berta Transportation

Product ID: 8248-1-2 Initiation Date: November 2005 Revision Date: July 14, 2016

## Product Evaluation

# RE: Review of TS Protection Systems, Omega –Net, Rock Fall and Avalanche Protection (Systems TS-100, TS-300, TS-500, TS-750 and TS-1000)

#### PRODUCT

The TS Protection Systems are manufactured by Trumer Schutzbauten located in Oberndorf, Austria and distributed by TS Protection systems Incorporated located in Vancouver, British Columbia.

## VENDOR CLAIMS AND INFORMATION

#### CLAIMS:

The systems advantages are:

- Absorption of high energy impacts due to elastic and plastic deformation.
- Application in avalanche protection in triangular or rectangular form.
- Easy installation even under difficult topographical conditions.

Product web link:

http://translate.google.ca/translate?hl=en&sl=de&u=http://www.trumerschutzbauten.com/&prev= /search%3Fq%3DTrumer%2BSchutzbauten%2Blocated%2Bin%2BOberndorf,%2BAustria%26h l%3Den%26biw%3D1920%26bih%3D893&sa=X&ei=RXJoUeyzIabZ2wWP3YDgBw&ved=0CF UQ7gEwBg

## **DESCRIPTION:**

The TS Protection Systems Omega-Net consists of single wave like pre-bent ropes which are interwoven. The ropes are made of heavily galvanized spiral-ropes, which meet independently and flexible at intersections.

Energy reduction is partly reached by plastic deformation of the Omega-Net and by energy absorbing brake elements. The remaining energy is led to the ground via anchors.

## POTENTIAL USAGE:

The TS Protection Systems are secondary protection devices which prevent rock fall and rock slide in sedimentation areas. They are used to protect urban living areas and infrastructure such as highways and rail road tracks.

This system is also used for avalanche protection which results in an additional rock-fall protection through the avalanche protection system.

## STANDARDS:

Swiss guidelines for Avalanche Protection University of Leoben, Institute of Mining

# ALBERTA TRANSPORTATION COMMENTS

## **EXPERIENCE:**

Alberta Infrastructure and Transportation has no experience with this product.

## **APPLICATION STANDARDS:**

Alberta Infrastructure and Transportation do not have a standard for rock fall and avalanche protection.

## **RECOMMENDATIONS:**

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TS Protection System be listed as a Proven Product under Alberta Transportation Product List, Rock/Debris Retaining Systems – Proprietary, based on the information provided.

# **TRIAL PROJECTS**

Hwy 3 – Crowsnest Pass

Joe Filice

cc Innovations Evaluation Group – Roger Skirrow Nick Bucyk/Jim Gavin