

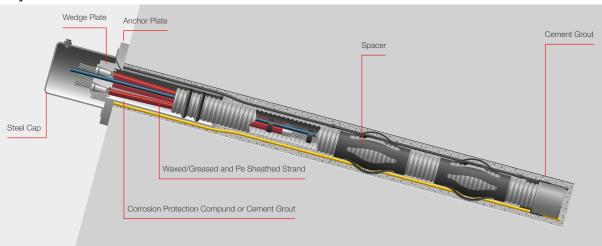
Multi-Strand Anchor Systems

Multi-strand anchors are an actively tensioned ground anchor system. Tensioning minimizes or eliminates anticipated deformations of the system and deformations at the civil engineering measure. This applies both to temporary structures (e.g. pit support systems) and permanent tie backs.

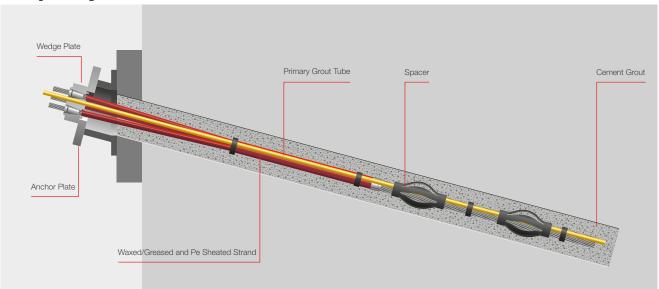
The strand anchors are produced with double corrosion protection (DCP), each individual strand is covered by corrosion protection compound and inserted into an individual duct in the factory. As long as the grout used for anchoring is load-bearing, the anchor force is unlimited because the number of strands that can be combined in the anchorage is variable at will.

Permanent (DCP) Anchor

acc. to DIN 4125



Temporary Anchor



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Published Date 09.2022

All dimensions, weights, quantities and specifications are those applicable at the time of this publication and may be amended from time to time. Please contact your local DSI Underground service representative for final confirmation of any key specifications.



Multi-Strand Anchor Systems

By definition, an anchor consists of the following three main components:

- Bonded length: anchor is fixed in the borehole using grout (cement grout) and can transfer the forces to the loadbearing soil via bond and skin friction
- Unbonded length:
 each strand is uncoupled from the borehole using individual sleeves
 so that it can freely extend in the unbonded length. This way,
 tension can be applied to the anchor system
- Anchor head:
 anchor head transfers the anchor force to the substructure and thus to the structure that needs to be anchored

If required, anchors can be supplied retensionable.

Applications

- Excavations (deformation resistant)
- Tiebacks
- Uplift control
- Positional stability
- Rock stabilization

Features

- Large degree of flexibility: force, length, transport, installation
- Practically no restrictions in terms of length: 150 [m]
- Small pack size for transportation
- Minimal space required during installation
- Retensionable due to exterior thread at wedge plates
- Permanent strand anchor can be supplied in many variations (standard, El-Iso, TWIN-Corr)

No.	Cross Sectional Area	Weight	Y1860 High Grade	
			Yield Load	Ultimate Load
[-]	[mm²]	[kg/m]	[kN]	[kN]
1	140	1.09	230	260
2	280	2.19	459	521
3	420	3.28	689	781
4	560	4.37	918	1,042
5	700	5.47	1,148	1,302
6	840	6.56	1,378	1,562
7	980	7.65	1,607	1,823
8	1,120	8.74	1,837	2,083
9	1,260	9.84	2,066	2,344
10	1,400	10.93	2,296	2,604
11	1,540	12.02	2,526	2,864
12	1,680	13.12	2,755	3,125
13	1,820	14.21	2,985	3,385
14	1,960	15.30	3,214	3,646
15	2,100	16.40	3,444	3,906
16	2,240	17.49	3,674	4,166
17	2,380	18.58	3,903	4,427
18	2,520	19.67	4,133	4,687
19	2,660	20.77	4,362	4,948
20	2,800	21.86	4,592	5,208
21	2,940	22.95	4,822	5,468
22	3,080	24.05	5,051	5,729