Stay & Suspension Cables
Services

- Structural Design
- Construction Engineering
- Geometric and tension control
- Construction Systems
- Cable supply and installation
- Maintenance and repair
- Cable replacement
System Description

Fatigue tests, per PTI, 45% MUTS upper load.

ANTI-IMPACT STEEL PIPE
2 part   removable,  sealed

GUIDE PIPE
Far from mechanical wedges, for extra fatigue safety

SOFT WEDGE
□ Increases anchorage’s fatigue resistance to 240 MPa range at 2 million cycles
□ Protects against water penetration & lateral vibrations

STRANDS
2 Individual nested corrosion barriers:
□ 2 High Density polyethylene sheath
□ 1 Galvanizing or epoxi coating, filled
□ and

FILLING
Grease or polyurethane

DRAINAGE
For debris, grease

TOTAL ENCAPSULATION
MECHANICAL WEDGES
Tested to 200 MPa range at 2 million cycles

WEDGE RETENTION
For extra protection against negative-direction strand movements

REGULATION NUT
With the required thread length

TENSION CHECKING
From anchorage body only, to avoid wedge-lifting-related strand indentation

STRAND OVERLENGTH
For stay removal only

TRANSITION ANGLE
Far from mechanical wedge for extra fatigue safety

REGULATION NUT
With the required thread length

HELICAL LASTOMERIC WRAP
Protects against wind and rain effects, dust, fire, temperature changes.

REGULATED NUT
With the required thread length

DEVIATOR
Soft, sliding, 2 part removable

ANNULAR DAMPER
2 part removable
Fatigue tests, per PTI, 45% MUTS upper load.

ANTI-IMPACT STEEL PIPE
2 part removable, sealed

GUIDE PIPE

DEVIATOR
Soft, sliding, 2 part removable

STRAINS
2 Individual nested corrosion barriers:
- 1st: Galvanizing or epoxi coating, filled
- 2nd: High Density polyethylene sheath

FILLING
Grease or polyurethane

ANNULAR DAMPER
2 part removable

DRAINAGE
For debris, grease

HELICAL ELASTOMERIC WRAP
- Protects against wind and rain effects, dust, fire, temperature changes.
- Removable, allows for strand inspection

HELICAL WEDGES
200 MPa range in cycles

Fatigue tests, per PTI, 45% MUTS upper load.
The DEL CABLE STAY SYSTEMS are the final product of a thorough, professional, experience-based analysis of the design and installation needs of present-day cable stayed bridges.

In the design field DEL stay anchorages, compatible with bare, galvanized and epoxi-coated strands, and with any additionally required protection, are prepared to far outpass the generally accepted stress range test criteria, should the project requires special features.

Also, they adapt to either steel or concrete decks, pylons and abutments.

DEL Stay cables are job-site oriented, avoiding hand-installed parts in difficult-access places, providing any-time removable parts for strands or anchorage inspection, and requiring simple construction equipment for their installation.

Stressing is made through light, mono and multi-strand jacks, combined to reduce the number of operations, including those related to level vs tension control.

Cable stayed bridges need custom solutions DEL works in that line, collaborating, as required, both in the evolution, design, construction and maintenance stages, adapting to needed features, sites and measures.