



## ALLOY WELDED CHAIN SLINGS

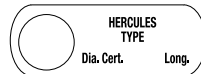
HERCULES provides information in several forms that enables purchasers and users to operate safely and effectively in conformity with government regulations. The drop forged identification Tag is attached to the Master Coupling link of each chain sling and provides the following lifeline information:

- Grade
- Size
- Reach
- Type
- Working load limit (at a specific angle lift)
- Serial number

A certificate of performance is provided for every HERCULES manufactured chain sling. The HERCULES certificate contains all the information provided on the identification tag, plus the Proof test load as required by government regulations.



Certificate of Test



Identification Tag

HERCULES welded chain slings are manufactured in a complete line of standard assemblies, as well as to any special customer requirements and specifications. HERCULES' engineering department will be happy to design, build, proof test, and certify any special requirements you may have, including plate clamps, sheet lifters, special shackles and lifting tongs. The specifications of each sling are kept on file along with a copy of the test certificate and can be referred to at any time in the future. To ensure complete component traceability, each sling assembly is individually proof tested to twice the working load limit and a signed test certificate is issued showing the serial number. A metal identification tag is attached to each chain sling and provides the pertinent information, shown at left.

## WELDED CHAIN SLING REPAIRS

### INSPECTION

Every master link, chain link and hook is checked for excess wear, nicks, gouges, deformation and stretch. Components needing replacement are marked and sent to the appropriate department for repair. Each chain sling goes through several inspections before it is returned to you.

### REPAIRING

All worn, damaged, stretched or deformed chain sling components are removed and replaced. All repair materials used are, of course, to original manufacture specifications.

### HEAT TREATING

The chain sling is again inspected after all repairs are made and before it is sent on to heat treating. Carefully controlled heating, quenching and temperature control, produces slings having the same high tensile strength as the original.

### PROOF TESTING

The complete chain sling assembly is placed on a calibrated, hydraulic proof testing machine. Here a load is gradually applied under direct tension, over the chain sling's full length until the proof load is reached. After proof testing, the sling is again thoroughly inspected.

### RECERTIFYING

Each chain that has been reconditioned is restored to its original condition and recertified. A new metal tag that identifies each chain sling is stamped with the sling's rated working load limit, chain size, reach and grade. The chain sling is returned to you complete with a signed test certificate attesting that the sling has been proof tested and meets its original standards.

## IMPORTANT TERMS

**WORKING LOAD LIMIT:** This is the maximum combined static and dynamic load in pounds or kilograms which should ever be applied to the product in service, even when the product is new, and when the load is uniformly applied in direct tension to the product.

**PROOF TEST:** A Term designating a quality control test applied to chain for the purpose of verifying weld and material quality. It is the minimum force in pounds or newtons that the chain has withstood in direct tension as part of the manufacturing process. Proof testing assures that the chain is more than capable of performing at its rated working load limit. Proof test loads are a manufacturing integrity test and shall not be used as a criteria for service or design purposes. All HERCULES proof tested chain and components are proof tested in accordance with the applicable ASTM, NACM, OSHA and AISI/ASME REQUIREMENTS.

**There is no substitute for physical proof testing.**