

## **Tested Rockfall Protection Systems** **Energy level: 150 kJ**

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

### **Rockfall protection system TS-150**

Rockfall protection systems with retaining ropes

### **General information**

Energy level [kJ]:	e.g. 150
Nominal height [m]:	e.g. 2.0
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 of 150 kJ, 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: High Performance netting 50/50/4.6  
Corrosion protection: Zinc-Aluminium coated class A according to EN 10244-2  
Maximum mesh size: 50 mm  
Connection to bearing ropes: using sewing rope

#### **Support structure**

- **Post:** Corrosion protection: hot dip galvanized according to EN ISO 1461  
Design: Pendulum support (hinge base plate)
- **Base plate:** Corrosion protection: hot dip galvanized according to EN ISO 1461  
Connection to underground: anchored installation

#### Connection components

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

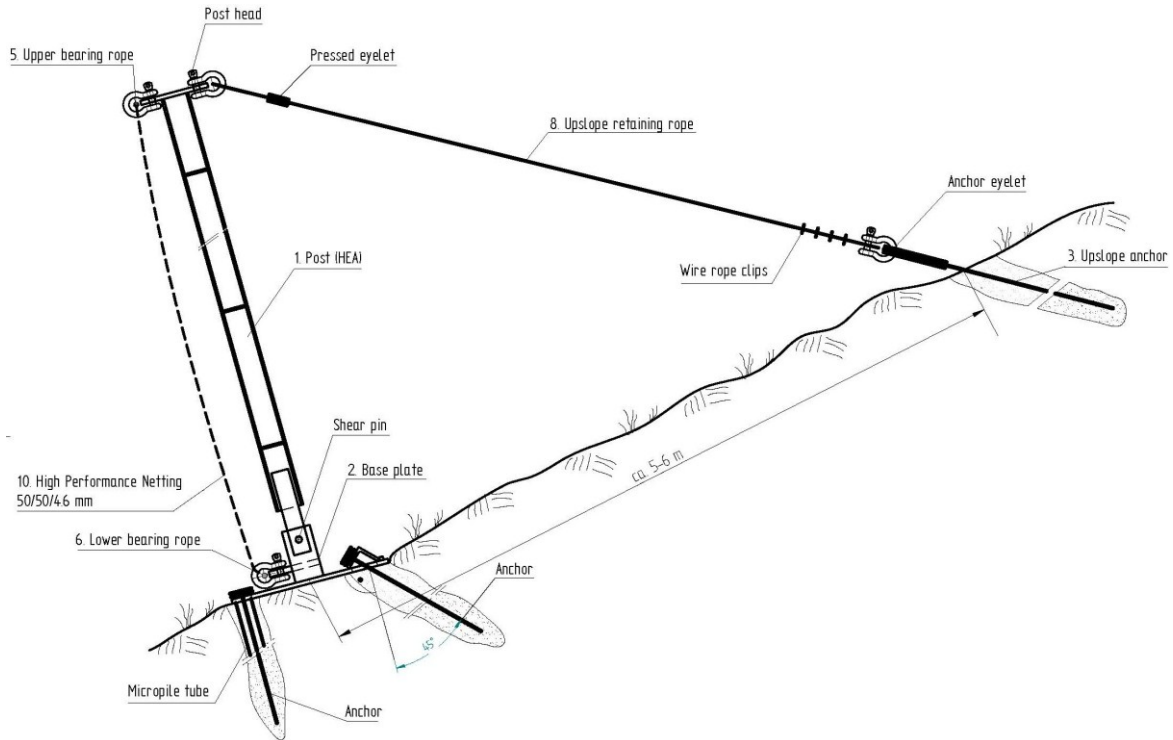
#### Energy absorbing elements (brake elements)

- 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 (2 pieces per base plate)

## Lateral view TS-150



## Plan view TS-150

