

## **Tested Rockfall Protection Systems** **Energy level: 300 – 500 kJ**

### **Text for invitation of tender**

### **Rockfall protection systems TS-300-oA, TS-500-oA**

### **Rockfall protection systems without retaining ropes**

#### **General information**

Energy level [kJ]:	e.g. 300
Nominal height [m]:	e.g. 3.0
Total length [m]:	e.g. 250
Number of rows:	e.g. 5
Average distance between posts [m]:	e.g. 10

The fitness for use of the offered rockfall protection system must be tested successfully in a 1:1 field test for a minimum energy impact (energy level indicated above), supervised by an independent authorized technical institute. As part of the certification, no breakage may occur in key structures (e.g. break in wire/rope of primary net, in the bearing rope, seam ropes or other system specific ropes; no fracture of posts, etc.) Test report, as well as test summary and the list of monitored anchor forces must be added to the tender.

#### **Design of the Main Structure and Individual Components**

The design of main structures and of single components must be such as described below (or equal / better). Individual components not cited herein must correspond to the appropriate technical standards (e.g. DIN).

#### **Interception structure**

- **Primary net:**  
Type: **Omega-Net**  
Corrosion protection: **Zinc coated class A acc. EN 10244-2**  
Maximum mesh size: **135 mm**  
Connection to bearing ropes: **threaded**
- **Additional layer:**  
*(optionally)*  
Typ: **Rectangular netting**  
Corrosion protection: **Zinc coated class A acc. EN 10244-2**  
Maximum mesh size: **50 mm**  
Minimum wire diameter: **2.5 mm**

### Support structure

- Post: Corrosion protection: hot dip galvanized according to EN ISO 1461  
Design: fixed rotation at the base plate (without upslope retaining ropes)  
Connection to underground: anchored installation

### Connection components

- Bearing ropes: Type: according to EN 12385-4  
Corrosion protection: hot dip galvanized
- Side stabilisation: Type: according to EN 12385-4  
Corrosion protection: hot dip galvanized

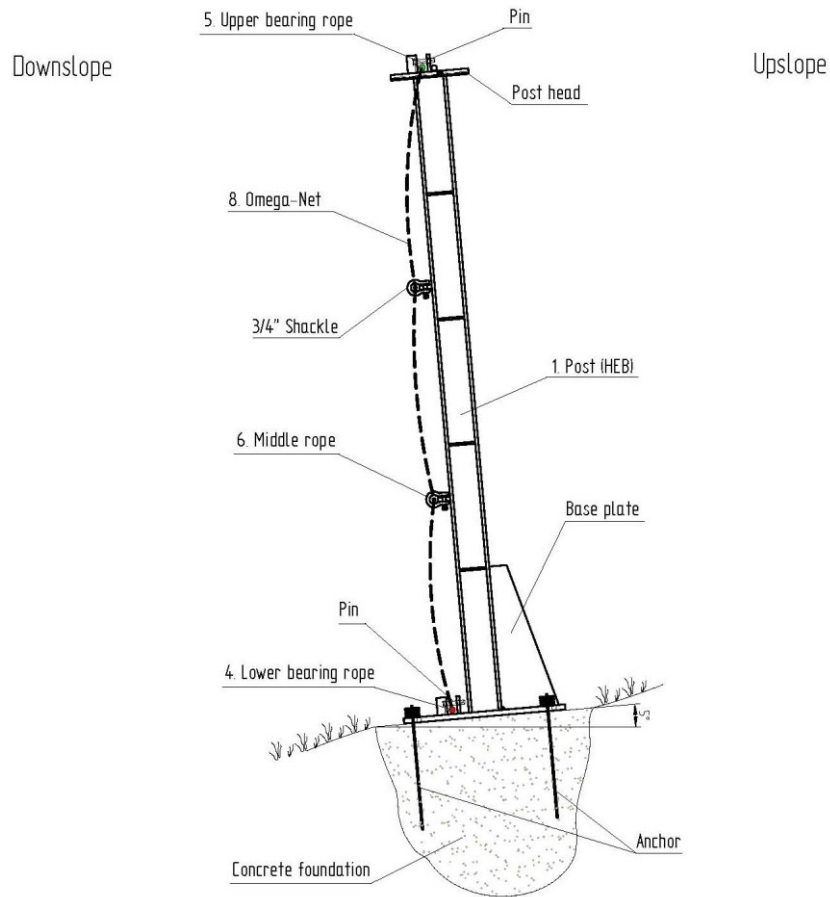
### Energy absorbing elements (brake elements)

- Operating mode: Energy dissipation: plastic deformation
- Position: close to anchors, so that can be carried out without dismantling the fence
- Corrosion protection: hot dip galvanized according to EN ISO 1461

### Anchoring

- of ropes: using anchor bars and eyelet frames
- of posts: using anchor bars (3 pieces per base plate);  
connection to concrete foundation or rock
- of concrete foundation: using anchor bars

## Lateral view TS-300-oA, TS-500-oA



## Frontal view TS-300-oA, TS-500-oA

