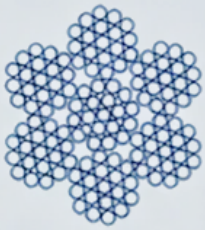
DIFFERENT TYPES OF STEEL WIRE ROPE

LIFTING KNOW HOW

CLASSIFICATION BY CONSTRUCTION CLASSES

The number of strands, number of wires per strand, and the pattern in which those wires are arranged.

6x19



CHARACTERISTICS:
General-Purpose construction, wear resistant
Lower fatigue résistance vs 6x36
The best-known are: 6x26
15 to 26 wires per strand

BEST FOR:
General lifting, big sheave diameters

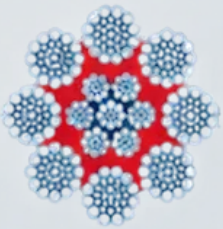
6x36



CHARACTERISTICS:
Very flexible, improved bending fatigue resistance
Lower wear resistance
The best-known are: 6x36
27 to 49 wires per strand

BEST FOR:
Winch lines, cranes, applications with frequent bending and multiple parts of line

8-Strand Ropes



CHARACTERISTICS:
Higher breaking strength and improved crush resistance are only true if the strands are compacted. The opposite is true if the strands are NOT compacted
The best-known are: 8x19

BEST FOR:
High cycle overhead cranes Port & Offshore cranes multi-layer drum applications (only if the strands are compacted)

Rotation-Resistant



CHARACTERISTICS:
Low torque, Minimizes spinning under load
The best-known are: 19x7 , 35x7

BEST FOR:
Tower cranes, mobile cranes and single-line hoisting
19x7 : it offers moderate resistance to rotation and is limited to 150 times the diameter of rope in feet for lift height
35x7: exhibit the greatest resistance and better stability against rotation of the assembly