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## Stay Cable Systems

### Special Solutions

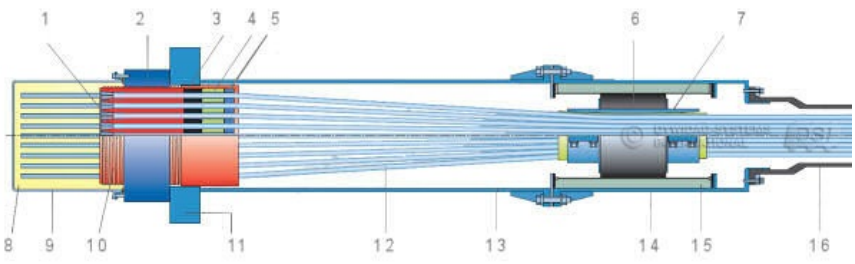
#### DYNA® Anchorages with Epoxy Coated Strands

Based on the DYNA Bond® and DYNA Grip® Systems, DSI can also offer stay cables using epoxy coated strands.

#### Epoxy Coated Strand

Epoxy coated strand is manufactured in compliance with ISO 14655:1999. The cold-drawn 7-wire strand is coated with epoxy resin in the shop. The interstices between the 7 wires are completely filled with epoxy resin thus providing an excellent and robust long-time corrosion protection. The epoxy material also reduces fretting action between the individual wires and cushions adjacent strands in deviation areas. Due to the good bond of the epoxy with the steel wires and combined with the ductile behavior of the epoxy material, the possibility of damage to the corrosion protection barrier during stressing is eliminated.

The 3-part wedges are specially designed for epoxy coated strands. The teeth penetrate through the coating so that they grip into the wires of the strand. Fatigue tests conducted on single-strand tendons have proven a dynamic stress range of up to 260 N/mm<sup>2</sup> (upper stress 0.45 GUTS at 2 million load cycles).



DSI DYNA® Bond Anchorage with Epoxy Coated Strands Type DG-E

1. Wedges
2. Ring Nut
3. Sealing Plates
4. Spacer
5. Compression Plate
6. Elastomeric Bearing
7. Clamp
8. Filling Material
9. Cap
10. Anchor Block
11. Bearing Plate
12. Epoxy Coated
13. Strands
14. Recess Pipe
15. Exit Pipe
16. Filler Material
17. HDPE Sheathing

- Downloads [read more ...](#)
- Brochure DYWIDAG Multistrand Stay Cable Systems, Filesize:4.5 MB
  - Brochure DYWIDAG Corrosion Protection System DYNA Protect, Filesize:1.1 MB
  - Brochure DYNA® Force Elasto Magnetic Sensor, Filesize:1.8 MB

- References [read more ...](#)
- Stay Cable Bridge, Manises and Paterna, Spain
  - Esplanade Riel Pedestrian Bridge, Canada

Convert Technical Units

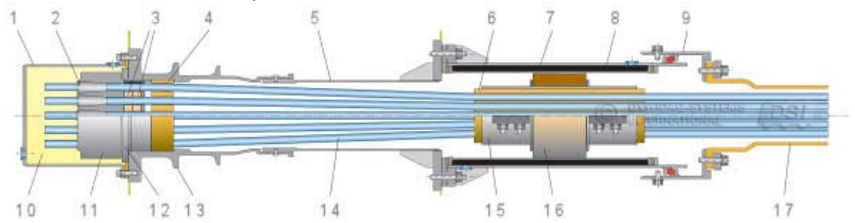
#### DYWIDAG Extradosed Tendons

DYWIDAG Stay Cables can also be used for extradosed tendons. In case of high-stress amplitudes, the strands are anchored with DYNA Bond® or DYNA Grip® Anchorages.

In case of low amplitudes, a special anchorage based on DYWIDAG External Tendons was developed. The picture shows a DYWIDAG Extradosed Cable Type XD-E with an adjustable elastomer bearing incorporating epoxy coated strands.

The DYWIDAG Extradosed Cables are replaceable, restressable and depressable.

A saddle construction as already described can also be used.



DSI DYWIDAG Extradosed Tendons

1. Cap
2. Wedges
3. Sealing
4. Spacer
5. Recess Pipe
6. HDPE-Liner
7. Filler Material
8. Exit Pipe
9. Connection Pipe
10. Filling material
11. Wedge Plate
12. Shim
13. Anchor Body
14. Epoxy Coated Strands
15. Clamp
16. Elastomeric Bearing
17. HDPE-Sheathing

The values are based on the German Code (DIN). Adaptations to other code systems or concrete strengths (e.g. ASTM, BS, etc.) are possible.

