.I.	Const.	225	1MAR01F152	104	1636000	crack	3	107	345

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	225	1MAR01F153	104	2750000	crack	3	107	345
S.I.	Const.	225	1MAR01F154	104	1970000	crack	3	107	345
S.I.	Const.	225	1MAR01F251	145	1187000	crack	3	148	345
S.I.	Const.	225	1MAR01F252	145	1003000	crack	3	148	345
S.I.	Const.	225	1MAR01F253	145	909000	crack	3	148	345
S.I.	Const.	225	1MAR01F254	145	824000	crack	3	148	345
Imp.	Const.	251	1USA01BA00	9	3370000	crack	10.8	0.55	36
Imp.	Const.	251	1USA01B4A0	9	3277000	crack	10.8	0.55	36
Imp.	Const.	251	1USA01B6A0	9	2823000	crack	10	0.53	50
Imp.	Const.	251	1USA01B200	8.7	2024000	crack	17.3	0.67	100
Imp.	Const.	251	1USA01B2A0	8.7	2866000	crack	17.3	0.67	100
Imp.	Const.	130	1USA01B600	8	2955000	crack	16.4	0.67	50
Imp.	Const.	40	1USA01B100	8	1806000	crack	18	0.7	100
Imp.	Const.	40	1USA01B1A0	8	1134000	crack	18	0.7	100
Imp.	Const.	40	1USA01B300	8	2171000	crack	1.8	0.2	36
Imp.	Const.	30	1USA01B3A0	8	1817000	crack	1.8	0.2	36
Imp.	Const.	40	1USA01B500	8	2013000	crack	2.5	0.24	50
Imp.	Const.	40	1USA01B5A0	8	2020000	crack	2.5	0.24	50
Imp.	Const.	260	1USA01B1A0	18	3069000	crack	1.8	0.1	36
Imp.	Const.	260	1USA01B100	18	3312000	crack	1.8	0.1	36
Imp.	Const.	260	1USA01B120	18	3069000	crack	1.8	0.1	50
Imp.	Const.	260	1USA01B8A0	18	4180000	runout	8.7	0.33	100
Imp.	Const.	100	1USA01B9A0	13.6	5440000	crack	7.1	0.34	36
Imp.	Const.	100	1USA01B11A	15.7	1825000	crack	5	0.24	50
Imp.	Const.	90	1USA01B110	15	3064000	crack	4.8	0.24	50
Imp.	Const.	100	1USA01B7A0	15.6	1452000	crack	14.4	0.48	100
Imp.	Const.	100	1USA01B700	13.6	8360000	runout	14.4	0.51	100
Imp.	Const.	40	1USA02CP01	4	98000000	runout	10	-1	50
Imp.	Const.	30	1USA01CP02	4	98500000	runout	10	-1	50
Imp.	Const.	40	1USA02CP03	4	99000000	runout	10	-1	50
Imp.	Const.	30	1USA01CP04	4	99500000	runout	10	-1	50
Imp.	Const.	40	1USA02CP05	4.6	98000000	runout	10	-1	50
Imp.	Const.	30	1USA01CP06	4.6	98500000	runout	10	-1	50
Imp.	Const.	40	1USA02CP07	4.6	99000000	runout	10	-1	50
Imp.	Const.	30	1USA01CP08	4.6	99500000	runout	10	-1	50
Imp.	Const.	40	1USA02CM09	4.7	34930000	crack	9.3	-1	36

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	30	1USA01CM10	4.7	37710000	crack	9.3	-1	36
Imp.	Const.	40	1USA02CP11	5	16610000	crack	10	-1	50
Imp.	Const.	30	1USA01CP12	5	32510000	crack	10	-1	50
Imp.	Const.	40	1USA02CP13	5	8451000	crack	10	-1	50
Imp.	Const.	30	1USA01CP14	5	47290000	crack	10	-1	50
Imp.	Const.	40	1USA02CW15	5	89200000	runout	24	-1	50
Imp.	Const.	30	1USA01CW16	5	89400000	runout	24	-1	50
Imp.	Const.	40	1USA02CT17	6	11420000	crack	10	-1	36
Imp.	Const.	30	1USA01CT18	6	12160000	crack	10	-1	36
Imp.	Const.	40	1USA02CW19	6	4327000	crack	10	-1	50
Imp.	Const.	30	1USA01CW20	6	12160000	crack	10	-1	50
Imp.	Const.	40	1USA02CW21	6	99500000	runout	24	-1	50
Imp.	Const.	30	1USA01CW22	6	99000000	runout	24	-1	50
Imp.	Const.	40	1USA02CP23	8	2334000	crack	10	-1	50
Imp.	Const.	30	1USA01CP24	8	5006000	crack	10	-1	50
Imp.	Const.	40	1USA02CP25	8	4235000	crack	10	-1	50
Imp.	Const.	30	1USA01CP26	8	13510000	crack	10	-1	50
S.I.	Const.	240	CDN010001	119	1190000	crack	-1	-1	-1
S.I.	Const.	240	CDN010002	119	1280000	crack	-1	-1	-1
S.I.	Const.	240	CDN010003	119	1970000	crack	-1	-1	-1
S.I.	Const.	240	CDN010004	112	2090000	crack	-1	-1	-1
S.I.	Const.	240	CDN010005	103	2960000	crack	-1	-1	-1
S.I.	Const.	240	CDN010006	103	4090000	crack	-1	-1	-1
S.I.	Const.	240	CDN010007	103	4410000	crack	-1	-1	-1
S.I.	Const.	240	CDN010008	83	7860000	crack	-1	-1	-1
Imp.	Const.	120	1CDN021W01	5	15900000	runout	2.78	-1	36
Imp.	Const.	120	1CDN022W01	10	1442000	crack	2.78	-1	36
Imp.	Const.	120	1CDN022W02	10	1739000	crack	2.78	-1	36
Imp.	Const.	120	1CDN022W03	10	1814000	crack	2.78	-1	36
Imp.	Const.	120	1CDN022W04	10	1830000	crack	2.78	-1	36
Imp.	Const.	120	1CDN023W01	15	350000	crack	2.78	-1	36
Imp.	Const.	120	1CDN023W02	15	357000	crack	2.78	-1	36
Imp.	Const.	120	1CDN023W03	15	365000	crack	2.78	-1	36
Imp.	Const.	120	1CDN024W01	10	1296000	crack	2.64	-1	36
Imp.	Const.	120	1CDN024W02	10	1821000	crack	2.64	-1	36
Imp.	Const.	120	1CDN025W01	17	144000	crack	2.64	-1	36

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	120	1CDN025W02	17	222000	crack	2.64	-1	36
Imp.	Const.	120	1CDN026W01	13	794000	crack	2.64	-1	36
Imp.	Const.	120	1CDN026W02	13	798000	crack	2.64	-1	36
Imp.	Const.	120	1CDN026W03	13	804000	crack	2.64	-1	36
Imp.	Const.	232	1CDN021RG1	11	1329000	crack	2.78	-1	36
Imp.	Const.	232	1CDN021RG2	11	2240000	runout	2.78	-1	36
Imp.	Const.	232	1CDN022RG1	13	1337000	crack	2.78	-1	36
Imp.	Const.	232	1CDN022RG2	13	1388000	crack	2.78	-1	36
Imp.	Const.	232	1CDN023RG1	17	432000	crack	2.78	-1	36
Imp.	Const.	232	1CDN023RG2	17	498000	crack	2.78	-1	36
Imp.	Const.	232	1CDN024RG1	10	3741000	crack	2.78	-1	36
Imp.	Const.	232	1CDN024RG2	10	8090000	runout	2.78	-1	36
Imp.	Const.	232	1CDN026RG1	19	506000	crack	2.78	-1	36
Imp.	Const.	232	1CDN026RG2	19	845000	crack	2.78	-1	36
Imp.	Const.	233	1CDN021T01	11	875000	crack	2.78	-1	36
Imp.	Const.	233	1CDN021T02	11	988000	crack	2.78	-1	36
Imp.	Const.	233	1CDN022T01	17	223000	crack	2.78	-1	36
Imp.	Const.	233	1CDN022T02	17	226000	crack	2.78	-1	36
Imp.	Const.	233	1CDN02P101	13	714000	crack	2.78	-1	36
Imp.	Const.	233	1CDN02P102	13	744000	crack	2.78	-1	36
Imp.	Const.	234	1CDN021TG1	11	1163000	crack	2.78	-1	36
Imp.	Const.	234	1CDN021TG2	11	1754000	crack	2.78	-1	36
Imp.	Const.	10	2NC1620001	33.6	734000	crack	1	-1	33
Imp.	Const.	10	2NC1620002	30	1760000	crack	1	-1	33
Imp.	Const.	10	2NC1620003	33.6	3271000	crack	1	-1	33
Imp.	Const.	10	2NC1320001	40.6	1055000	crack	1	-1	33
Imp.	Const.	10	2NC1320002	38.4	1668000	crack	1	-1	33
Imp.	Const.	10	2NC1320003	37.4	3452000	crack	1	-1	33
Imp.	Const.	10	2NC1320004	36.4	5100000	crack	1	-1	33
Imp.	Const.	10	2NC1090001	52.5	77000	crack	1	-1	33
Imp.	Const.	10	2NC1090002	52.5	97000	crack	1	-1	33
Imp.	Const.	10	2NC1090003	52.5	103000	crack	1	-1	33
Imp.	Const.	10	2NC1090004	52.5	165000	crack	1	-1	33
Imp.	Const.	10	2NC1520001	53.8	336000	crack	1	-1.01	0
Imp.	Const.	10	2NC1520002	45.8	3000000	runout	1	-1.01	0
Imp.	Const.	10	2NC1420001	67.7	119000	crack	1	-1.01	0

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	10	2NC1420002	65.9	196000	crack	1	-1.01	0
Imp.	Const.	10	2NC1420003	56.8	440000	crack	1	-1.01	0
Imp.	Const.	10	2NC1420004	56	483000	crack	1	-1.01	0
Imp.	Const.	10	2NC1420005	55.3	734000	crack	1	-1.01	0
Imp.	Const.	10	2NC1420006	44	758000	crack	1	-1.01	0
Imp.	Const.	10	2NC1420007	47	1041000	crack	1	-1.01	0
Imp.	Const.	10	2NC1420008	42.2	1345000	crack	1	-1.01	0
Imp.	Const.	10	2NC1420009	40	1883000	crack	1	-1.01	0
Imp.	Const.	10	2NC1420010	36.4	6240000	runout	1	-1.01	0
Imp.	Const.	10	2NC1420011	41.1	6410000	runout	1	-1.01	0
Imp.	Const.	10	2NC1420012	55.3	6770000	runout	1	-1.01	0
Imp.	Const.	10	2NC1420013	36	7340000	runout	1	-1.01	0
Imp.	Const.	100	1USA040103	16.3	1460000	crack	1	-1	36
Imp.	Const.	100	1USA040107	16.4	1465000	crack	1	-1	36
Imp.	Const.	251	1USA03010H	11.5	760000	crack	1	-1	36
Imp.	Const.	251	1USA03010I	11.5	950000	crack	1	-1	36
Imp.	Const.	251	1USA03020E	11	1270000	crack	1	-1	36
Imp.	Const.	251	1USA03020G	10.8	1860000	crack	1	-1	36
Imp.	Const.	251	1USA03030E	10.8	1450000	crack	1	-1	36
Imp.	Const.	251	1USA0303EE	8.7	2070000	crack	1	-1	36
Imp.	Const.	251	1USA03040H	11.8	970000	crack	1	-1	36
Imp.	Const.	251	1USA03040I	11.9	800000	crack	1	-1	36
Imp.	Const.	251	1USA03040J	8.5	1320000	crack	1	-1	36
Imp.	Const.	251	1USA03050O	11	1270000	crack	1	-1	36
Imp.	Const.	251	1USA03050R	11.1	1300000	crack	1	-1	36
Imp.	Const.	251	1USA0305BB	9.6	2140000	crack	1	-1	36
Imp.	Const.	130	1USA030100	10.7	950000	crack	1	-1	36
Imp.	Const.	130	1USA03010S	11.8	1610000	crack	1	-1	36
Imp.	Const.	130	1USA03010Y	11.9	1630000	crack	1	-1	36
Imp.	Const.	130	1USA03030C	13.2	1020000	crack	1	-1	36
Imp.	Const.	130	1USA03030L	13.9	1600000	crack	1	-1	36
Imp.	Const.	130	1USA03040Q	10	1320000	crack	1	-1	36
Imp.	Const.	130	1USA03050K	13.3	2140000	crack	1	-1	36
Imp.	Const.	230	1USA03020T	10.7	1380000	crack	1	-1	36
Imp.	Const.	230	1USA0303II	10.6	1600000	crack	1	-1	36
Imp.	Const.	230	1USA03040S	9.2	1640000	crack	1	-1	36

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	230	1USA03040T	10.6	1640000	crack	1	-1	36
Imp.	Const.	230	1USA03050U	11.2	2140000	crack	1	-1	36
Imp.	Const.	230	1USA03050W	10.4	2140000	crack	1	-1	36
Imp.	Const.	230	1USA04010C	14.6	460000	crack	1	-1	36
Imp.	Const.	230	1USA0401CC	15.1	770000	crack	1	-1	36
Imp.	Const.	230	1USA04010F	9.5	1077000	crack	1	-1	36
Imp.	Const.	230	1USA0401FF	9.1	1460000	crack	1	-1	36
Imp.	Const.	230	1USA04010G	9.2	1460000	crack	1	-1	36
Imp.	Const.	230	1USA0401GG	9	1671000	crack	1	-1	36
Imp.	Const.	230	1USA0401HH	9.5	1460000	crack	1	-1	36
Imp.	Const.	230	1USA04010G	8.7	1556000	crack	1	-1	36
Imp.	Const.	230	1USA0401GG	8.7	1761000	crack	1	-1	36
Imp.	Const.	253	1USA03040B	15.3	1640000	crack	1	-1	36
Imp.	Const.	253	1USA03040Z	16.4	1320000	crack	1	-1	36
Imp.	Const.	253	1USA0305DD	15.4	1560000	crack	1	-1	36
Imp.	Const.	253	1USA0305EE	17	930000	crack	1	-1	36
Imp.	Const.	253	1USA0305FF	16.5	2140000	crack	1	-1	36
Imp.	Const.	233	1USA04020H	16.9	853000	crack	1	-1	36
Imp.	Const.	233	1USA0402HH	16.2	1021000	crack	1	-1	36
Imp.	Const.	233	1USA04030I	15.2	1369000	crack	1	-1	36
Imp.	Const.	233	1USA0403II	15.7	1369000	crack	1	-1	36
Imp.	Const.	231	1USA04010I	16.9	701000	crack	1	-1	36
Imp.	Const.	231	1USA0401II	16.3	1077000	crack	1	-1	36
S.I.	Const.	250	1ICOM10501	150	100000	crack	-1	-1	-1
S.I.	Const.	250	1ICOM10502	120	220000	crack	-1	-1	-1
S.I.	Const.	250	1ICOM10503	120	290000	crack	-1	-1	-1
S.I.	Const.	250	1ICOM10504	120	310000	crack	-1	-1	-1
S.I.	Const.	250	1ICOM10505	120	415000	crack	-1	-1	-1
S.I.	Const.	250	1ICOM10506	80	1720000	crack	-1	-1	-1
S.I.	Const.	250	1ICOM10507	60	5010000	crack	-1	-1	-1
S.I.	Const.	250	1ICOM10508	50	7440000	crack	-1	-1	-1
S.I.	Const.	255	1ICOM10601	135	640000	crack	-1	-1	-1
S.I.	Const.	255	1ICOM10602	135	1050000	crack	-1	-1	-1
S.I.	Const.	255	1ICOM10603	130	1300000	crack	-1	-1	-1
S.I.	Const.	255	1ICOM10604	120	710000	crack	-1	-1	-1
S.I.	Const.	255	1ICOM10605	120	760000	crack	-1	-1	-1

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	255	1ICOM10606	120	1700000	runout	-1	-1	-1
S.I.	Const.	255	1ICOM10607	120	2430000	crack	-1	-1	-1
S.I.	Const.	255	1ICOM10608	120	3610000	crack	-1	-1	-1
S.I.	Const.	255	1ICOM10609	120	4470000	runout	-1	-1	-1
S.I.	Const.	120	1ICOM10701	120	220000	crack	-1	-1	-1
S.I.	Const.	120	1ICOM10702	105	355000	crack	-1	-1	-1
S.I.	Const.	120	1ICOM10703	105	360000	crack	-1	-1	-1
S.I.	Const.	120	1ICOM10704	90	744000	crack	-1	-1	-1
S.I.	Const.	120	1ICOM10705	90	750000	crack	-1	-1	-1
S.I.	Const.	120	1ICOM10706	70	1700000	crack	-1	-1	-1
S.I.	Const.	120	1ICOM10707	70	1750000	crack	-1	-1	-1
S.I.	Const.	120	1ICOM10708	70	1760000	crack	-1	-1	-1
S.I.	Const.	120	1ICOM10709	125	370000	crack	-1	-1	-1
S.I.	Const.	120	1ICOM10710	125	373000	crack	-1	-1	-1
S.I.	Const.	120	1ICOM10711	125	405000	crack	-1	-1	-1
S.I.	Const.	120	1ICOM10712	125	518000	crack	-1	-1	-1
S.I.	Const.	120	1ICOM10713	85	910000	crack	-1	-1	-1
S.I.	Const.	120	1ICOM10714	85	915000	crack	-1	-1	-1
S.I.	Const.	120	1ICOM10715	85	1160000	crack	-1	-1	-1
S.I.	Const.	120	1ICOM10716	85	1170000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10301	240	105000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10302	240	122000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10303	240	128000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10304	240	133000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10305	240	153000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10206	240	159000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10307	175	284000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10308	175	306000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10309	175	310000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10310	175	324000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10311	175	358000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10312	175	364000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10313	175	370000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10314	125	706000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10315	125	980000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10316	125	1010000	crack	-1	-1	-1

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	200	1ICOM10317	125	1020000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10318	125	1080000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10319	125	1090000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10320	125	5000000	runout	-1	-1	-1
S.I.	Const.	200	1ICOM10321	125	5000000	runout	-1	-1	-1
S.I.	Const.	200	1ICOM10322	240	130000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10323	240	135000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10324	240	144000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10325	240	170000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10326	175	346000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10327	175	402000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10328	175	700000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10329	125	755000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10330	125	793000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10331	125	921000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10332	150	270000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10333	150	314000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10334	150	335000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10335	150	507000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10336	80	2490000	crack	-1	-1	-1
S.I.	Const.	200	1ICOM10337	80	5030000	crack	-1	-1	-1
S.I.	Const.	220	1ICOM20201	180	179000	crack	-1	0.1	470
S.I.	Const.	220	1ICOM20202	150	504000	crack	-1	0.1	470
S.I.	Const.	220	1ICOM20203	110	1470000	crack	-1	0.1	470
S.I.	Const.	220	1ICOM20204	80	15800000	crack	-1	0.1	470
S.I.	Const.	200	1ICOM20301	180	164000	crack	-1	0.1	470
S.I.	Const.	130	1ICOM3PSR1	120	1234000	crack	20	140	510
S.I.	Const.	130	1ICOM3PSR2	120	572000	crack	20	140	510
S.I.	Const.	130	1ICOM3PSR2	120	673000	crack	20	140	510
S.I.	Const.	130	1ICOM3PSR3	120	463000	crack	20	140	510
S.I.	Const.	130	1ICOM3PSR4	120	531000	crack	20	140	510
S.I.	Const.	130	1ICOM3PSR4	120	540000	crack	20	140	510
S.I.	Const.	130	1ICOM3PSR4	120	1308000	crack	20	140	510
S.I.	Const.	130	1ICOM3PSR4	120	1350000	crack	20	140	510
S.I.	Const.	130	1ICOM3PSR5	120	451000	crack	20	140	510
S.I.	Const.	130	1ICOM3PSR5	120	455000	crack	20	140	510

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	130	1ICOM3PSR5	120	773000	crack	20	140	510
S.I.	Const.	130	1ICOM3PSR5	120	780000	crack	20	140	510
S.I.	Const.	130	1ICOM3PRG1	80	2764000	crack	20	100	510
S.I.	Const.	130	1ICOM3PRG2	80	1945000	crack	20	100	510
S.I.	Const.	130	1ICOM3PRG2	80	1960000	crack	20	100	510
S.I.	Const.	130	1ICOM3PRG3	120	617000	crack	20	140	510
S.I.	Const.	130	1ICOM3PRG3	120	620000	crack	20	140	510
S.I.	Const.	130	1ICOM3PRG4	120	612000	crack	20	140	510
S.I.	Const.	130	1ICOM3PRG4	120	618000	crack	20	140	510
S.I.	Const.	130	1ICOM3PRG5	160	261000	crack	20	180	510
S.I.	Const.	130	1ICOM3PRG5	160	268000	crack	20	180	510
S.I.	Const.	130	1ICOM3PRG6	160	271000	crack	20	180	510
S.I.	Const.	130	1ICOM3PRG6	160	275000	crack	20	180	510
S.I.	Const.	251	1ICOM3PRG1	80	1922000	crack	20	100	510
S.I.	Const.	251	1ICOM3PRG1	80	1950000	crack	20	100	510
S.I.	Const.	251	1ICOM3PRG2	80	1810000	crack	20	100	510
S.I.	Const.	251	1ICOM3PRG3	120	514000	crack	20	140	510
S.I.	Const.	251	1ICOM3PRG4	120	361000	crack	20	140	510
S.I.	Const.	251	1ICOM3PRG5	160	210000	crack	20	180	510
S.I.	Const.	251	1ICOM3PRG6	160	199000	crack	20	180	510
S.I.	Const.	251	1ICOM3PSG1	120	297000	crack	20	140	510
S.I.	Const.	251	1ICOM3PSG1	120	300000	crack	20	140	510
S.I.	Const.	251	1ICOM3PSG2	120	307000	crack	20	140	510
S.I.	Const.	251	1ICOM3PSG2	120	315000	crack	20	140	510
S.I.	Const.	251	1ICOM3PSG3	120	222000	crack	20	140	510
S.I.	Const.	256	1ICOM3PSG1	120	798000	crack	20	140	510
S.I.	Const.	256	1ICOM3PSG2	120	1720000	runout	20	140	510
S.I.	Const.	256	1ICOM3PSG3	120	726000	crack	20	140	510
S.I.	Const.	100	1ICOM3PSR1	120	3050000	runout	20	140	510
S.I.	Const.	100	1ICOM3PSR2	120	2795000	crack	20	140	510
S.I.	Const.	100	1ICOM3PSR3	120	2670000	crack	20	140	510
S.I.	Const.	20	1ICOM3PSR1	120	2355000	crack	20	140	510
S.I.	Const.	20	1ICOM3PLT1	220	469000	crack	20	240	510
S.I.	Const.	20	1ICOM3PLT2	220	713000	crack	20	240	510
S.I.	Const.	20	1ICOM3PLT3	160	1475000	crack	20	180	510
Imp.	Const.	220	1NC5CPS91A	10	25600000	runout	0	0	100

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	220	1NC5CPS25A	10	9244000	crack	0	0	100
Imp.	Var.	220	1NC5CPS84A	12	3179000	crack	0	0.5	100
Imp.	Var.	220	1NC5CPS116	12	5010000	crack	0	0.5	100
Imp.	Var.	220	1NC5CPS109	12	3855000	crack	0	0.5	100
Imp.	Var.	220	1NC5CPS102	15	2445000	crack	0	1	100
Imp.	Var.	220	1NC5CPS98A	15	2443000	crack	0	1	100
Imp.	Var.	220	1NC5CPS35A	15	2294000	crack	0	1	100
Imp.	Const.	220	1NC5CPS33A	30	276000	crack	0	0	100
Imp.	Const.	220	1NC5CPS115	30	269000	crack	0	0	100
Imp.	Const.	220	1NC5CPS101	30	195000	crack	0	0	100
Imp.	Var.	220	1NC5CPS76A	36	187000	crack	0	0.5	100
Imp.	Var.	220	1NC5CPS34A	36	209000	crack	0	0.5	100
Imp.	Var.	220	1NC5CPS604	36	161000	crack	0	0.5	100
Imp.	Var.	220	1NC5CPS07A	45	167000	crack	0	1	100
Imp.	Var.	220	1NC5CPS43A	45	110000	crack	0	1	100
Imp.	Var.	220	1NC5CPS82A	45	138000	crack	0	1	100
Imp.	Const.	220	1NC5CPS02A	10	4354000	crack	10	0	100
Imp.	Const.	220	1NC5CPS04A	10	5308000	crack	10	0	100
Imp.	Const.	220	1NC5CPS57A	10	3696000	crack	10	0	100
Imp.	Var.	220	1NC5CPS20A	12	5414000	crack	10	0.5	100
Imp.	Var.	220	1NC5CPS78A	12	2448000	crack	10	0.5	100
Imp.	Var.	220	1NC5CPS14A	12	3396000	crack	10	0.5	100
Imp.	Var.	220	1NC5CPS21A	15	1907000	crack	10	1	100
Imp.	Var.	220	1NC5CPS51A	15	2313000	crack	10	1	100
Imp.	Var.	220	1NC5CPS70A	15	2032000	crack	10	1	100
Imp.	Const.	220	1NC5CPS08A	30	231000	crack	10	0	100
Imp.	Const.	220	1NC5CPS11A	30	283000	crack	10	0	100
Imp.	Const.	220	1NC5CPS29A	30	213000	crack	10	0	100
Imp.	Var.	220	1NC5CPS18A	36	171000	crack	10	0.5	100
Imp.	Var.	220	1NC5CPS37A	36	204000	crack	10	0.5	100
Imp.	Var.	220	1NC5CPS22A	36	181000	crack	10	0.5	100
Imp.	Var.	220	1NC5CPS06A	45	128000	crack	10	1	100
Imp.	Var.	220	1NC5CPS16A	45	123000	crack	10	1	100
Imp.	Var.	220	1NC5CPS56A	45	119000	crack	10	1	100
Imp.	Const.	220	1NC5CPS114	60	31000	crack	10	0	100
Imp.	Const.	220	1NC5CPS114	60	41000	crack	10	0	100

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	220	1NC5CPS114	60	35000	crack	10	0	100
Imp.	Const.	220	1NC5CPS93A	10	4210000	crack	40	0	100
Imp.	Const.	220	1NC5CPS69A	10	6190000	crack	40	0	100
Imp.	Const.	220	1NC5CPS69A	10	6760000	crack	40	0	100
Imp.	Var.	220	1NC5CPS73A	12	2036000	crack	40	0.5	100
Imp.	Var.	220	1NC5CPS54A	12	2095000	crack	40	0.5	100
Imp.	Var.	220	1NC5CPS64A	12	3502000	crack	40	0.5	100
Imp.	Const.	220	1NC5CPS80A	30	216000	crack	40	0	100
Imp.	Const.	220	1NC5CPS17A	30	241000	crack	40	0	100
Imp.	Const.	220	1NC5CPS36A	30	248000	crack	40	0	100
Imp.	Var.	220	1NC5CPS30A	36	109000	crack	40	0.5	100
Imp.	Var.	220	1NC5CPS88A	36	152000	crack	40	0.5	100
Imp.	Var.	220	1NC5CPS68A	36	162000	crack	40	0.5	100
Imp.	Var.	220	1NC5CPS42A	45	86000	crack	0	1	100
Imp.	Var.	220	1NC5CPS97A	45	89000	crack	0	1	100
Imp.	Var.	220	1NC5CPS87A	45	155000	crack	0	1	100
Imp.	Var.	220	1NC5CPS23A	45	97000	crack	0	1	100
Imp.	Var.	220	1NC5CPS105	45	100000	crack	0	1	100
Imp.	Var.	220	1NC5CPS107	45	103000	crack	0	1	100
Imp.	Var.	220	1NC5CPS03A	45	99000	crack	0	1	100
Imp.	Var.	220	1NC5CPS67A	45	126000	crack	0	1	100
Imp.	Var.	220	1NC5CPS92A	45	111000	crack	0	1	100
Imp.	Var.	220	1NC5CPS118	45	84000	crack	0	1	100
Imp.	Var.	220	1NC5CPS106	45	105000	crack	0	1	100
Imp.	Var.	220	1NC5CPS108	45	96000	crack	0	1	100
Imp.	Var.	220	1NC5CPS113	45	92000	crack	0	1	100
Imp.	Var.	220	1NC5CPS50A	45	81000	crack	0	1	100
Imp.	Var.	220	1NC5CPS72A	45	86000	crack	0	1	100
Imp.	Var.	220	1NC5CPS112	45	136000	crack	0	1	100
Imp.	Var.	220	1NC5CPS85A	45	102000	crack	0	1	100
Imp.	Var.	220	1NC5CPS63A	45	110000	crack	0	1	100
Imp.	Var.	220	1NC5CPS111	45	109000	crack	0	1	100
Imp.	Var.	220	1NC5CPS61A	45	107000	crack	0	1	100
Imp.	Var.	220	1NC5CPS47A	45	102000	crack	0	1	100
Imp.	Var.	220	1NC5CPS32A	45	116000	crack	0	1	100
Imp.	Var.	220	1NC5CPS48A	45	81000	crack	0	1	100

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Var.	220	1NC5CPS38A	45	108000	crack	0	1	100
Imp.	Const.	220	1NC5CPS24A	30	262000	crack	0	0	100
Imp.	Const.	220	1NC5CPS120	30	213000	crack	0	0	100
Imp.	Const.	220	1NC5CPS83A	30	336000	crack	0	0	100
Imp.	Const.	220	1NC5CPS09A	30	277000	crack	0	0	100
Imp.	Const.	220	1NC5CPS44A	30	456000	crack	0	0	100
Imp.	Const.	220	1NC5CPS39A	30	298000	crack	0	0	100
Imp.	Const.	220	1NC5CPS90A	30	302000	crack	0	0	100
Imp.	Const.	220	1NC5CPS40A	30	168000	crack	0	0	100
Imp.	Const.	220	1NC5CPS95A	30	213000	crack	0	0	100
Imp.	Var.	40	1NC5WBC141	4.5	21660000	crack	15	1	100
Imp.	Var.	40	1NC5WBC141	4.5	21940000	crack	15	1	100
Imp.	Var.	40	1NC5WBC141	4.5	16990000	crack	15	1	100
Imp.	Var.	40	1NC5WBC141	3	103700000	crack	10	1	100
Imp.	Var.	40	1NC5WBC141	3	104000000	runout	10	1	100
Imp.	Var.	40	1NC5WBC141	3	60220000	crack	10	1	100
Imp.	Const.	40	1NC5WBC148	10	1128000	crack	10	0	100
Imp.	Const.	40	1NC5WBC148	10	1335000	crack	10	0	100
Imp.	Const.	40	1NC5WBC148	10	1370000	crack	10	0	100
Imp.	Var.	40	1NC5WBC149	12	1431000	crack	10	0.5	100
Imp.	Var.	40	1NC5WBC149	12	1004000	crack	10	0.5	100
Imp.	Var.	40	1NC5WBC149	12	1120000	crack	10	0.5	100
Imp.	Var.	40	1NC5WBC141	15	555000	crack	10	1	100
Imp.	Var.	40	1NC5WBC141	15	336000	crack	10	1	100
Imp.	Var.	40	1NC5WBC141	15	555000	crack	10	1	100
Imp.	Const.	40	1NC5WBC148	20	248000	crack	10	0	100
Imp.	Const.	40	1NC5WBC148	20	189000	crack	10	0	100
Imp.	Const.	40	1NC5WBC148	20	257000	crack	10	0	100
Imp.	Var.	40	1NC5WBC149	24	133000	crack	10	0.5	100
Imp.	Var.	40	1NC5WBC149	24	171000	crack	10	0.5	100
Imp.	Var.	40	1NC5WBC149	24	205000	crack	10	0.5	100
Imp.	Var.	40	1NC5WBC147	30	186000	crack	10	1	100
Imp.	Var.	40	1NC5WBC147	30	73000	crack	10	1	100
Imp.	Var.	40	1NC5WBC147	30	80000	crack	10	1	100
Imp.	Const.	40	1NC5WBC148	30	88000	crack	10	0	100
Imp.	Const.	40	1NC5WBC148	30	77000	crack	10	0	100

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	40	1NC5WBC148	30	70000	crack	10	0	100
Imp.	Var.	40	1NC5WBC147	36	87000	crack	10	0.5	100
Imp.	Var.	40	1NC5WBC147	36	81000	crack	10	0.5	100
Imp.	Var.	40	1NC5WBC147	36	63000	crack	10	0.5	100
Imp.	Const.	40	1NC5WBC149	10	948000	crack	0	0	100
Imp.	Const.	40	1NC5WBC149	10	1820000	crack	0	0	100
Imp.	Const.	40	1NC5WBC149	10	1606000	crack	0	0	100
Imp.	Var.	40	1NC5WBC141	15	832000	crack	0	1	100
Imp.	Var.	40	1NC5WBC141	15	729000	crack	0	1	100
Imp.	Var.	40	1NC5WBC141	15	654000	crack	0	1	100
Imp.	Const.	30	1NC5WBC147	10	2020000	crack	0	0	100
Imp.	Const.	30	1NC5WBC147	10	2122000	crack	0	0	100
Imp.	Const.	30	1NC5WBC147	10	1491000	crack	0	0	100
Imp.	Var.	30	1NC5WBC147	15	1079000	crack	0	1	100
Imp.	Var.	30	1NC5WBC147	15	856000	crack	0	1	100
Imp.	Var.	30	1NC5WBC147	15	867000	crack	0	1	100
Imp.	Const.	20	1NC5WBP141	20	3377000	crack	0	0	100
Imp.	Const.	20	1NC5WBP141	20	3432000	crack	0	0	100
Imp.	Const.	20	1NC5WBP141	20	3829000	crack	0	0	100
Imp.	Var.	20	1NC5WBP141	24	1542000	crack	0	0.5	100
Imp.	Var.	20	1NC5WBP141	24	878000	crack	0	0.5	100
Imp.	Var.	20	1NC5WBP141	24	1341000	crack	0	0.5	100
Imp.	Var.	20	1NC5WBP140	30	8060000	crack	0	1	100
Imp.	Var.	20	1NC5WBP140	30	486000	crack	0	1	100
Imp.	Var.	20	1NC5WBP140	30	606000	crack	0	1	100
Imp.	Const.	20	1NC5WBP141	30	384000	crack	0	0	100
Imp.	Const.	20	1NC5WBP141	30	885000	crack	0	0	100
Imp.	Const.	20	1NC5WBP141	30	570000	crack	0	0	100
Imp.	Var.	20	1NC5WBP140	36	472000	crack	0	0.5	100
Imp.	Var.	20	1NC5WBP140	36	598000	crack	0	0.5	100
Imp.	Var.	20	1NC5WBP140	36	5072000	crack	0	0.5	100
Imp.	Var.	20	1NC5WBP140	45	335000	crack	0	1	100
Imp.	Var.	20	1NC5WBP140	45	298000	crack	0	1	100
Imp.	Var.	20	1NC5WBP140	45	342000	crack	0	1	100
Imp.	Const.	20	1NC5WBP142	40	433000	crack	0	0	100
Imp.	Const.	20	1NC5WBP142	40	299000	crack	0	0	100

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	20	1NC5WBC142	40	300000	crack	0	0	100
Imp.	Var.	20	1NC5WBP141	48	260000	crack	0	0.5	100
Imp.	Var.	20	1NC5WBP141	48	306000	crack	0	0.5	100
Imp.	Var.	20	1NC5WBP141	48	299000	crack	0	0.5	100
Imp.	Var.	20	1NC5WBP142	15	6383000	crack	0	1	100
Imp.	Var.	20	1NC5WBP142	15	5724000	crack	0	1	100
Imp.	Var.	20	1NC5WBP142	15	10090000	crack	0	1	100
Imp.	Const.	40	1NC5WBC361	10	1122000	crack	0	0	36
Imp.	Const.	40	1NC5WBC361	10	1386000	crack	0	0	36
Imp.	Const.	40	1NC5WBC361	10	2644000	crack	0	0	36
Imp.	Var.	40	1NC5WBC362	10.95	886000	crack	0	0.25	36
Imp.	Var.	40	1NC5WBC362	10.95	905000	crack	0	0.25	36
Imp.	Var.	40	1NC5WBC362	10.95	728000	crack	0	0.25	36
Imp.	Var.	40	1NC5WBC363	12	634000	crack	0	0.5	36
Imp.	Var.	40	1NC5WBC363	12	570000	crack	0	0.5	36
Imp.	Var.	40	1NC5WBC363	12	640000	crack	0	0.5	36
Imp.	Const.	40	1NC5WBC362	20	156000	crack	0	0	36
Imp.	Const.	40	1NC5WBC362	20	151000	crack	0	0	36
Imp.	Const.	40	1NC5WBC362	20	150000	crack	0	0	36
Imp.	Var.	40	1NC5WBC363	21.9	127000	crack	0	0.25	36
Imp.	Var.	40	1NC5WBC363	21.9	141000	crack	0	0.25	36
Imp.	Var.	40	1NC5WBC363	21.9	120000	crack	0	0.25	36
Imp.	Var.	40	1NC5WBC364	24	72000	crack	0	0.5	36
Imp.	Var.	40	1NC5WBC364	24	141000	crack	0	0.5	36
Imp.	Var.	40	1NC5WBC364	24	100000	crack	0	0.5	36
Imp.	Const.	40	1NC5WBC363	40	16000	crack	0	0	36
Imp.	Const.	40	1NC5WBC363	40	17000	crack	0	0	36
Imp.	Const.	40	1NC5WBC363	40	15000	crack	0	0	36
Imp.	Var.	40	1NC5WBC364	6	9453000	crack	0	0.5	36
Imp.	Var.	40	1NC5WBC364	6	3924000	crack	0	0.5	36
Imp.	Var.	40	1NC5WBC364	6	5724000	crack	0	0.5	36
Imp.	Const.	40	1NC5WBC362	10	1088000	crack	10	0	36
Imp.	Const.	40	1NC5WBC362	10	1000000	crack	10	0	36
Imp.	Const.	40	1NC5WBC362	10	846000	crack	10	0	36
Imp.	Var.	40	1NC5WBC364	12	580000	crack	10	0.5	36
Imp.	Var.	40	1NC5WBC364	12	511000	crack	10	0.5	36

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Var.	40	1NC5WBC364	12	506000	crack	10	0.5	36
Imp.	Const.	27	1NC5WBP360	20	4700000	crack	-10	0	36
Imp.	Const.	27	1NC5WBP360	20	2978000	crack	-10	0	36
Imp.	Const.	25	1NC5WBP360	20	1346000	crack	-10	0	36
Imp.	Var.	20	1NC5WBP361	21.9	2944000	crack	0	0.25	36
Imp.	Var.	20	1NC5WBP361	21.9	1702000	crack	0	0.25	36
Imp.	Var.	27	1NC5WBP361	21.9	4540000	crack	0	0.25	36
Imp.	Var.	27	1NC5WBP361	24	1469000	crack	-10	0.5	36
Imp.	Var.	20	1NC5WBP361	24	1751000	crack	-10	0.5	36
Imp.	Var.	20	11NC5WBP36	24	1521000	crack	-10	0.5	36
Imp.	Const.	20	1NC5WBP362	30	938000	crack	-10	0	36
Imp.	Const.	27	1NC5WBP362	30	963000	crack	-10	0	36
Imp.	Const.	20	1NC5WBP362	30	1072000	crack	-10	0	36
Imp.	Var.	25	1NC5WBP362	32.85	556000	crack	-10	0.25	36
Imp.	Var.	21	1NC5WBP362	32.85	784000	crack	-10	0.25	36
Imp.	Var.	27	1NC5WBP362	32.85	708000	crack	-10	0.25	36
Imp.	Const.	20	1NC5WBP360	20	4549000	crack	0	0	36
Imp.	Const.	27	1NC5WBP360	20	2371000	crack	0	0	36
Imp.	Const.	20	1NC5WBP360	20	7337000	crack	0	0	36
Imp.	Var.	20	1NC5WBP361	21.9	2148000	crack	0	0.25	36
Imp.	Var.	21	1NC5WBP361	21.9	3940000	crack	0	0.25	36
Imp.	Var.	20	1NC5WBP361	21.9	2139000	crack	0	0.25	36
Imp.	Var.	25	1NC5WBP362	24	1056000	crack	0	0.5	36
Imp.	Var.	20	1NC5WBP362	24	2731000	crack	0	0.5	36
Imp.	Var.	25	1NC5WBP362	24	2024000	crack	0	0.5	36
Imp.	Const.	20	1NC5WBP362	30	953000	crack	0	0	36
Imp.	Const.	25	1NC5WBP362	30	1007000	crack	0	0	36
Imp.	Const.	25	1NC5WBP362	30	1044000	crack	0	0	36
Imp.	Var.	20	1NC5WBP363	29.24	1067000	crack	0	0.25	36
Imp.	Var.	20	1NC5WBP363	29.24	964000	crack	0	0.25	36
Imp.	Const.	25	1NC5WBP363	50	196000	crack	-10	0	36
Imp.	Const.	20	1NC5WBP363	50	125000	crack	-10	0	36
Imp.	Const.	20	1NC5WBP363	50	217000	crack	-10	0	36
Imp.	Var.	120	1NC7000001	2.4	43600000	crack	2	4.1	36
S.I.	Const.	150	1JPN01N022	408	211000	crack	20	-1	600
S.I.	Const.	150	1JPN01N008	343	474000	crack	20	-1	600

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	150	1JPN01N007	300	2000000	runout	20	-1	600
S.I.	Const.	150	1JPN01N018	313	848000	crack	20	-1	600
S.I.	Const.	150	1JPN01N017	305	1490000	crack	20	-1	600
S.I.	Const.	150	1JPN01N009	352	1610000	runout	20	-1	600
S.I.	Const.	150	1JPN01N014	450	154000	crack	20	-1	600
S.I.	Const.	150	1JPN01N006	287	2040000	runout	20	-1	600
S.I.	Const.	150	1JPN01N010	349	565000	crack	20	-1	600
S.I.	Const.	150	1JPN01S014	303	878000	crack	20	-1	600
S.I.	Const.	150	1JPN01S085	300	2340000	crack	20	-1	600
S.I.	Const.	150	1JPN01S087	349	924000	crack	20	-1	600
S.I.	Const.	150	1JPN01S100	351	506000	crack	20	-1	600
S.I.	Const.	150	1JPN01SA33	300	819000	crack	20	-1	600
S.I.	Const.	150	1JPN01M005	302	290000	crack	20	-1	600
S.I.	Const.	150	1JPN01M036	300	555000	crack	20	-1	600
S.I.	Const.	150	1JPN01M043	301	392000	crack	20	-1	600
S.I.	Const.	150	1JPN01M068	254	1900000	crack	20	-1	600
S.I.	Const.	150	1JPN01M069	254	1050000	crack	20	-1	600
S.I.	Const.	150	1JPN01M0A1	249	2290000	crack	20	-1	600
S.I.	Const.	150	1JPN01M0A2	300	1050000	crack	20	-1	600
S.I.	Const.	150	1JPN01M0B5	250	1490000	crack	20	-1	600
S.I.	Const.	150	1JPN01M096	305	172000	crack	20	-1	600
S.I.	Const.	150	1JPN01M0B4	281	233000	crack	20	-1	600
S.I.	Const.	150	1JPN01M0B7	243	537000	crack	20	-1	600
S.I.	Const.	150	1JPN01M0B8	280	268000	crack	20	-1	600
S.I.	Const.	150	1JPN01MC18	284	332000	crack	20	-1	600
S.I.	Const.	150	1JPN01M0C5	236	696000	crack	20	-1	600
S.I.	Const.	150	1JPN01LB18	300	348000	crack	20	-1	600
S.I.	Const.	150	1JPN01LB19	301	258000	crack	20	-1	600
S.I.	Const.	150	1JPN01LB20	301	236000	crack	20	-1	600
S.I.	Const.	150	1JPN01L0C7	250	456000	crack	20	-1	600
S.I.	Const.	150	1JPN01L0C9	249	567000	crack	20	-1	600
S.I.	Const.	150	1JPN01LC21	251	530000	crack	20	-1	600
S.I.	Const.	150	1JPN01LC22	200	1210000	crack	20	-1	600
S.I.	Const.	150	1JPN01LC23	200	1690000	crack	20	-1	600
S.I.	Const.	150	1JPN01LB14	182	687000	crack	20	-1	600
S.I.	Const.	150	1JPN01LB17	210	548000	crack	20	-1	600

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	150	1JPN01LC11	184	1110000	crack	20	-1	600
S.I.	Const.	150	1JPN01LC12	234	470000	crack	20	-1	600
S.I.	Const.	150	1JPN01LC15	183	901000	crack	20	-1	600
S.I.	Const.	150	1JPN01LC20	286	205000	crack	20	-1	600
S.I.	Const.	150	1JPN01L0B6	181	1180000	crack	20	-1	600
S.I.	Const.	150	1JPN01LB11	231	408000	crack	20	-1	600
S.I.	Const.	150	1JPN01LC13	230	602000	crack	20	-1	600
S.I.	Const.	150	1JPN01LC19	278	273000	crack	20	-1	600
S.I.	Const.	150	1JPN01SBA1	140	2200000	crack	20	-1	600
S.I.	Const.	150	1JPN01SBA2	120	4800000	runout	20	-1	600
S.I.	Const.	150	1JPN01SBA3	181	922000	crack	20	-1	600
S.I.	Const.	150	1JPN01SBA4	219	378000	crack	20	-1	600
S.I.	Const.	150	1JPN01SBA5	250	284000	crack	20	-1	600
S.I.	Const.	150	1JPN01SBA6	302	141000	crack	20	-1	600
S.I.	Const.	150	1JPN01SBB1	300	266000	crack	20	-1	600
S.I.	Const.	150	1JPN01SBB2	200	2390000	crack	20	-1	600
S.I.	Const.	150	1JPN01SBC1	299	417000	crack	20	-1	600
S.I.	Const.	150	1JPN01SBC2	250	2920000	crack	20	-1	600
S.I.	Const.	150	1JPN01N023	482	124000	crack	20	-1	600
S.I.	Const.	150	1JPN01N024	426	151000	crack	20	-1	600
S.I.	Const.	150	1JPN01N025	381	187000	crack	20	-1	600
S.I.	Const.	150	1JPN01N037	338	281000	crack	20	-1	600
S.I.	Const.	150	1JPN01N038	308	1110000	crack	20	-1	600
S.I.	Const.	150	1JPN01N039	282	2300000	runout	20	-1	600
S.I.	Const.	160	1JPN1100S1	196	370000	crack	-98	-1	580
S.I.	Const.	160	1JPN1100S2	196	495000	crack	-131	-2	580
S.I.	Const.	160	1JPN1100S3	196	700000	crack	-164	-5	580
S.I.	Const.	160	1JPN1100S4	196	321000	crack	0	0	580
S.I.	Const.	160	1JPN1100S5	127	3480000	crack	-64	-1	580
S.I.	Const.	160	1JPN1100S6	147	1028000	crack	-74	-1	580
S.I.	Const.	160	1JPN1100S7	147	1792000	crack	-98	-2	580
S.I.	Const.	160	1JPN1100S8	147	1414000	crack	1	0	580
S.I.	Const.	160	1JPN1100S9	147	4700000	runout	-123	-5	580
S.I.	Const.	150	1JPN0200T1	247	1762000	crack	10	-1	800
S.I.	Const.	150	1JPN0200T2	245	1249000	crack	10	-1	800
S.I.	Const.	150	1JPN0200T3	267	527000	crack	10	-1	800

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	150	1JPN0200T4	220	555000	crack	10	-1	800
S.I.	Const.	150	1JPN0200T5	222	1224000	crack	10	-1	800
S.I.	Const.	150	1JPN0200T7	197	2567000	crack	10	-1	800
S.I.	Const.	150	1JPN0200T8	216	1708000	crack	10	-1	800
S.I.	Const.	150	1JPN0200T9	267	400000	crack	10	-1	800
S.I.	Const.	150	1JPN020T10	199	1243000	crack	10	-1	800
S.I.	Const.	170	1JPN05AB01	135	1200000	crack	-1	-1	800
S.I.	Const.	170	1JPN05AB02	135	1200000	crack	-1	-1	800
S.I.	Const.	170	1JPN05AB03	135	2150000	crack	-1	-1	800
S.I.	Const.	170	1JPN05AB04	125	1200000	crack	-1	-1	800
S.I.	Const.	170	1JPN05AB05	125	1620000	crack	-1	-1	800
S.I.	Const.	170	1JPN05AB06	125	1700000	crack	-1	-1	800
S.I.	Const.	170	1JPN5DEF01	150	1100000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF02	150	1210000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF03	150	1480000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF04	150	1520000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF05	150	1600000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF06	150	2050000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF07	115	1050000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF08	115	1680000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF09	115	1730000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF10	115	1900000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF11	115	2050000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF12	115	2150000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF13	115	2400000	crack	-1	-1	580
S.I.	Const.	170	1JPN5DEF14	115	2750000	crack	-1	-1	580
S.I.	Const.	170	1JPN05G001	115	2150000	crack	-1	-1	800
S.I.	Const.	170	1JPN05G002	115	2350000	crack	-1	-1	800
S.I.	Const.	160	1JPN05JS01	200	470000	crack	300	0.6	800
S.I.	Const.	160	1JPN05JS02	132	4000000	runout	198	0.6	800
S.I.	Const.	160	1JPN05JS03	310	183000	crack	0	0	800
S.I.	Const.	160	1JPN05JS04	217	445000	crack	0	0	800
S.I.	Const.	160	1JPN05JS05	148	1150000	crack	0	0	800
S.I.	Const.	160	1JPN05JS06	140	1300000	crack	0	0	800
S.I.	Const.	160	1JPN05JS07	135	1600000	crack	0	0	800
S.I.	Const.	160	1JPN05JS08	140	1820000	crack	0	0	800

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	160	1JPN05JS09	135	3200000	runout	0	0	800
S.I.	Const.	160	1JPN05JS10	140	4000000	crack	0	0	800
S.I.	Const.	160	1JPN05JS11	390	112000	crack	-195	-1	800
S.I.	Const.	160	1JPN05JS12	280	394000	crack	-140	-1	800
S.I.	Const.	160	1JPN05JS13	200	385000	crack	0	0	800
S.I.	Const.	160	1JPN05JS14	135	3150000	crack	0	0	800
S.I.	Const.	160	1JPN05JS15	145	3150000	crack	0	0	800
S.I.	Const.	170	1JPN05BA01	156	890000	crack	0	0	800
S.I.	Const.	170	1JPN05BA02	133	1310000	crack	0	0	800
S.I.	Const.	170	1JPN05BA03	155	2780000	crack	0	0	800
S.I.	Const.	150	1JPN05JS16	270	400000	crack	0	0	800
S.I.	Const.	150	1JPN05JS17	270	530000	crack	0	0	800
S.I.	Const.	150	1JPN05JS18	222	555000	crack	0	0	800
S.I.	Const.	150	1JPN05JS19	248	1270000	crack	0	0	800
S.I.	Const.	150	1JPN05JS20	223	1250000	crack	0	0	800
S.I.	Const.	150	1JPN05JS21	200	1270000	crack	0	0	800
S.I.	Const.	150	1JPN05JS22	250	1800000	crack	0	0	800
S.I.	Const.	150	1JPN05JS23	220	1750000	crack	0	0	800
S.I.	Const.	150	1JPN05JS24	200	2600000	crack	0	0	800
S.I.	Const.	170	1JPN05BB01	174	1200000	crack	0	0	800
S.I.	Const.	170	1JPN05BB02	148	1990000	crack	0	0	800
S.I.	Const.	170	1JPN05BB03	127	3000000	runout	0	0	800
S.I.	Const.	170	1JPN05BE01	219	1010000	crack	0	0	800
S.I.	Const.	170	1JPN05BE02	192	1280000	crack	0	0	800
S.I.	Const.	170	1JPN05BE03	163	2190000	crack	0	0	800
S.I.	Const.	171	1JPN05BD01	228	1040000	crack	0	0	800
S.I.	Const.	171	1JPN05BD02	198	1080000	crack	0	0	800
S.I.	Const.	171	1JPN05BD03	168	1940000	crack	0	0	800
S.I.	Const.	172	1JPN05BF01	202	807000	crack	0	0	800
S.I.	Const.	172	1JPN05BF02	198	740000	crack	0	0	800
S.I.	Const.	172	1JPN05BF03	198	1350000	crack	0	0	800
S.I.	Const.	172	1JPN05BF04	168	3150000	crack	0	0	800
S.I.	Const.	170	1JPN05BG01	175	1190000	crack	-1	-1	500
S.I.	Const.	170	1JPN05BG02	182	3000000	runout	-1	-1	500
S.I.	Const.	170	1JPN05BG02	217	1240000	crack	-1	-1	500
S.I.	Const.	170	1JPN05BG03	221	1570000	crack	-1	-1	500

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	150	1JPN09SB01	395	180000	crack	10	1	800
S.I.	Const.	150	1JPN09SB02	395	310000	crack	10	1	800
S.I.	Const.	150	1JPN09SB03	300	375000	crack	10	1	800
S.I.	Const.	150	1JPN09SB04	300	570000	crack	10	1	800
S.I.	Const.	150	1JPN09SB05	290	620000	crack	10	1	800
S.I.	Const.	150	1JPN09SB06	250	1200000	crack	10	1	800
S.I.	Const.	150	1JPN09SB07	250	2100000	runout	10	1	800
S.I.	Const.	150	1JPN09SB08	230	2150000	crack	10	1	800
S.I.	Const.	150	1JPN09SB09	290	500000	crack	10	0	800
S.I.	Const.	150	1JPN09SB10	290	520000	crack	10	0	800
S.I.	Const.	150	1JPN09SB11	290	765000	crack	10	0	800
S.I.	Const.	150	1JPN09SB12	230	760000	crack	10	0	800
S.I.	Const.	150	1JPN09SB13	230	1120000	crack	10	0	800
S.I.	Const.	150	1JPN09SB14	190	1600000	crack	10	0	800
S.I.	Const.	150	1JPN100201	392	405000	crack	10	-1	800
S.I.	Const.	150	1JPN100202	343	842000	crack	10	-1	800
S.I.	Const.	150	1JPN100203	324	1010000	crack	10	-1	800
S.I.	Const.	150	1JPN100204	284	2000000	runout	10	-1	800
S.I.	Const.	150	1JPN100205	343	540000	crack	10	-1	800
S.I.	Const.	150	1JPN100206	275	860000	crack	10	-1	800
S.I.	Const.	150	1JPN100207	294	960000	crack	10	-1	800
S.I.	Const.	150	1JPN100208	255	1100000	crack	10	-1	800
S.I.	Const.	150	1JPN100301	333	305000	crack	10	-1	500
S.I.	Const.	150	1JPN100302	314	510000	crack	10	-1	500
S.I.	Const.	150	1JPN100303	294	870000	crack	10	-1	500
S.I.	Const.	150	1JPN100304	265	1100000	crack	10	-1	500
S.I.	Const.	150	1JPN100305	255	1400000	crack	10	-1	500
S.I.	Const.	150	1JPN100306	353	210000	crack	10	-1	500
S.I.	Const.	150	1JPN100307	294	590000	crack	10	-1	500
S.I.	Const.	150	1JPN100308	275	620000	crack	10	-1	500
S.I.	Const.	150	1JPN100309	265	1020000	crack	10	-1	500
S.I.	Const.	150	1JPN100401	343	290000	crack	10	-1	800
S.I.	Const.	150	1JPN100402	265	700000	crack	10	-1	800
S.I.	Const.	150	1JPN100403	314	1200000	crack	10	-1	800
S.I.	Const.	150	1JPN100404	294	1400000	crack	10	-1	800
S.I.	Const.	150	1JPN100405	245	1550000	crack	10	-1	800

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	150	1JPN100406	294	430000	crack	10	-1	800
S.I.	Const.	150	1JPN100407	245	1050000	crack	10	-1	800
S.I.	Const.	150	1JPN100408	265	1200000	crack	10	-1	800
S.I.	Const.	150	1JPN100409	226	3000000	crack	10	-1	800
S.I.	Const.	150	1JPN100410	294	350000	crack	10	-1	800
S.I.	Const.	150	1JPN100411	235	610000	crack	10	-1	800
S.I.	Const.	150	1JPN100412	255	750000	crack	10	-1	800
S.I.	Const.	150	1JPN100413	235	840000	crack	10	-1	800
S.I.	Const.	150	1JPN100414	216	1500000	crack	10	-1	800
S.I.	Const.	150	1JPN100501	343	250000	crack	10	-1	500
S.I.	Const.	150	1JPN100502	294	480000	crack	10	-1	500
S.I.	Const.	150	1JPN100503	324	660000	crack	10	-1	500
S.I.	Const.	150	1JPN100504	255	1100000	crack	10	-1	500
S.I.	Const.	150	1JPN100505	343	95000	crack	10	-1	500
S.I.	Const.	150	1JPN100506	324	180000	crack	10	-1	500
S.I.	Const.	150	1JPN100507	294	770000	crack	10	-1	500
S.I.	Const.	150	1JPN100508	265	780000	crack	10	-1	500
S.I.	Const.	150	1JPN100509	265	2000000	runout	10	-1	500
S.I.	Const.	150	1JPN100510	314	260000	crack	10	-1	500
S.I.	Const.	150	1JPN100511	294	270000	crack	10	-1	500
S.I.	Const.	150	1JPN100512	255	300000	crack	10	-1	500
S.I.	Const.	150	1JPN100513	216	870000	crack	10	-1	500
S.I.	Const.	150	1JPN100514	206	2000000	runout	10	-1	500
S.I.	Const.	151	1JPN100601	373	81000	crack	10	-1	800
S.I.	Const.	151	1JPN100602	412	120000	crack	10	-1	800
S.I.	Const.	151	1JPN100603	412	360000	crack	10	-1	800
S.I.	Const.	151	1JPN100604	451	670000	crack	10	-1	800
S.I.	Const.	151	1JPN100605	343	720000	crack	10	-1	800
S.I.	Const.	151	1JPN100606	373	1300000	crack	10	-1	800
S.I.	Const.	151	1JPN100607	314	1600000	crack	10	-1	800
S.I.	Const.	151	1JPN100701	363	310000	crack	10	-1	500
S.I.	Const.	151	1JPN100702	333	330000	crack	10	-1	500
S.I.	Const.	151	1JPN100703	343	660000	crack	10	-1	500
S.I.	Const.	151	1JPN100704	324	180000	crack	10	-1	500
S.I.	Const.	150	1JPN12T102	449	128000	crack	10	0	800
S.I.	Const.	150	1JPN12T103	198	2022000	crack	10	0	800

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	150	1JPN12T104	303	288000	crack	10	0	800
S.I.	Const.	150	1JPN12T105	191	696000	crack	10	0	800
S.I.	Const.	150	1JPN12T106	413	690000	crack	10	0	800
S.I.	Const.	150	1JPN12T107	209	1503000	crack	10	0	800
S.I.	Const.	150	1JPN12T108	216	799000	crack	10	0	800
S.I.	Const.	150	1JPN12T109	222	930000	crack	10	0	800
S.I.	Const.	150	1JPN12T201	191	1468000	crack	10	0	800
S.I.	Const.	150	1JPN12T202	212	663000	crack	10	0	800
S.I.	Const.	150	1JPN12T203	304	161000	crack	10	0	800
S.I.	Const.	150	1JPN12T204	279	212000	crack	10	0	800
S.I.	Const.	150	1JPN12T301	174	1781000	crack	10	0	800
S.I.	Const.	150	1JPN12T302	194	2535000	crack	10	0	800
S.I.	Const.	150	1JPN12T303	270	535000	crack	10	0	800
S.I.	Const.	150	1JPN12T304	352	242000	crack	10	0	800
S.I.	Const.	150	1JPN12T401	215	1356000	crack	10	0	800
S.I.	Const.	150	1JPN12T402	278	643000	crack	10	0	800
S.I.	Const.	150	1JPN12T403	349	292000	crack	10	0	800
S.I.	Const.	160	1JPN130P01	245	172000	crack	27	-1	370
S.I.	Const.	160	1JPN130P02	245	216000	crack	27	-1	370
S.I.	Const.	160	1JPN130P03	245	307000	crack	27	-1	370
S.I.	Const.	160	1JPN130P04	177	565000	crack	27	-1	370
S.I.	Const.	160	1JPN130P05	177	821000	crack	27	-1	370
S.I.	Const.	160	1JPN130P06	177	741000	crack	27	-1	370
S.I.	Const.	160	1JPN130P07	147	2117000	crack	27	-1	370
S.I.	Const.	160	1JPN130P08	127	10000000	runout	27	-1	370
S.I.	Const.	160	1JPN130P09	127	5340000	runout	27	-1	370
S.I.	Const.	160	1JPN130W01	245	242000	crack	27	-1	370
S.I.	Const.	160	1JPN130W02	245	217000	crack	27	-1	370
S.I.	Const.	160	1JPN130W03	245	274000	crack	27	-1	370
S.I.	Const.	160	1JPN130W04	177	774000	crack	27	-1	370
S.I.	Const.	160	1JPN130W05	177	432000	crack	27	-1	370
S.I.	Const.	160	1JPN130W06	177	822000	crack	27	-1	370
S.I.	Const.	160	1JPN130W07	147	2160000	crack	27	-1	370
S.I.	Const.	160	1JPN130W08	147	1820000	crack	27	-1	370
S.I.	Const.	160	1JPN130W09	147	5030000	runout	27	-1	370
S.I.	Const.	160	1JPN130W10	147	5340000	runout	27	-1	370

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	160	1JPN130N01	245	268000	crack	27	-1	370
S.I.	Const.	160	1JPN130N02	245	170000	crack	27	-1	370
S.I.	Const.	160	1JPN130N03	245	219000	crack	27	-1	370
S.I.	Const.	160	1JPN130N04	177	660000	crack	27	-1	370
S.I.	Const.	160	1JPN130N05	177	826000	crack	27	-1	370
S.I.	Const.	160	1JPN130N06	177	608000	crack	27	-1	370
S.I.	Const.	160	1JPN130N07	147	5480000	runout	27	-1	370
S.I.	Const.	160	1JPN130N08	147	1170000	crack	27	-1	370
S.I.	Const.	160	1JPN130N09	147	1720000	crack	27	-1	370
S.I.	Const.	165	1JPN132W01	245	379000	crack	27	-1	370
S.I.	Const.	165	1JPN132W02	245	318000	crack	27	-1	370
S.I.	Const.	165	1JPN132W03	245	267000	crack	27	-1	370
S.I.	Const.	165	1JPN132W04	177	955000	crack	27	-1	370
S.I.	Const.	165	1JPN132W05	177	1869000	crack	27	-1	370
S.I.	Const.	165	1JPN132W06	177	1034000	crack	27	-1	370
S.I.	Const.	165	1JPN132W07	147	3250000	runout	27	-1	370
S.I.	Const.	165	1JPN132W08	147	3030000	runout	27	-1	370
S.I.	Const.	165	1JPN132W09	147	2740000	crack	27	-1	370
S.I.	Const.	165	1JPN132N01	245	379000	crack	27	-1	370
S.I.	Const.	165	1JPN132N02	245	634000	crack	27	-1	370
S.I.	Const.	165	1JPN132N03	245	440000	crack	27	-1	370
S.I.	Const.	165	1JPN132N04	177	631000	crack	27	-1	370
S.I.	Const.	165	1JPN132N05	177	2210000	runout	27	-1	370
S.I.	Const.	165	1JPN132N06	177	720000	crack	27	-1	370
S.I.	Const.	165	1JPN132N07	147	3470000	runout	27	-1	370
S.I.	Const.	165	1JPN132N08	147	1790000	crack	27	-1	370
S.I.	Const.	165	1JPN132N09	147	3620000	runout	27	-1	370
S.I.	Const.	165	1JPN134W01	245	740000	crack	27	-1	370
S.I.	Const.	165	1JPN134W02	245	233000	crack	27	-1	370
S.I.	Const.	165	1JPN134W03	245	578000	crack	27	-1	370
S.I.	Const.	165	1JPN134W04	177	1733000	crack	27	-1	370
S.I.	Const.	165	1JPN134W05	177	4470000	runout	27	-1	370
S.I.	Const.	165	1JPN134W06	177	652000	crack	27	-1	370
S.I.	Const.	165	1JPN134W07	177	1506000	crack	27	-1	370
S.I.	Const.	165	1JPN134W08	147	4750000	runout	27	-1	370
S.I.	Const.	165	1JPN134W09	147	4710000	runout	27	-1	370

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	165	1JPN134W10	147	3930000	runout	27	-1	370
S.I.	Const.	165	1JPN134N01	245	482000	crack	27	-1	370
S.I.	Const.	165	1JPN134N02	245	368000	crack	27	-1	370
S.I.	Const.	165	1JPN134N03	245	392000	crack	27	-1	370
S.I.	Const.	165	1JPN134N04	177	974000	crack	27	-1	370
S.I.	Const.	165	1JPN134N05	177	1694000	crack	27	-1	370
S.I.	Const.	165	1JPN134N06	177	4750000	runout	27	-1	370
S.I.	Const.	165	1JPN134N07	177	1386000	crack	27	-1	370
S.I.	Const.	165	1JPN134N08	147	4490000	runout	27	-1	370
S.I.	Const.	165	1JPN134N09	147	4510000	runout	27	-1	370
S.I.	Const.	165	1JPN134N10	147	4680000	runout	27	-1	370
S.I.	Const.	165	1JPN135W01	245	336000	crack	27	-1	370
S.I.	Const.	165	1JPN135W02	245	364000	crack	27	-1	370
S.I.	Const.	165	1JPN135W03	245	274000	crack	27	-1	370
S.I.	Const.	165	1JPN135W04	177	2493000	crack	27	-1	370
S.I.	Const.	165	1JPN135W05	177	5210000	runout	27	-1	370
S.I.	Const.	165	1JPN135W06	177	1387000	crack	27	-1	370
S.I.	Const.	165	1JPN135W07	177	1558000	crack	27	-1	370
S.I.	Const.	165	1JPN135W08	147	2315000	crack	27	-1	370
S.I.	Const.	165	1JPN135W09	147	3940000	runout	27	-1	370
S.I.	Const.	165	1JPN135W10	147	1110000	crack	27	-1	370
S.I.	Const.	200	1JPN130P01	245	123000	crack	27	-1	370
S.I.	Const.	200	1JPN130P02	245	109000	crack	27	-1	370
S.I.	Const.	200	1JPN130P03	245	158000	crack	27	-1	370
S.I.	Const.	200	1JPN130P04	177	359000	crack	27	-1	370
S.I.	Const.	200	1JPN130P05	177	373000	crack	27	-1	370
S.I.	Const.	200	1JPN130P06	177	321000	crack	27	-1	370
S.I.	Const.	200	1JPN130P07	127	1040000	crack	27	-1	370
S.I.	Const.	200	1JPN130P08	127	1005000	crack	27	-1	370
S.I.	Const.	200	1JPN130P09	127	720000	crack	27	-1	370
S.I.	Const.	200	1JPN130P10	127	1310000	crack	27	-1	370
S.I.	Const.	200	1JPN130W01	245	135000	crack	27	-1	370
S.I.	Const.	200	1JPN130W02	245	130000	crack	27	-1	370
S.I.	Const.	200	1JPN130W03	245	154000	crack	27	-1	370
S.I.	Const.	200	1JPN130W04	177	323000	crack	27	-1	370
S.I.	Const.	200	1JPN130W05	177	314000	crack	27	-1	370

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	200	1JPN130W06	177	372000	crack	27	-1	370
S.I.	Const.	200	1JPN130W07	177	297000	crack	27	-1	370
S.I.	Const.	200	1JPN130W08	127	1322000	crack	27	-1	370
S.I.	Const.	200	1JPN130W09	127	5330000	runout	27	-1	370
S.I.	Const.	200	1JPN130W10	127	1028000	crack	27	-1	370
S.I.	Const.	200	1JPN130W11	127	5340000	runout	27	-1	370
S.I.	Const.	200	1JPN130N01	245	144000	crack	27	-1	370
S.I.	Const.	200	1JPN130N02	245	137000	crack	27	-1	370
S.I.	Const.	200	1JPN130N03	245	151000	crack	27	-1	370
S.I.	Const.	200	1JPN130N04	245	139000	crack	27	-1	370
S.I.	Const.	200	1JPN130N05	177	422000	crack	27	-1	370
S.I.	Const.	200	1JPN130N06	177	709000	crack	27	-1	370
S.I.	Const.	200	1JPN130N07	177	356000	crack	27	-1	370
S.I.	Const.	200	1JPN130N08	127	958000	crack	27	-1	370
S.I.	Const.	200	1JPN130N09	127	787000	crack	27	-1	370
S.I.	Const.	200	1JPN130N10	127	777000	crack	27	-1	370
S.I.	Const.	205	1JPN132W01	245	195000	crack	27	-1	370
S.I.	Const.	205	1JPN132W02	245	168000	crack	27	-1	370
S.I.	Const.	205	1JPN132W03	245	154000	crack	27	-1	370
S.I.	Const.	205	1JPN132W04	177	360000	crack	27	-1	370
S.I.	Const.	205	1JPN132W05	177	377000	crack	27	-1	370
S.I.	Const.	205	1JPN132W06	177	348000	crack	27	-1	370
S.I.	Const.	205	1JPN132W07	147	2370000	runout	27	-1	370
S.I.	Const.	205	1JPN132W08	147	705000	crack	27	-1	370
S.I.	Const.	205	1JPN132W09	147	1100000	crack	27	-1	370
S.I.	Const.	205	1JPN132W10	127	2990000	runout	27	-1	370
S.I.	Const.	205	1JPN132W11	127	1179000	crack	27	-1	370
S.I.	Const.	205	1JPN132W12	127	1056000	crack	27	-1	370
S.I.	Const.	205	1JPN134W01	245	177000	crack	27	-1	370
S.I.	Const.	205	1JPN134W02	245	166000	crack	27	-1	370
S.I.	Const.	205	1JPN134W03	245	213000	crack	27	-1	370
S.I.	Const.	205	1JPN134W04	177	668000	crack	27	-1	370
S.I.	Const.	205	1JPN134W05	177	327000	crack	27	-1	370
S.I.	Const.	205	1JPN134W06	177	357000	crack	27	-1	370
S.I.	Const.	205	1JPN134W07	147	662000	crack	27	-1	370
S.I.	Const.	205	1JPN134W08	147	915000	crack	27	-1	370

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	205	1JPN134W09	147	4470000	runout	27	-1	370
S.I.	Const.	205	1JPN134W10	127	1624000	crack	27	-1	370
S.I.	Const.	205	1JPN134N01	245	150000	crack	27	-1	370
S.I.	Const.	205	1JPN134N02	245	248000	crack	27	-1	370
S.I.	Const.	205	1JPN134N03	245	130000	crack	27	-1	370
S.I.	Const.	205	1JPN134N04	177	415000	crack	27	-1	370
S.I.	Const.	205	1JPN134N05	177	532000	crack	27	-1	370
S.I.	Const.	205	1JPN134N06	177	631000	crack	27	-1	370
S.I.	Const.	205	1JPN134N07	127	1086000	crack	27	-1	370
S.I.	Const.	205	1JPN134N08	127	968000	crack	27	-1	370
S.I.	Const.	205	1JPN134N09	127	623000	crack	27	-1	370
Imp.	Var.	30	1NC8004W01	4.09	34700000	crack	4.17	7.88	36
Imp.	Var.	30	1NC8004W01	4.09	35000000	runout	4.17	7.88	36
Imp.	Var.	30	1NC8004W17	4.09	35000000	runout	4.17	7.88	36
Imp.	Var.	30	1NC8004W17	4.09	35000000	runout	4.17	7.88	36
Imp.	Var.	30	1NC8004E01	4.09	34700000	crack	4.17	7.88	36
Imp.	Var.	30	1NC8004E01	4.09	35000000	runout	4.17	7.88	36
Imp.	Var.	30	1NC8004E17	4.09	35000000	runout	4.17	7.88	36
Imp.	Var.	30	1NC8004E17	4.09	32000000	crack	4.17	7.88	36
Imp.	Var.	30	1NC8002N01	3.25	86900000	crack	4.17	12.5	36
Imp.	Var.	30	1NC8002N01	3.25	120000000	runout	4.17	12.5	36
Imp.	Var.	30	1NC8002N17	3.25	120000000	runout	4.17	12.5	36
Imp.	Var.	30	1NC8002N17	3.25	120000000	runout	4.17	12.5	36
Imp.	Var.	30	1NC8002S01	3.25	120000000	runout	4.17	12.5	36
Imp.	Var.	30	1NC8002S01	3.25	87200000	crack	4.17	12.5	36
Imp.	Var.	30	1NC8002S17	3.25	120000000	runout	4.17	12.5	36
Imp.	Var.	30	1NC8002S17	3.25	120000000	runout	4.17	12.5	36
Imp.	Var.	40	1NC8003E01	1.87	109000000	runout	2.22	5.92	36
Imp.	Var.	40	1NC8003E01	1.87	109000000	runout	2.22	5.92	36
Imp.	Var.	40	1NC8003E17	1.87	109000000	runout	2.22	5.92	36
Imp.	Var.	40	1NC8003E17	1.87	109000000	runout	2.22	5.92	36
Imp.	Var.	40	1NC8003W01	1.99	104000000	runout	2.65	7.09	36
Imp.	Var.	40	1NC8003W01	1.99	104000000	runout	2.65	7.09	36
Imp.	Var.	40	1NC8003W17	1.99	104000000	runout	2.65	7.09	36
Imp.	Var.	40	1NC8003W17	1.99	104000000	crack	2.65	7.09	36
Imp.	Var.	40	1NC8001N01	2.07	107000000	runout	2.47	6.62	36

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Var.	40	1NC8001N01	2.07	107000000	runout	2.47	6.62	36
Imp.	Var.	40	1NC8001N17	2.07	107000000	runout	2.47	6.62	36
Imp.	Var.	40	1NC8001N17	2.07	107000000	runout	2.47	6.62	36
Imp.	Var.	40	1NC8001S01	2.07	107000000	runout	2.47	6.62	36
Imp.	Var.	40	1NC8001S01	2.07	107000000	runout	2.47	6.62	36
Imp.	Var.	40	1NC8001S17	2.07	107000000	runout	2.47	6.62	36
Imp.	Var.	40	1NC8001S17	2.07	107000000	runout	2.47	6.62	36
Imp.	Const.	90	1NC8003E08	6.29	109000000	crack	7.5	20	36
Imp.	Const.	90	1NC8002N08	7.02	89470000	crack	9	27	36
Imp.	Const.	90	1NC8103E08	12.5	5010000	crack	7.5	20	36
Imp.	Const.	90	1NC8102N08	16	110000	crack	9	27	36
Imp.	Const.	90	1NC8003E09	6.29	109000000	crack	7.5	20	36
Imp.	Const.	90	1NC8103E09	12.5	5010000	crack	7.5	20	36
Imp.	Const.	90	1NC8003E10	6.29	112000000	runout	7.5	20	36
Imp.	Const.	90	1NC8001N08	7.12	107000000	runout	8.3	22.3	36
Imp.	Const.	90	1NC8001N09	7.12	107000000	runout	8.3	22.3	36
Imp.	Const.	90	1NC8001N10	7.12	107000000	runout	8.3	22.3	36
Imp.	Const.	90	1NC8001S08	7.12	107000000	runout	8.3	22.3	36
Imp.	Const.	90	1NC8001S09	7.12	107000000	runout	8.3	22.3	36
Imp.	Const.	90	1NC8001S10	7.12	107000000	runout	8.3	22.3	36
Imp.	Const.	90	1NC8002S08	7.02	125000000	runout	9	27	36
Imp.	Const.	90	1NC8002S09	5.66	125000000	runout	7.26	21.77	36
Imp.	Const.	90	1NC8002S10	7.02	125000000	runout	9	27	36
Imp.	Const.	90	1NC8002N09	5.66	125000000	runout	7.26	21.77	36
Imp.	Const.	90	1NC8002N10	7.02	120000000	crack	9	27	36
Imp.	Const.	90	1NC8003W08	6.7	104000000	runout	9	24	36
Imp.	Const.	90	1NC8003W09	6.7	104000000	runout	9	24	36
Imp.	Const.	90	1NC8003W10	6.7	104000000	runout	9	24	36
Imp.	Const.	90	1NC8004W08	8.83	34700000	runout	9	25	36
Imp.	Const.	90	1NC8004W09	8.83	34700000	runout	9	25	36
Imp.	Const.	90	1NC8004W10	8.83	34700000	runout	9	25	36
Imp.	Const.	90	1NC8004E08	8.83	34700000	runout	9	25	36
Imp.	Const.	90	1NC8004E09	8.83	34700000	runout	9	25	36
Imp.	Const.	90	1NC8004E10	8.83	34700000	runout	9	25	36
S.I.	Var.	90	0ORE80A601	55.9	24290000	crack	9	1	311
S.I.	Var.	90	0ORE80A602	55.9	27620000	crack	2	1	311

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Var.	120	1NC8001N02	1.36	107000000	runout	1.61	4.32	36
Imp.	Var.	120	1NC8001N03	1.74	107000000	runout	2.07	5.54	36
Imp.	Var.	120	1NC8001N04	1.76	107000000	runout	2.09	5.61	36
Imp.	Var.	120	1NC8001N05	2.08	107000000	runout	2.45	6.59	36
Imp.	Var.	120	1NC8001N06	2.15	107000000	runout	2.56	6.85	36
Imp.	Var.	120	1NC8001N07	2.42	107000000	runout	2.88	7.71	36
Imp.	Var.	120	1NC8001N11	2.42	107000000	runout	2.88	7.71	36
Imp.	Var.	120	1NC8001N12	2.15	107000000	runout	2.56	6.85	36
Imp.	Var.	120	1NC8001N13	2.08	107000000	runout	2.45	6.59	36
Imp.	Var.	120	1NC8001N14	1.76	107000000	runout	2.09	5.61	36
Imp.	Var.	120	1NC8001N15	1.74	107000000	runout	2.07	5.54	36
Imp.	Var.	120	1NC8001N16	1.36	107000000	runout	1.61	4.32	36
Imp.	Var.	120	1NC8001S02	1.36	107000000	runout	1.61	4.32	36
Imp.	Var.	120	1NC8001S03	1.74	107200000	crack	2.07	5.54	36
Imp.	Var.	120	1NC8001S04	1.76	107000000	runout	2.09	5.61	36
Imp.	Var.	120	1NC8001S05	2.08	107000000	runout	2.45	6.59	36
Imp.	Var.	120	1NC8001S06	2.15	86000000	crack	2.56	6.85	36
Imp.	Var.	120	1NC8001S07	2.42	107000000	runout	2.88	7.71	36
Imp.	Var.	120	1NC8001S11	2.42	43600000	crack	2.88	7.71	36
Imp.	Var.	120	1NC8001S12	2.15	107000000	runout	2.56	6.85	36
Imp.	Var.	120	1NC8001S13	2.08	107000000	runout	2.45	6.59	36
Imp.	Var.	120	1NC8001S14	1.76	107000000	runout	2.09	5.61	36
Imp.	Var.	120	1NC8001S15	1.74	107000000	runout	2.07	5.54	36
Imp.	Var.	120	1NC8001S16	1.36	107000000	runout	1.61	4.32	36
Imp.	Var.	120	1NC8002S02	1.36	120000000	crack	1.74	5.23	36
Imp.	Var.	120	1NC8002S03	1.74	120000000	crack	2.23	6.69	36
Imp.	Var.	120	1NC8002S04	1.76	120000000	crack	2.26	6.77	36
Imp.	Var.	120	1NC8002S05	2.08	120000000	crack	2.67	8	36
Imp.	Var.	120	1NC8002S06	2.15	120000000	runout	2.76	8.27	36
Imp.	Var.	120	1NC8002S07	2.42	69500000	crack	3.1	9.31	36
Imp.	Var.	120	1NC8002S11	2.42	120000000	crack	3.1	9.31	36
Imp.	Var.	120	1NC8002S12	2.15	120000000	runout	2.76	8.27	36
Imp.	Var.	120	1NC8002S13	2.08	99600000	crack	2.67	8	36
Imp.	Var.	120	1NC8002S14	1.76	120000000	runout	2.26	6.77	36
Imp.	Var.	120	1NC8002S15	1.74	120000000	runout	2.23	6.69	36
Imp.	Var.	120	1NC8002S16	1.36	120000000	runout	1.74	5.23	36

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Var.	120	1NC8002N02	1.36	94300000	crack	1.74	5.23	36
Imp.	Var.	120	1NC8002N03	1.74	120000000	runout	2.23	6.69	36
Imp.	Var.	120	1NC8002N04	1.76	120000000	runout	2.26	6.77	36
Imp.	Var.	120	1NC8002N05	2.08	120000000	crack	2.67	8	36
Imp.	Var.	120	1NC8002N06	2.15	120000000	crack	2.76	8.27	36
Imp.	Var.	120	1NC8002N07	2.42	120000000	crack	3.1	9.31	36
Imp.	Var.	120	1NC8002N11	2.42	71900000	crack	3.1	9.31	36
Imp.	Var.	120	1NC8002N12	2.15	120000000	crack	2.76	8.27	36
Imp.	Var.	120	1NC8002N13	2.08	120000000	crack	2.67	8	36
Imp.	Var.	120	1NC8002N14	1.76	120000000	runout	2.26	6.77	36
Imp.	Var.	120	1NC8002N15	1.74	120000000	runout	2.23	6.69	36
Imp.	Var.	120	1NC8002N16	1.36	120000000	runout	1.74	5.23	36
Imp.	Var.	120	1NC8003W02	1.29	104000000	runout	1.75	4.65	36
Imp.	Var.	120	1NC8003W03	1.66	104000000	runout	2.23	5.94	36
Imp.	Var.	120	1NC8003W04	1.69	104000000	runout	2.26	6.03	36
Imp.	Var.	120	1NC8003W05	1.98	104000000	runout	2.65	7.08	36
Imp.	Var.	120	1NC8003W06	2.05	104000000	runout	2.74	7.33	36
Imp.	Var.	120	1NC8003W07	2.31	37800000	crack	3.11	8.29	36
Imp.	Var.	120	1NC8003W11	2.31	104000000	runout	3.11	8.29	36
Imp.	Var.	120	1NC8003W12	2.05	67200000	crack	2.74	7.33	36
Imp.	Var.	120	1NC8003W13	1.98	104000000	runout	2.65	7.08	36
Imp.	Var.	120	1NC8003W14	1.69	104000000	runout	2.26	6.03	36
Imp.	Var.	120	1NC8003W15	1.66	104000000	runout	2.23	5.94	36
Imp.	Var.	120	1NC8003W16	1.29	104000000	runout	1.75	3.65	36
Imp.	Var.	120	1NC8003E02	1.22	109000000	runout	1.45	3.87	36
Imp.	Var.	120	1NC8003E03	1.55	109000000	runout	1.85	4.94	36
Imp.	Var.	120	1NC8003E04	1.59	109000000	runout	1.88	5.02	36
Imp.	Var.	120	1NC8003E05	1.86	109000000	runout	2.22	5.92	36
Imp.	Var.	120	1NC8003E06	1.92	109000000	runout	2.3	6.13	36
Imp.	Var.	120	1NC8003E07	1.93	104000000	crack	2.59	6.91	36
Imp.	Var.	120	1NC8003E11	2.17	109000000	crack	2.59	6.91	36
Imp.	Var.	120	1NC8003E12	1.92	109000000	crack	2.3	6.13	36
Imp.	Var.	120	1NC8003E13	1.86	109000000	runout	2.22	5.92	36
Imp.	Var.	120	1NC8003E14	1.59	109000000	runout	1.88	5.02	36
Imp.	Var.	120	1NC8003E15	1.55	109000000	runout	1.85	4.94	36
Imp.	Var.	120	1NC8003E16	1.22	109000000	runout	1.45	3.87	36

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Var.	120	1NC8004W02	1.71	34700000	runout	1.74	3.29	36
Imp.	Var.	120	1NC8004W03	2.18	34700000	runout	2.23	4.21	36
Imp.	Var.	120	1NC8004W04	2.22	34700000	runout	2.26	4.27	36
Imp.	Var.	120	1NC8004W05	2.61	34700000	runout	2.67	5.04	36
Imp.	Var.	120	1NC8004W06	2.7	34700000	runout	2.76	5.21	36
Imp.	Var.	120	1NC8004W07	3.05	34700000	runout	3.12	8.65	36
Imp.	Var.	120	1NC8004W11	3.05	22600000	crack	3.12	8.65	36
Imp.	Var.	120	1NC8004W12	2.7	33000000	crack	2.76	5.21	36
Imp.	Var.	120	1NC8004W13	2.61	18600000	crack	2.67	5.04	36
Imp.	Var.	120	1NC8004W14	2.22	33000000	crack	2.26	4.27	36
Imp.	Var.	120	1NC8004W15	2.18	34700000	runout	2.23	4.21	36
Imp.	Var.	120	1NC8004W16	1.71	34700000	runout	1.74	3.29	36
Imp.	Var.	120	1NC8004E02	1.71	34700000	runout	1.74	3.29	36
Imp.	Var.	120	1NC8004E03	2.18	34700000	runout	2.23	4.21	36
Imp.	Var.	120	1NC8004E04	2.22	34700000	runout	2.26	4.27	36
Imp.	Var.	120	1NC8004E05	2.61	34700000	crack	2.67	5.04	36
Imp.	Var.	120	1NC8004E06	2.7	32000000	crack	2.76	5.21	36
Imp.	Var.	120	1NC8004E07	3.05	34700000	runout	3.12	8.65	36
Imp.	Var.	120	1NC8004E11	3.05	34700000	runout	3.12	8.65	36
Imp.	Var.	120	1NC8004E12	2.7	34700000	runout	2.76	5.21	36
Imp.	Var.	120	1NC8004E13	2.61	34700000	crack	2.67	5.04	36
Imp.	Var.	120	1NC8004E14	2.22	34700000	runout	2.26	4.27	36
Imp.	Var.	120	1NC8004E15	2.18	34700000	runout	2.23	4.21	36
Imp.	Var.	120	1NC8004E16	1.71	17400000	crack	1.74	3.29	36
S.I.	Const.	100	3CHIS104.0	146	3900000	crack			390
S.I.	Const.	100	3CHIS203.0	172	4300000	crack			390
S.I.	Const.	100	3CHIS204.0	161	1330000	crack			390
S.I.	Const.	100	3CHIS205.0	181	875000	crack			390
S.I.	Const.	100	3CHIS206.0	146	1938000	crack			390
S.I.	Const.	50	3ICOM001.0	180	170300	crack			355
S.I.	Const.	50	3ICOM002.0	180	203000	crack			355
S.I.	Const.	50	3ICOM003.0	180	200400	crack			355
S.I.	Const.	50	3ICOM004.0	180	220300	crack			355
S.I.	Const.	50	3ICOM005.0	180	159300	crack			355
S.I.	Const.	50	3ICOM006.0	180	155400	crack			355
S.I.	Const.	50	3ICOM007.0	100	1454500	crack			355

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Const.	50	3ICOM008.0	100	1364700	crack			355
S.I.	Const.	50	3ICOM009.0	100	1390100	crack			355
S.I.	Const.	50	3ICOM010.0	100	1001200	crack			355
S.I.	Const.	50	3ICOM011.0	100	956200	crack			355
S.I.	Const.	50	3ICOM012.0	100	1273200	crack			355
S.I.	Const.	100	3BELG011.0	95	1650000	crack			355
S.I.	Const.	100	3BELG012.0	100	1900000	crack			355
S.I.	Const.	100	3BELG013.0	92	1750000	crack			355
S.I.	Const.	100	3BELG014.0	130	425000	crack			355
S.I.	Const.	100	3BELG015.0	160	407000	crack			355
S.I.	Const.	100	3BELG021.0	160	528000	crack			355
S.I.	Const.	100	3BELG022.0	206	697000	crack			355
S.I.	Const.	100	3BELG023.0	125	716000	crack			355
S.I.	Const.	100	3BELG024.0	130	484000	crack			355
S.I.	Const.	100	3BELG031.0	109	2217000	runout			355
S.I.	Const.	100	3BELG032.0	131	660000	crack			355
S.I.	Const.	100	3BELG033.0	120	1050000	crack			355
S.I.	Const.	100	3BELG012.1	103	2060000	runout			355
S.I.	Const.	100	3BELG015.1	126	650000	crack			355
S.I.	Var.	90	3TFHD009.1	45.2	9262000	crack			
S.I.	Var.	90	3TFHD009.2	40.3	13765700	crack			
S.I.	Var.	90	3TFHD009.3	45.2	10400700	crack			
S.I.	Var.	90	3TFHD009.4	40.3	12185400	crack			
S.I.	Var.	90	3TFHD009.5	45.2	10217900	crack			
S.I.	Var.	90	3TFHD009.6	40.3	17105200	crack			
S.I.	Var.	90	3TFHD007.1	56.7	11737900	crack			
S.I.	Var.	90	3TFHD007.2	63.6	4637600	crack			
S.I.	Var.	90	3TFHD007.3	56.7	4486950	crack			
S.I.	Var.	90	3TFHD007.4	63.6	4407900	crack			
S.I.	Var.	90	3TFHD007.5	56.7	7733800	crack			
S.I.	Var.	90	3TFHD007.6	63.6	6120000	crack			
S.I.	Var.	90	3TFHC001.0	63.2	21400000	runout			
S.I.	Var.	90	3TFHC002.0	80	4500000	runout			
S.I.	Var.	90	3TFHC012.1	70.7	7900000	crack			
S.I.	Var.	90	3TFHC012.2	70.7	7850000	crack			
S.I.	Var.	90	3TFHC012.3	70.7	6019000	crack			

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
S.I.	Var.	90	3TFHC012.4	70.7	6300000	crack			
S.I.	Var.	90	3TFHC012.5	70.7	6200000	crack			
S.I.	Var.	90	3TFHC012.6	70.7	5650000	crack			
S.I.	Var.	90	3TFHC011.1	70.7	7654000	crack			
S.I.	Var.	90	3TFHC011.2	70.7	8600000	crack			
S.I.	Var.	90	3TFHC011.3	70.7	7300000	crack			
S.I.	Var.	90	3TFHC011.4	70.7	10400000	crack			
S.I.	Var.	90	3TFHC011.5	70.7	10850000	crack			
S.I.	Var.	90	3TFHC011.6	70.7	12130000	runout			
S.I.	Var.	90	3TFHD008.1	37.1	18737000	crack			
S.I.	Var.	90	3TFHD008.2	37.1	24962000	crack			
S.I.	Var.	90	3TFHD008.3	37.1	25406000	crack			
S.I.	Var.	90	3TFHD008.4	37.1	42000000	runout			
S.I.	Var.	90	3TFHC006.1	54.1	20100000	crack			
S.I.	Var.	90	3TFHC006.2	54.1	78000000	runout			
Imp.	Const.	140	1DTRG001	20	12634300	crack			550
Imp.	Const.	140	1DTRG002	24	775600	crack			550
Imp.	Const.	140	1DTRG003	30	572000	crack			550
Imp.	Const.	140	1DTRG004	60	66500	crack			550
Imp.	Const.	140	1DTRG005	90	14500	crack			550
Imp.	Const.	140	1DTRG006	140	1010	crack			550
Imp.	Const.	140	1DTRG007	20	2903700	crack			550
Imp.	Const.	140	1DTRG008	24	3732900	crack			550
Imp.	Const.	140	1DTRG009	30	779500	crack			550
Imp.	Const.	140	1DTRG010	60	61900	crack			550
Imp.	Const.	140	1DTRG011	90	14800	crack			550
Imp.	Const.	140	1DTRG012	140	2020	crack			550
Imp.	Const.	140	1DTRG013	20	26195300	runout			550
Imp.	Const.	140	1DTRG014	24	1118600	crack			550
Imp.	Const.	140	1DTRG015	30	515000	crack			550
Imp.	Const.	140	1DTRG016	60	70600	crack			550
Imp.	Const.	140	1DTRG017	90	16300	crack			550
Imp.	Const.	140	1DTRG018	140	2680	crack			550
Imp.	Const.	130	1DTRAC06	33.2	152950	crack			550
Imp.	Const.	130	1DTRAC14	26	392300	crack			550
Imp.	Const.	130	1DTRAC09	22.2	703170	crack			550

Units	Load Type	Detail	ID Number	Stress Range	Cycles	Result	Min. Stress	Max. Stress	Yield Stress
Imp.	Const.	130	1DTRAC13	18.1	1438000	crack			550
Imp.	Const.	130	1DTRAC05	15.6	4453420	crack			550
Imp.	Const.	130	1DTRAC11	13.9	25467460	runout			550
Imp.	Const.	130	1DTRAC10	12.2	2502800	crack			550
Imp.	Const.	130	1DTRAC07	12.2	22962600	runout			550
Imp.	Const.	130	1DTRAC01	11.3	50804500	runout			550
Imp.	Const.	130	2DTRAC15	33.3	58410	crack			550
Imp.	Const.	130	2DTRAC21	33.3	103010	crack			550
Imp.	Const.	130	2DTRAC20	26.1	339910	crack			550
Imp.	Const.	130	2DTRAC19	18.2	927040	crack			550
Imp.	Const.	130	2DTRAC22	15.7	981270	crack			550
Imp.	Const.	130	2DTRAC17	14	2030830	crack			550
Imp.	Const.	130	2DTRAC18	12.2	4039940	crack			550
Imp.	Const.	130	2DTRAC16	11.3	28899840	crack			550
Imp.	Const.	130	2DTRAC23	9.5	50545730	runout			550

