

Compacting

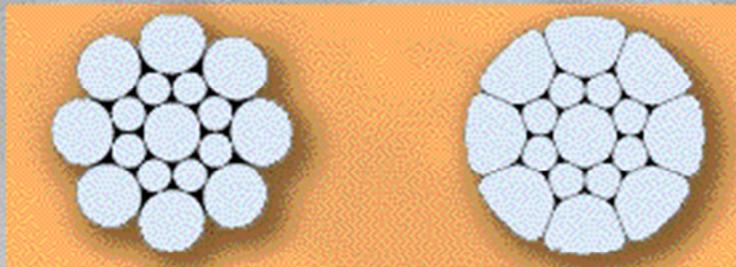
Conventional or compacted strands?

Compacted strands are initially stranded in the same way as regular strands but are subsequently drawn through a die tool in order to reduce the strand's diameter,

smoothen its surface and flatten the line of contact between individual wires. Ropes made from compacted strands have much higher breaking loads and are more flexible compared to those made from conventional strands.

Compacted strands also make far better contact between the rope surface and the sheaves they are running over.

Furthermore, because of the higher metallic area of their outer wires, the compacted strands are far more resistant to abrasion and corrosion.

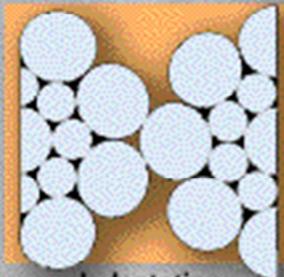


Conventional strand

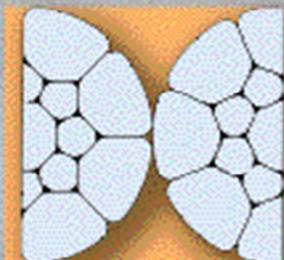
Compacted strand

When using wire ropes on multi-layer drums, the smoother profile of the compacted strands ensures that 'nicking' or damage caused by neighbouring wraps rubbing against each other are practically impossible.

This feature makes compacted strand ropes the obvious choice for use on multi-layer spooling applications.



Indentation



No indentation

Higher or lower tensile strength wire?

The choice of the tensile strength of the wire rope primarily depends on the breaking load required.

Ropes made from wires with a tensile strength of 1770 N/mm² and 1960 N/mm² provide about the same level of service life when operated under similar conditions.

Ropes made from wires of a tensile strength higher than 1960 N/mm² should only be used if the breaking load needed cannot be achieved by

any other means, such as selecting a rope with a higher metallic area.

Higher metallic areas can be achieved by using full steel or double parallel ropes or ropes made out of compacted strands.

Bright or galvanized ropes?

Usually, running ropes are supplied bright and lubricated.

Standing ropes on the other hand are supplied with a galvanized finish.

However, running ropes can be supplied and used with a galvanized finish and this is particularly useful when a rope is operating in a harsh or corrosive environment.

It is a popular misconception that galvanized running ropes do not have to be lubricated.

The zinc coating actually only fulfils one of the two tasks that a lubricant performs: protection against corrosion.

A lubricant's second task: reducing friction between the large number of the rope's elements running over sheaves, can only be achieved by the zinc coating in a very insubstantial way.

Although standing galvanized ropes can be used without lubricant, a running rope will have a greatly reduced service life unless it is fully lubricated.