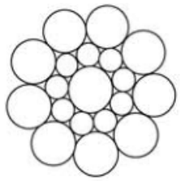
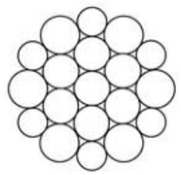
STRAND CONSTRUCTION



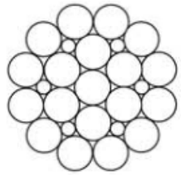
Seale

The world most frequently used strand construction for elevator ropes is 19-wire Seale strand (1-9-9). Because of the thicker outer wire, the Seale strand offers a high degree of resistance against external wear during use.



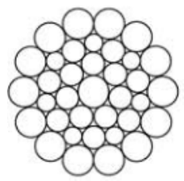
Warrington

Ropes made of Warrington strands (1-1-1+6) offer better bending fatigue properties than comparable ropes made of Seale strand. The outer wire circle of Warrington strand made of far thinner wires than Seale strand. The rope is thus subject to less flexural stress. Ropes made of Warrington stand are particularly suitable for traction elevators with double-wrap drive or in roped hydraulic elevators.



Filler

Ropes made of Filler strands offer a good balance in both abrasion resistance and bending fatigue resistance in relation to other comparable ropes. One popular rope of this type is 8x25F-FC(1-6-6F-12). Filler strand are used in elevator ropes above 16mm due to their improve flexibility. The Filler strand is sensitive to geometric distortion which may lowers rope's service life. Filler strand for ropes below 10mm is not recommended due to the extreme thickness of filler wires.



Warrington Seale

Ropes of Warrington-Seale construction (1-7-7+7-14) feature a compact construction with solid support for the wires. This strand construction is used in compensating ropes with large diameter starting from 24mm. In such case, the outer wires of a Seale strand would become excessively thick.

ELEVATOR ROPE LIST

