

**SOFT ROCK | MINING HARD ROCK MINING | TUNNELLING**

# MINE MESH & AUSRO STRAPS

## FLEXIBLE FORMAT MESH

### DESCRIPTION

Mesh provides surface support coverage to loose rock between installed rock bolts, in underground mining excavations.

Multiple configurations of mesh are available including numerous sheet sizes, apertures, wire diameters and black or galvanised wire.

Ausro straps are yielding straps which allow the straps to yield under load conditions allowing better load distribution between bolts. Ausro straps are used in unstable ground conditions where seismic activity is present, to improve surface support and ensure better connection between the surface support and bolts.

Minova is a distributor of ASW mine mesh and supplies both welded mesh and AUSRO straps.



Figure 1 - Welded steel mesh

### APPLICATION AND USES

Primary use in metal mining and tunneling development used in conjunction with ribbed and friction bolts. Mesh provides surface support coverage for loose rock. Ausro straps are used in unstable ground conditions where seismic activity is present, to improve surface support and ensure better connection between the surface support and bolts.

### ADVANTAGES

- Proven historical performance
- Flexible formats with numerous sheet sizes, apertures, wire diameters, black or galvanised wire
- Rapid installation
- Reduced Shotcrete requirement
- ISO 9001: 2015 Quality system
- Superior containment of rock bursts

## TECHNICAL DATA

### Mechanical Properties - Mesh

Sheet Size (mm)	Wire Diameter (mm)	Aperture (mm)	Surface Finish
1500 x 1200	3.15	100 x 100	Black
1700 x 1200	4.0	100 x 150	Black
1700 x 1200	4.0	100 x 100	Black
3000 x 2400	4.0	75 x 50	Galvanised
4200 x 2400	5.0	100 x 100	Galvanised
1700 x 4000	5.6	100 x 100	Galvanised
3000 x 2400	5.6	100 x 100	Galvanised
3000 x 2400	5.6	100 x 100	Black
4500 x 1700	5.6	100 x 100	Galvanised
4000 x 2400	5.6	100 x 100	Galvanised
4500 x 2400	5.6	100 x 100	Galvanised
6000 x 2400	5.6	100 x 100	Galvanised
2400 x 1500	4.0	100 x 100	Galvanised
3000 x 1700	5.6	100 x 100	Galvanised
6000 x 1700	5.6	100 x 100	Galvanised
6000 x 300	8.0	100 x 100	Black
6000 x 300	8.0	100 x 100	Galvanised

Sheet Size (mm)	Weight per Sheet (kg)	Wire Tensile strength MPa	Break Force of Weld (kN)
1500 x 1200	2.4	500 – 650	2.5
1700 x 1200	3.6	500 – 650	4.7
1700 x 1200	5.4	500 – 650	4.7
3000 x 2400	24.3	500 – 650	4.7
4200 x 2400	32.1	500 – 650	9.5
1700 x 4000	30.0	500 – 650	9.5
3000 x 2400	30.0	500 – 650	9.5
3000 x 2400	30.0	500 – 650	9.5
4500 x 1700	33.0	500 – 650	9.5
4000 x 2400	40.0	500 – 650	9.5
4500 x 2400	44.0	500 – 650	9.5
6000 x 2400	60.0	500 – 650	9.5
2400 x 1500	15.0	500 – 650	4.7
3000 x 1700	22.0	500 – 650	9.5
6000 x 1700	43.0	500 – 650	9.5
6000 x 300	16.7	520	9.5

**Mechanical Properties – Ausro Strap**

Sheet Size(mm)	3000 x 300	3500 x 300	4000 x 300	5800 x 300	6000 x 300
Line Wire Diameter (mm)	10	10	10	10	10
Cross Wire Diameter (mm)	6.3	6.3	6.3	6.3	6.3
Line Wire Spacing (mm)	75	75	75	75	75
Cross Wire Spacing (mm)	155	155	155	155	155
Material Yield Stress (MPa)	>500	>500	>500	>500	>500
Weight/m Kg	4.1	4.1	4.1	4.1	4.1
Transversal Load Capacity (kN)	>30	>30	>30	>30	>30
Longitudinal Load Capacity (kN)	>130	>130	>130	>130	>130

**Plates**

Minova can supply a comprehensive range of plates for use with mesh

**APPROVALS AND CERTIFICATES**

**Product Standards**

Mesh Manufacture	AS4671
Welding	AS1304 – 1991
Galvanizing	AS2423
Destructive Test Frequency	Every 500 sheets
Non-destructive Test Frequency	Every 25 Sheets

**PACKAGING AND TRANSPORTATION**

Mesh is usually packaged in bundles of 50.

Timber chokes for forklift handling.

**TECHNICAL SUPPORT**

We provide technical advisory service by a team of specialists in the field. The service includes on site assistance and advice on evaluation trials and laboratory work. All technical data sheets can be found on [www.minovalglobal.com/apac](http://www.minovalglobal.com/apac)

**DISTRIBUTOR**

Minova is a distributor of ASW mine mesh.

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An ISO 9001:2015 Quality Management Certified Company



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## **CUSTOMER SERVICE**

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