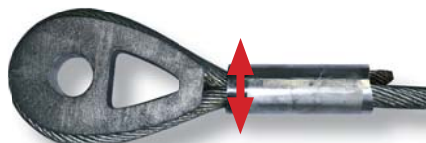
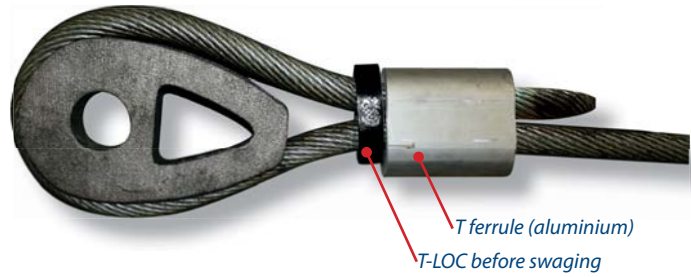


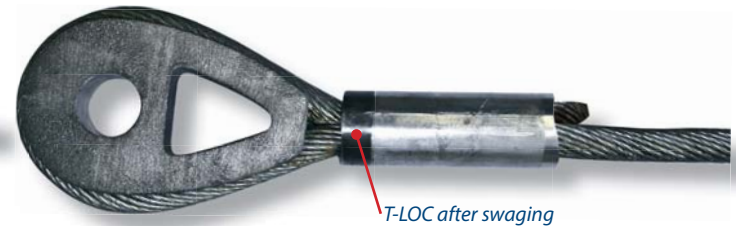
TURNBACK FERRULES



T-LOC (steel reinforcement)



Splitting risk on 2160 grade wire rope without T-LOC



T-LOC after swaging

3.2 T-LOC (STEEL REINFORCEMENT) TALURIT™ SYSTEM

Patent pending: Application no. PCT/SE2010/000142
Reinforced aluminium termination.

GENERAL DESCRIPTION

T-LOC is produced from carbon steel and designed for rotation resistant wire rope of grade 2160 together with T ferrules, especially in combination with solid thimble eyes.

The system is tested with rotation resistant wire ropes in class 35(W) x 7 and has been validated according to EN 13411-3. The tested constructions are 34(W) x K7 and 39(W) x K7-WSC, fill factor: 0.74-0.75.

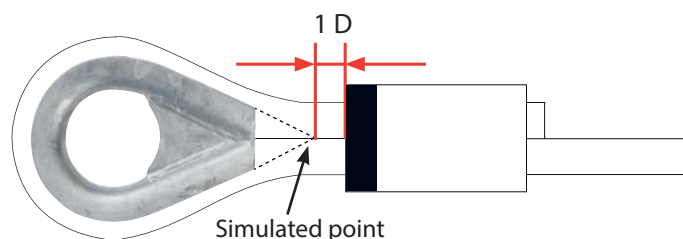
APPLICATIONS

When using high tensile wire rope of grade 2160, T-LOC will secure the special sling eye which has a higher splitting force than normal. Since T-LOC is produced from carbon steel and has a better tensile strength than aluminium. Solid thimbles according to DIN 3091 as well as high rope grades will apply strain on the ferrule side nearest the sling eye. T-LOC prevents the aluminium ferrule from splitting due to pressure from the wider angle of the sling eye.

TO BE NOTED

No new dies are necessary, T-LOC is swaged in your existing dies along with the aluminium ferrule. During the swaging operation they're joined together seamlessly. Only aluminium T ferrules may be used together with T-LOC. Due to the variety of steel wire ropes, it is difficult to approve all of them. If other wire rope constructions and fill factors are to be used, tests must be done in order to verify the strength of application.

T-LOC is available from stock for wire rope diameter range 8 to 55 mm. The distance from the T-LOC to the solid thimbles after swaging must be at least 1xD from the "simulated" point of the nominal wire rope diameter.



TALURIT™ SPLICING SYSTEM

Selection chart for T-LOC ferrules

Please note that these instructions are only applicable to products produced and supplied by Talurit AB, Sweden and Gerro GmbH, Germany!

T-LOC No.	Measured wire rope (grade 2160) (mm)	
	Min	Max
	35(W) x 7 Fill factor: $0,74 \leq f \leq 0,75$	
10	8,0	9,0
11	9,0	9,9
12	10,0	10,9
13	11,0	11,9
14	12,0	12,9
16	13,0	13,9
18	14,0	15,9
20	16,0	17,9
22	18,0	19,9
24	20,0	21,9
26	22,0	23,9
28	24,0	25,9
30	26,0	27,9
32	28,0	29,9
34	30,0	31,9
36	32,0	33,9
38	34,0	35,9
40	36,0	37,9
44	38,0	39,9
48	40,0	43,9
52	44,0	47,9
56	48,0	51,9
60	52,0	54,6
66	54,7	59,9



T-LOC ferrule, Steel reinforcement used together with a T ferrule

f = Fill factor, is the ratio between the sum of the nominal metallic cross-sectional areas of all the wires in the rope and the circumscribed area of the rope based on its nominal diameter.

C = Nominal metallic cross-sectional area factor of the rope.

$$C = \frac{f \cdot \pi}{4}$$

Larger sizes available on request.

T-LOC ferrules: The T-LOC system is tested and validated according to EN 13411-3. The tested constructions are 34(W) x K7 and 39(W) x K7-WSC, fill factor: 0.74-0.75. Selection of the correct ferrule is to take account of:

- 1) the measured rope diameter
- 2) the rope type (and core) and
- 3) the nominal fill factor, f (or metallic cross-sectional area factor, C) of the rope.

Wire Rope: Applicable wire rope is new rotation resistant wire ropes in class 35(W) x 7 as specified in EN 12385-4. The maximum rope grade is to be 2160. The types of rope lay shall be Ordinary or Lang lay.

Swaging: See separate swaging instructions for T-LOC on the following page.

Note! Please read our TALURIT™ Splicing Instructions carefully to secure a safe and correct swaging operation.

T-LOC SPLICING SYSTEM

Swaging instructions

Note! Use personal safety gear

Matching wire rope to ferrule

Selection of the correct ferrule is to take account of:

- 1) the measured rope diameter
- 2) the rope type (and core) and
- 3) the nominal fill factor, f (or metallic cross-sectional area factor, C) of the rope.

f = Fill factor, is the ratio between the sum of the nominal metallic cross-sectional areas of all the wires in the rope and the circumscribed area of the rope based on its nominal diameter.

C = Nominal metallic cross-sectional area factor of the rope $C = \frac{f \cdot \pi}{4}$

Applicable rope types and grade

Rotation resistant wire ropes in class 35(W) x 7 as specified in EN 12385-4.

The maximum rope grade is to be 2160. The types of rope lay shall be Ordinary or Lang lay.

Assembly (T-LOC is marked black)



Thread ferrule and T-LOC on wire rope.



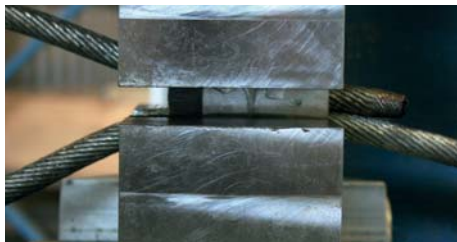
Make the eye.



Incorporate thimble, if used.
Further adjustment while swaging.



Mount in lubricated dies.
T-LOC must be positioned next to T ferrule.



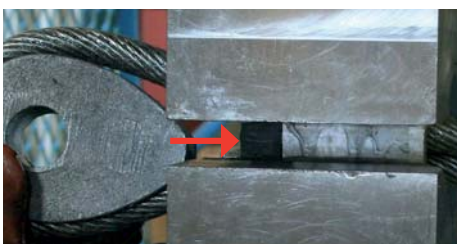
Use the swager's hold position and swage until T-LOC and ferrule are clamped. STOP.
Note! Check alignment of T-LOC and ferrule before and during swaging operation.



Measure. Distance T-LOC and solid thimble before swaging must be at least 1,5 times the nominal diameter.



Swage T-LOC and ferrule (or first part of the ferrule, if the assembly is too long for the dies).
Close dies.
Note! Check alignment during swaging.



Make sure that T-LOC remains next to the T ferrule.



If a second swaging is required, open dies and swage the second part of the ferrule. Close dies. Check the termination to be free from flaws and defects.
Diameter and length on the T ferrule should also be checked.

Distance between thimble and T-LOC after swaging

