

## Rockfall protection system TS-500-oA - 500 kJ Energy

### 1. General Information

Energy level [kJ]:	500
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 of **500 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 or retaining ropes, seam ropes or other vital system 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.

### 2. 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).

#### 2.1 Interception structure

- Principal net: Type: **Omega-Net**  
Corrosion prevention: **galvanisation class A (EN 10244-2)**  
Maximum mesh size: **150 mm**  
Connection to bearing ropes: **threaded**
- Additional layer: Type: **rectangular netting**  
Corrosion prevention: **galvanisation class A (EN 10244-2)**  
Maximum mesh size: **60 mm**  
Minimum wire diameter: **3.1 mm**

#### 2.2 Support structure

- Post: Corrosion prevention: **hot dip galvanised**  
Design: **fixed rotation at the base plate**
- Base plate: Corrosion prevention: **hot dip galvanised**  
Connection to underground: **anchored**

#### 2.3 Connection components

- Bearing ropes: Type: **according to EN 12385-4**  
Corrosion prevention: **galvanised**
- Retaining ropes: Type: **according to EN 12385-4**  
Corrosion prevention: **galvanised**

#### 2.4 Energy absorbing elements

- Operating mode: **Energy dissipation: plastic deformation**
- Position: **close to anchors, for optimal installation**
- Corrosion prevention: **hot dip galvanised**

#### 2.5 Anchoring

- ropes: **Wire Pack Anchor or mono bar anchor**
- posts: **Mono bar anchor**