



# LAÚCA HYDRO POWER PLANT, ANGOLA

**Slope Stability**

# Laúca Hydro Power Plant

## Slope Stability

<b>Project</b>	Laúca Hydro Power Plant
<b>Location</b>	Laúca
<b>Country</b>	Angola
<b>Year of installation</b>	2017
<b>Customer</b>	Aproveitamento Hidroelétrico de Laúca
<b>Engineering</b>	Intertechne Consultores S.A.
<b>Other participating companies</b>	Tecnasol Fundações E Geotecnia, S.A.

**Initial situation** The Lauca Hydro Power Plant is located at the foot of a steep slope. The slope requires stabilization to avoid causing damage to the facilities and equipment.

**Description** The following solutions were used for slope protection:

*Top of the cliffs and tower shaped structures partially protected with TECCO® System:*

- high tensile mesh: TECCO® G65/3
- self-drilling nails: INCO 32 TD
- nail diameter: 32 mm
- nail length: 4.0 m
- nail pattern: 1.4 x 1.4 m

*Tower shaped structures partially protected with TECCO® System and SPIDER® System:*

- high tensile mesh: TECCO® G65/3
- high tensile net SPIDER S4-230
- tower structure width below 3.0 m: nail pattern 1.4 x 1.4 m
- tower structure width over 3.0 m: nail pattern 3.0 x 1.4 m

*At the base of the tower structures:*

- high tensile mesh: TECCO® G65/3
- self-drilling nails: INCO 32 TD
- nail diameter: 32 mm
- nail length: 4.0 m
- nail pattern: 5.0 x 5.0 m

*Regular area of the slope, between rockfall barrier line and top of the cliffs:*

- high tensile mesh: TECCO® G65/3
- self-drilling nails: INCO 32 TD
- nail diameter: 32 mm
- nail length: 4.0 m
- nail pattern: 5.0 x 5.0 m

*Below the rockfall barrier, ca. 10 m high zone directly above slope cut:*

- high tensile mesh: TECCO® G65/3
- self-drilling nails: INCO 32 TD
- nail diameter: 32 mm
- nail length: 8.0 m
- nail pattern: 2.0 x 2.0 m

Self drilling nails were used due to fractured condition of the rock slope.

**For questions please contact our Geobrugg specialist at your side**

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