

WIRE ROPE AND SLING BASICS

Wire rope slings are both flexible and resistant to Wire Rope Construction abrasion. These characteristics are determined by the WIRE ROPE rope construction. Fewer wires result in larger diameter CORE wires, better abrasion resistance, and reduced flexibility. More wires result in decreased wire diameter, reduced abrasion resistance, increased flexibility, and kink resistance. Wire rope products may be proof tested upon request. If WIRE STRAND WIRE CENTER they contain swaged terminations and will be used as a sling, they will be 100% proof tested. STRAND CENTER CORE The scale below shows the relative position of the sling constructions shown in this catalog as they pertain to 6x19 IWRC (163 WIRES) abrasion resistance and flexibility. TATA 9EZ FIEN TRait Casted **Extra Improved Plow Steel** EIPS = Rope FC **Fiber Core** = 3trt+93Part Cabled 140^{4,9}1,PartBraid IWRC 3tot 193 Part Capled ottheoparteraid 8474798.Part Braid otet, 98, Part Braid Independent Wire Rope Core = ot^{19 Single Part} ot²⁶ Single Part TXTXFE2Fex Better Better Abrasion Flexibility Resistance Total Number 163 271 343 399 489 798 931 978 1064 1141 1304 of Wires

WIRE ROPE SLINGS

Features and Benefits

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- *Tuff-Tag*[™] for capacity and serial numbered identification for traceability and compliance with OSHA.
- Least expensive (per capacity), of all steel slings.
- Use of IWRC EIPS rope gives 15% greater capacity than IWRC IP (Improved Plow) ropes.
- Countless combinations of sling terminations: hooks, chokers, and thimbles are available to fit specific lift requirements.

D/d - Basket Hitch Effect



Tests have shown that when a sling body is bent around a diameter, the strength of the sling is decreased.

D/d ratio is the ratio of the diameter around which the sling is bent, divided by the body diameter of the sling.

The capacities in this catalog are based on the minimum D/d ratios that appear below each of the capacity tables. For more severe bending conditions, contact *Lift-All* for revised capacities.

Environmental Considerations

- IWRC must not be used at temperatures above 400°F.
- FC must not be used at temperatures above 180°F.
- Fiber core ropes should not be subjected to degreasing solvents.

Effect of Shackle Pin or Crane Hook on Sling Eye



Damage to slings can occur if the wrong size pin or hook is used. The width of the hook should never exceed the natural inside width of the eye.

The eye dimension for each type and size of the slings are shown in the capacity tables of this catalog. If your pin or hook is large, request an oversized eye.

Wire

Chain Slings

Rigging Hardware

Mesh s Slings

ts Hugger

Lift-All Hoists

Plate Clamps