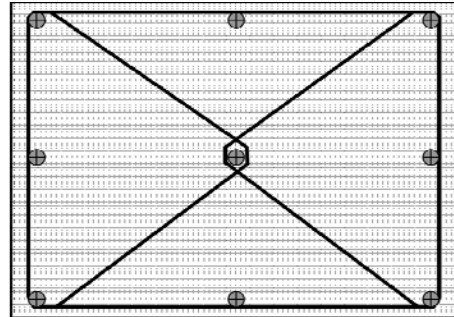


HEA Mesh (High Energy Absorption Mesh)

Preliminary Product Information Data Sheet

Overview

Where ground conditions are rock-burst prone and challenging, HEA mesh by DSI provides improved surface containment with the addition of pre-laced wire strand. In dynamic conditions where an excavation surface deforms, the strata loading is effectively transferred to all bolts and tendons, with a strong connection between the bolts and mesh offered by the HEA mesh installation.



HEA mesh has the ability to allow large deformations whilst maintaining a high load capacity. This “yield-ability” of HEA mesh to absorb energy in dynamic and repeated loadings can complement yielding reinforcement as an element in a complete dynamic system.



Key Benefits

- Superior containment of rock bursts
- Jumbo specific for rapid installation
- Reduced shotcrete requirement
- Deformation plus strength for superior performance

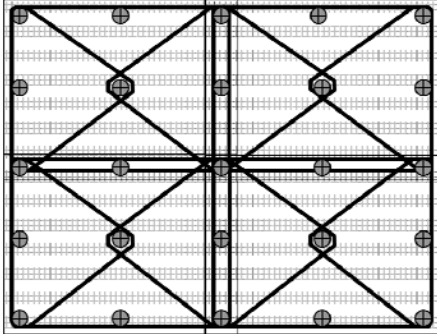
Product Properties	Typical
Sheet Size	2400mm X 3000mm
Aperture	100mm X 100mm
HEA Mesh Wire Diameter	5.6mm
Mass Per Sheet	45.5kg
Cable (Strand) Diameter	12.7mm
Cable Tensile Strength	1870kN

Indicative Performance*

- Deformation (typical maximum value at sheet centre): 900mm
- Point loading (typical maximum value at sheet centre): 17.5 tonne

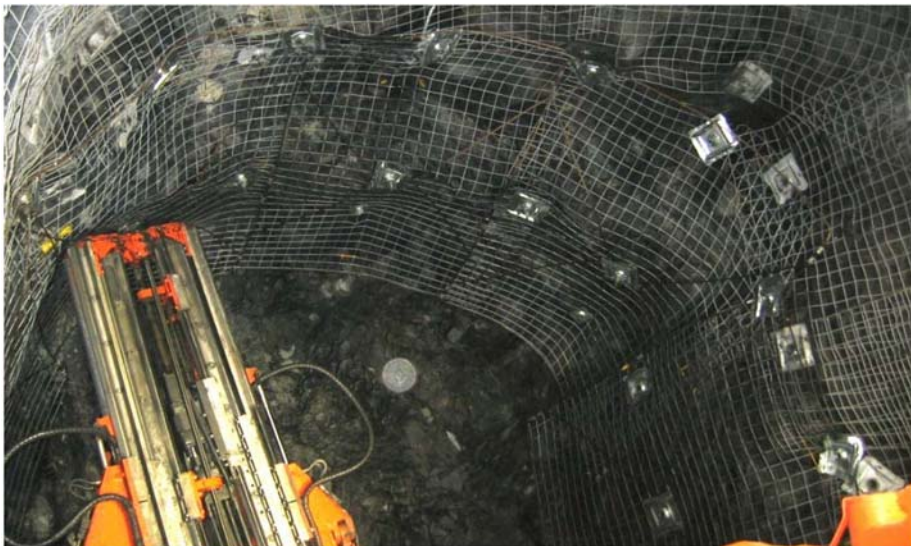
* Based on University of Western Australia laboratory test results – underground loading conditions may differ.

Installation Overview



The pre-laced modular concept of HEA mesh is designed to meet the development intensive requirements of Jumbo based one pass mesh and bolt installations. This is achieved by the mesh behaving as standard mesh during handling and bolting.

The bolting pattern provides interconnection of the cable lacing system between successive HEA mesh modules. Correct overlay of HEA mesh sheets and bolt placement is critical to ensure cable lacing performs as a complete system during a ground movement event. HEA mesh effectively removes the “weak link” of support systems.



HEA mesh could provide a more cost effective solution to the high energy demands of rock burst containment. Geotechnical consultation is available regarding product application and associated changes in strata control design. Enquiries should be directed through DSI technical service representatives.

DSI Mining Products Division is Quality Assured to ISO 9001:2008, Registration No.QAC/R61/0315