ARCUS WIRE GROUP
MARINE • INDUSTRIAL • ARCHITECTURAL

LOAD TESTING INFORMATION SHEET

Load testing

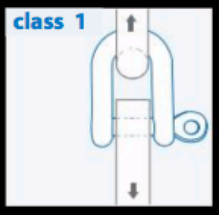
Load Characteristics depend greatly on each production method, minimum designed cross section area, material grade, and testing setup. In this section we will cover the fundamentals of load testing setup.

Safety working load is different in each geographical area. However, it is strongly recommended to designing your working load not over one quarter (1/4) of the breaking load listed in this catalog as a common and proper safety ratio.

Proof loading is a tensile loading procedure prior to the actual use of the product. Since stainless modulus of elasticity is relatively high to that of galvanized steel, (hence giving its unique elongation and warning sign) it is recommended to proof load at 1.8 times of recommended safety working load.

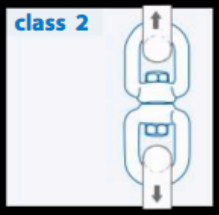
Load Class types indicate how each breaking load testing profile is setup and carried within this catalog. The class type are indicated with a (1) sign next to the B.L (1) sign on the Item menu bar (see page XVII). Principal testing profile setup stipulates the following conditions: 1) All items are checked prior to testing against distorted, worn or damaged parts including threads. 2) All items must be fully locked and tighten before testing. 3) Testing is done in room temperature settings. 4) Testing profile is setup in a vertical and undistorted alignment against applied loads. 5) 90% of loading area is covered by the loading tool. 6) Loads are applied in a consistent rate of 2MPa/sec. 7) No shock loading is applied.

class 1



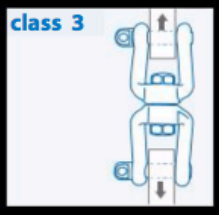
Circular load end vs. horizontal flat load end.

class 2



Double circular load ends.

class 3



Double horizontal flat load ends.

class 4

Circular load end vs. rolled swaged cable load end.

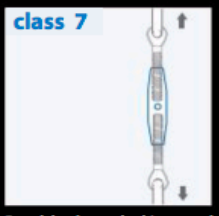
class 5

Horizontal flat load end vs. rolled swaged cable load end.

class 6

Double rolled swaged cable load ends.

class 7



Double threaded internal threaded load ends

class 8

Circular load end vs. external threaded load end.

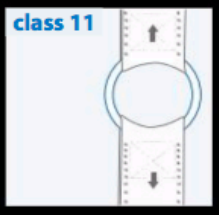
class 9

Horizontal flat load end vs. external threaded load end.

class 10

Hand swaged load end vs. external threaded load end.

class 11



Double Nylon strap load ends.

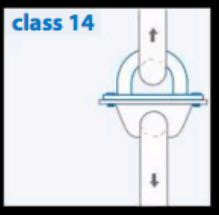
class 12

Circular load end vs. nylon strap load end.

class 13

Nylon strap load end vs. external threaded load end.

class 14



Circular load end vs. flat screwed load end.

class 15

Circular load end vs. internal threaded load end.

class 16

Nylon strap load end vs. internal threaded load end.

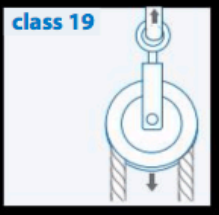
class 17

Double Nylon rope load ends.

class 18

Flat screwed load end vs. nylon rope load end.

class 19



Circular load end vs. nylon rope load end.

class 20

Double internal threaded load ends.