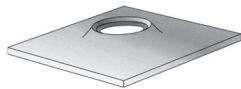


# Accessories for Rock and Roof Bolts

## WASHERS

### Domed Washer



#### Physical Properties

Technical Data	4.5	5.0
Length, mm	125	125
Width, mm	125	125
Thickness, mm	4.5	5.0

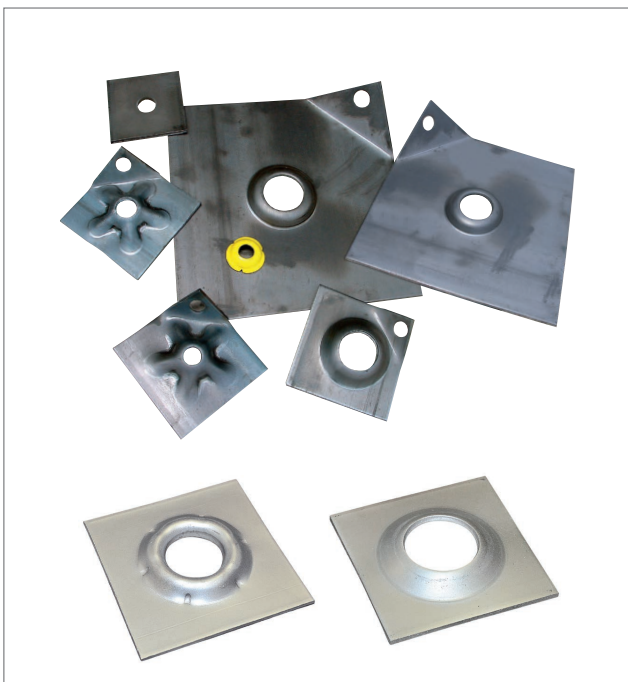
Hole size 36, 38, 42, 44, 48 mm

#### Features

- Bolts are compatible with Domed Washers fitted with matching seats
- Domed Washers are complimentary to the seat and overcome the problems of surface angularity. This allows the development of a good torque tension ratio
- The Domed Washer and seat assembly provides up to 18° angle of tilt.

#### Packaging

- Domed Washers are bundled with bars or palletised.



### Ribbed Dome Washer

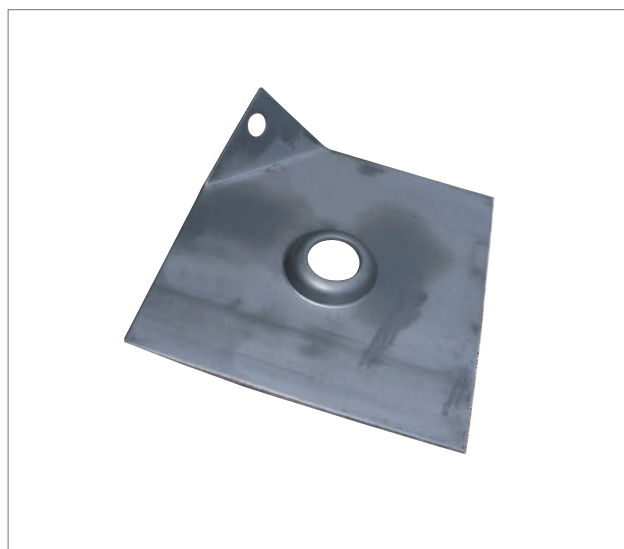
#### Features

- Rib Washer 18.5 - 19 mm and 22.5 - 27.5 mm centre holes
- Yielding Washer - Dog Ear



### 300 x 300mm Flat Washer with central dome

- Flat dome washer with 36, 38, 44 and 48mm centre hole.



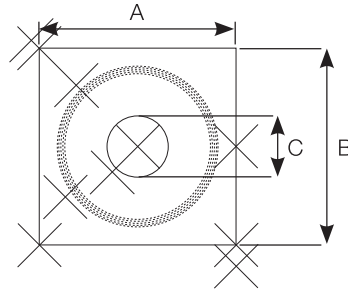
# Accessories for Rock and Roof Bolts

## WASHERS

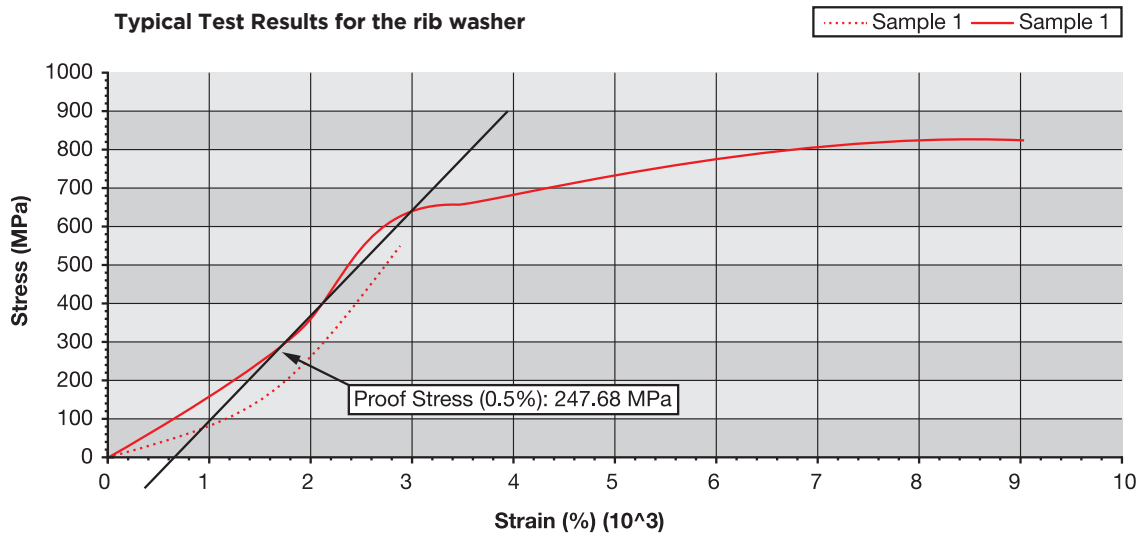
### Flat Washer

Flat Plates for general use

Technical Data	
A x B, mm	100 x 100
Thickness, mm	5.0
C, mm	18.5 - 19



### Extensive testing of high quality washers



## GROUTING RODS

### Grouting Rods

Bar Type: Rebar

Diameter, mm	Length, m
12	1.2 - 3.4
14	1.2 - 3.4
16	1.2 - 3.4



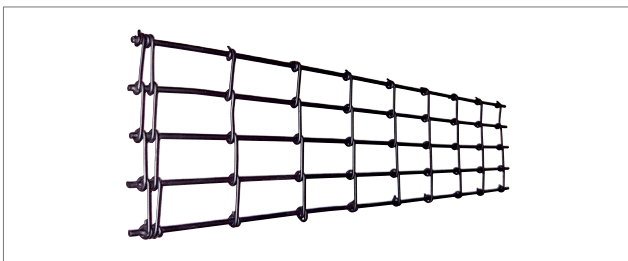
# Accessories for Rock and Roof Bolts

## STRAPS

### Osro Straps

Bar Type: Round Steel

Diameter, mm	Length, m	Width, m
Horizontal Bars 6 - 10	1 - 6	0.25 - 1
Strapping Bars 5.5	1 - 6	0.25 - 1



### W Straps

Steel, mm	Length, m	Width, mm	Multi-hole
1.6	1.2 - 4.0	250 - 500	500mm Apart

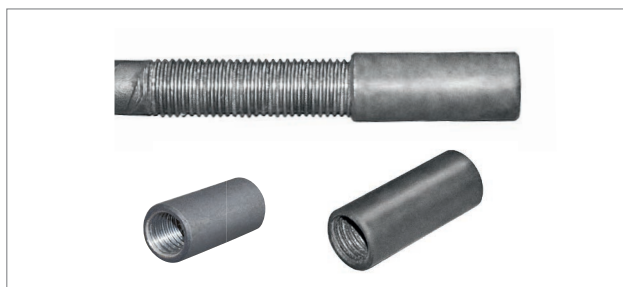


## COUPLERS

### Couplers

For 20mm and 25mm bar

Technical Data	20mm	25mm
Outer Diameter, mm	28	32
Length, mm	61	70

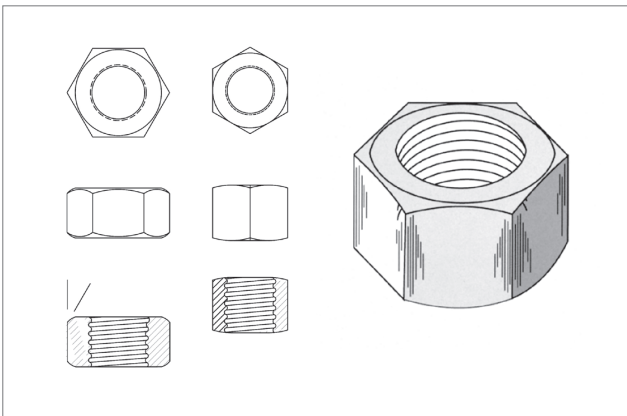


# Accessories for Rock and Roof Bolts

## NUTS

### Nuts

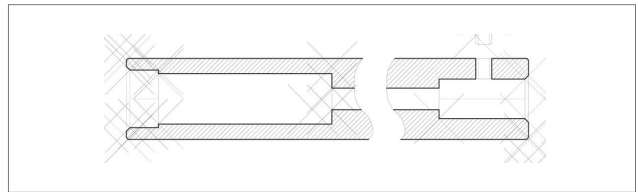
- 18 DIN 405 Drive Nut
- 20 DIN 405 Drive Nut
- 22 DIN 405 Drive Nut
- 25 DIN 405 Drive Nut
- Nuts can be delivered on request.



## SPANNERS

### Spanners

- SA-27F/22 m or 27M/22F
- SA-32F/22 m or 32M/22F
- SA-35F/22 m or 35M/22F
- Spanners can be delivered on request.



## TORQUE INDICATORS

### Torque Indicators

- Torque indicators can be used on 16, 18, 20 and 25mm Anchor Bolts
- Torque indicators are installed between the nut and the washer. The collapsed torque indicator is an indication of a correctly installed anchor bolt.

