JENNMAR

PRODUCT CATALOGUE

COAL MINING

MISSION STATEMENT

Vision

To be the safest and most innovative Australian manufacturer relentless in the pursuit of employee and customer excellence.

Mission

To be a responsible employer and leading innovator of sustainably manufactured high quality products for mining, industrial and infrastructure markets. Accountable to our stakeholders by creating employee and customer excellence, and positive outcomes for all.

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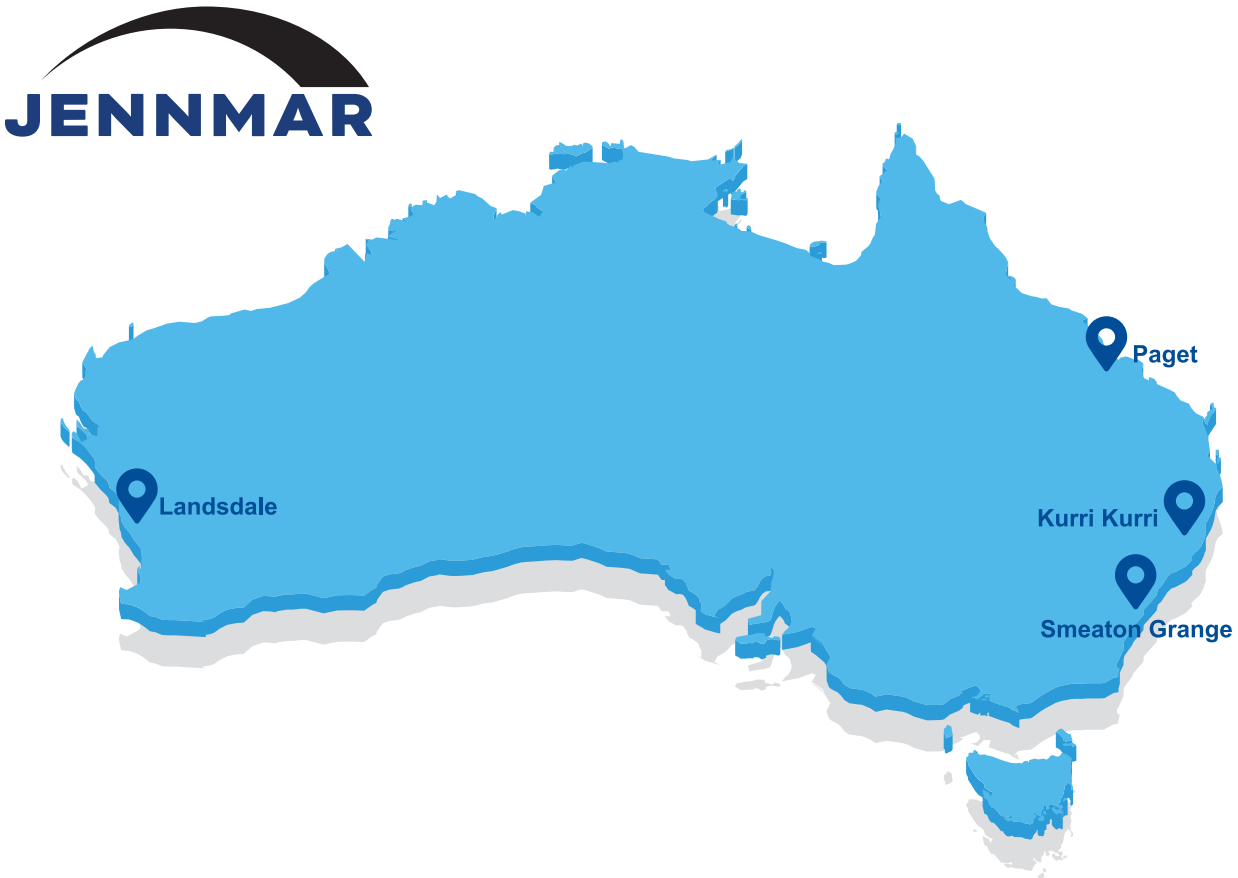

Accreditations

Jennmar Australia is certified as compliant with the following standards:

Certified System™

OHS
ISO 45001
SAI GLOBAL

Certified System™

Quality
ISO 9001
SAI GLOBAL

Certified System™

Environment
ISO 14001
SAI GLOBAL

INJURY FREE CULTURE
ABSOLUTE ZERØ
JENNMAR AUSTRALIA

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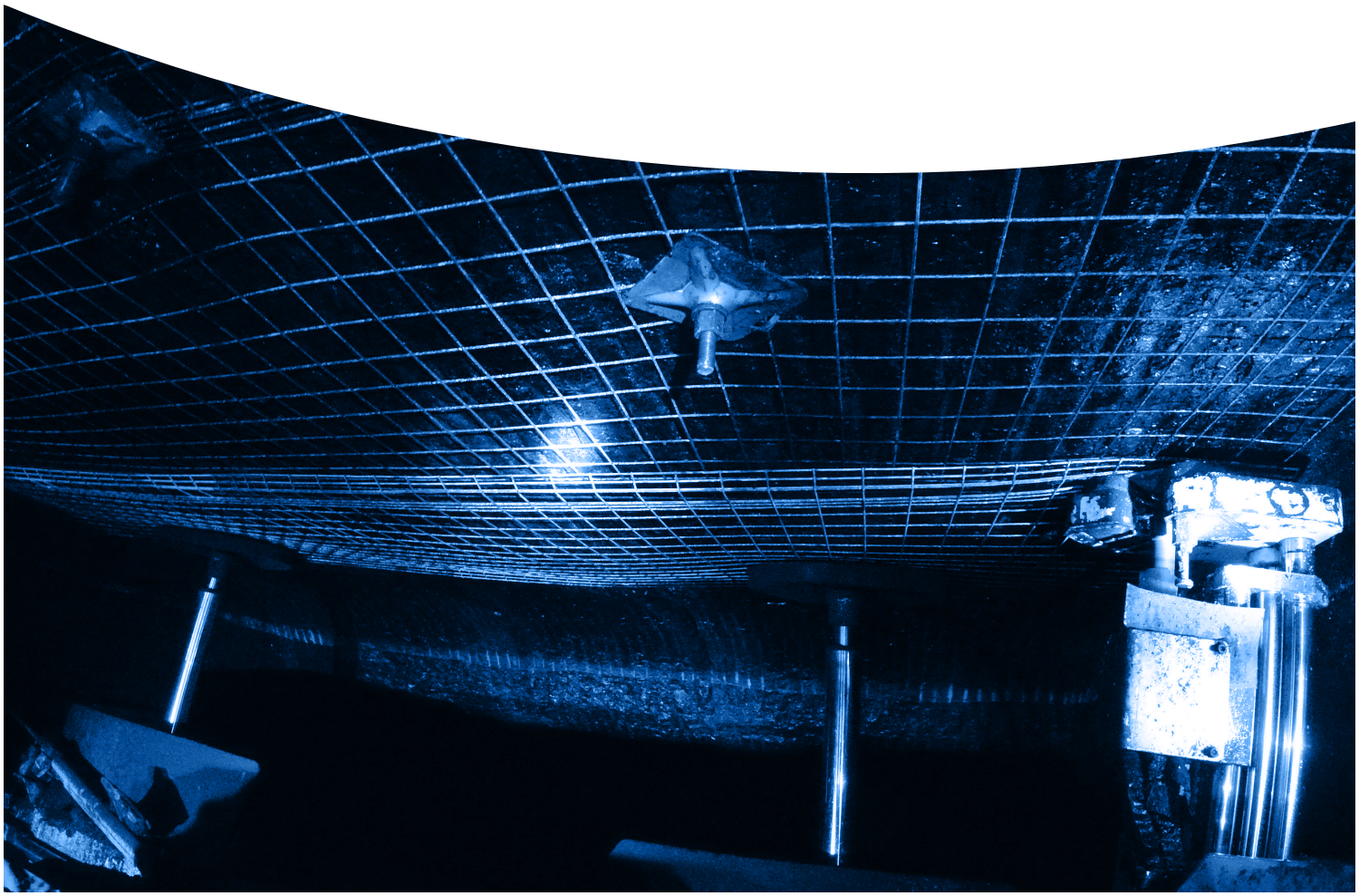
ROCK BOLTS &
ROCK BOLT ACCESSORIES



M24 JX Torque Tension Bolt

Features:

- The preferred primary roof support bolt by Australian coal mines
- The “X” grade steel used by Jennmar has a superior toughness and ductility through the use of grain refining alloys. The Jennmar “X” grade bolts provide better performance in mines where Stress Corrosion Cracking is evident and also in areas of high localized horizontal stresses
- All nuts are coated with a dry film molycoat to provide low friction and corrosion resistance
- All nuts are connected to the bolt by a shear-pin with varying ranges of torque breakout strength

Property	Minimum Value	Typical Value
Yield strength (kN)	218	246
Ultimate Tensile strength (kN)	305	348
Shear Strength (kN)	213	243
Elongation %	15	19
Bar core diameter (mm)	21.5	21.7
Cross sectional area (mm2)	363	378
Rib height (mm)	1.1	1.5
Rib Spacing (mm)	23	30
Mass/meter (kg/m)	2.8	3

Steel grade colour code	

Bolt length (m)	Colour code
1.2	
1.5	
1.8	
2.1	
2.4	

High ribbed bar for improved resin mixing and higher load transfer
To suit drill bit 27–28 mm
Available plain or hot dipped galvanized

M24 JBX Torque Tension Bolt

Features:

- The “X” grade steel used by Jennmar has a superior toughness and ductility through the use of grain refining alloys. The Jennmar “X” grade bolts provide better performance in mines where Stress Corrosion Cracking is evident and also in areas of high localized horizontal stresses
- All nuts are coated with a dry film molycoat to provide low friction and corrosion resistance
- All nuts are connected to the bolt by a shear-pin with varying ranges of torque breakout strength

Property	Minimum Value	Typical Value
Yield strength (kN)	218	246
Ultimate Tensile strength (kN)	305	348
Shear Strength (kN)	213	243
Elongation %	15	19
Bar core diameter (mm)	21.5	21.7
Cross sectional area (mm2)	363	378
Rib height (mm)	0.5	1
Rib Spacing (mm)	9	13
Mass/meter (kg/m)	2.8	3

Steel grade colour code	

Bolt length (m)	Colour code
1.2	
1.5	
1.8	
2.1	
2.4	

To suit drill bit 27–28 mm

M24 JBS Torque Tension Bolt

Features:

- Mild steel bolts are commonly used for development rib support and longwall bolt-up roof support
- All nuts are coated with a dry film molycoat to provide low friction and corrosion resistance
- All nuts are connected to the bolt by a shear-pin with varying ranges of torque breakout strength

Property	Minimum Value	Typical Value
Yield strength (kN)	109	129
Ultimate Tensile strength (kN)	160	185
Shear Strength (kN)	112	130
Elongation %	22	27
Bar core diameter (mm)	21.5	21.7
Cross sectional area (mm2)	363	378
Rib height (mm)	0.5	1
Rib Spacing (mm)	9	13
Mass/meter (kg/m)	2.8	3

Steel grade colour code	

Bolt length (m)	Colour code
1.2	
1.5	
1.8	
2.1	
2.4	

To suit drill bit 27–28 mm

Available plain or hot dipped galvanised

Hawkeye ‘X’ grade bolt

Features:

- Ideal for longwall facelines and bolt-up
- Low protrusion
- Female square drive
- Torque: tension
- Can be configured for Spin2stall or Spin & Hold system
- Made for low seam height

Property	Minimum Value	Typical Value
Yield strength (kN)	218	246
Ultimate Tensile Strength UTS (kN)	305	348
Shear Strength (kN)	213	243
Elongation %	15	19
Bar core diameter	21.5	21.7
Cross sectional area (mm2)	363	378
Rib height (mm)	1.1	1.5
Rib spacing (mm)	23	30
Hawkeye nut diameter (mm)	33	33
Mass/Meter (kg/m)	2.8	3

Steel grade colour code	

Bolt length (m)	Colour Code
1.2	
1.5	
1.8	
2.1	
2.4	
2.7	

¾" JSD Paddle Bolt

Features:

- 22 mm wide paddles on the insertion end promotes shredding of the resin capsule film and efficient mixing in 27–28 mm diameter holes
- Normally used for rib support as a lightweight alternative to M24 Bolts when high strength is not required
- Can be readily installed with hand operated "windy borers"
- Available with a 3 mm 'C' break out pin

Property	Minimum Value	Typical Value
Yield strength (kN)	66	78
Ultimate Tensile strength (kN)	98	116
Shear Strength (kN)	68	76
Elongation %	22	27
Bar core diameter (mm)	17	17.4
Cross sectional area (mm2)	227	238
Rib height (mm)	1	1.4
Rib Spacing (mm)	7	11
Mass/meter (kg/m)	1.85	1.95

Steel grade colour code	

Bolt length (m)	Colour code
1.2	
1.5	
1.8	
2.1	

To suit drill bit 27–28 mm

33 mm Friction Lok Bolt

Features:

- The radial compression of the slotted steel tube inside a borehole provides both radial and axial restraint to rock movement
- Used as rib support in some coal mines when crushed coal rib prevent resin capsule insertion
- Minimal bolt tail protrudes into the roadway
- Can be post grouted for extra corrosion protection and support capacity
- Available in black or hot dipped galvanized

Property	Minimum Value	Typical Value
Yield strength (kN)	80	100
Ultimate Tensile strength (kN)	100	120
Cross sectional area (mm2)	-	204
Mass/meter (kg/m)	-	1.53

To suit drill bit 30–32 mm

M36 Boot Bolt

Features:

- High strength & ductility, 33 mm diameter bolt for pinning conveyor equipment to the mine floor
- High ductility reduces likelihood of fatigue failures due to the constantly changing load conditions of the conveyor equipment
- Designed for installation with common coal mine equipment – 42 mm cable bolt drill bits, 36 mm diameter cable bolt resin capsules
- Separate drive nut allow spinning into the hole using regular roof bolt spanners. Drive nut part # NUTM36DRIVE
- Special 100 x 100 mm plate designed to fit the common “boot end” base plates. Accommodates installation angles up to 15 degrees
- Standard length 1800 mm

Property	Typical Value
Yield strength (kN)	284
Ultimate Tensile strength (kN)	412
Shear Strength (kN)	275
Elongation %	30
Bar core diameter (mm)	33
Cross sectional area (mm2)	855
Paddle width (mm)	36-38
Paddle Spacing (mm)	50
Mass/meter (kg/m)	6.7

Bolt length (m)	Colour code
1.2	
1.5	
1.8	
2.1	

To suit drill bit 42 mm

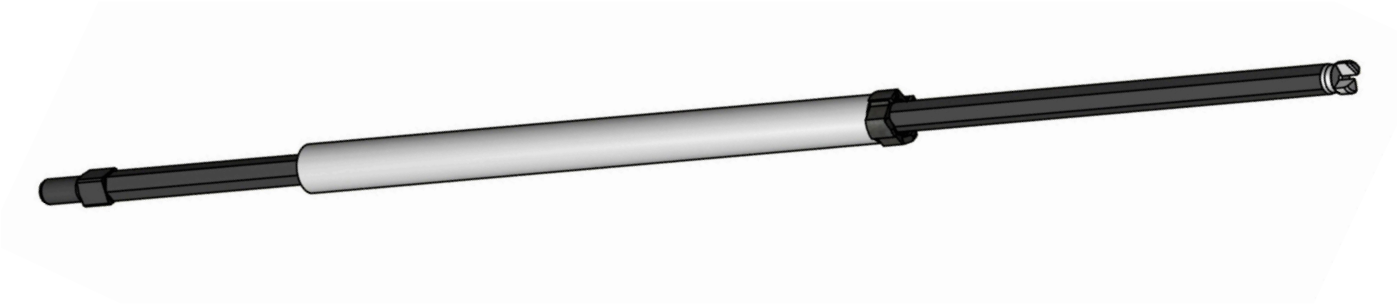
M24 Tension Indicator Washer

Features:

- Centralising corner lugs to match the standard M24 Dome ball
- Collapses/inverts uniformly at the rated tension load and torque
- Used in conjunction with mated flat washer to prevent frictional heating or damage to the tension indicator washer
- Washer does not collapse onto the thread and can be removed by hand if the nut is taken off
- Coloured RED dome is hidden when the correct load is applied

Dimensions (mm)	52 x 52
Load at Collapse (tonnes)	6 - 8

Cover Drive



Features:

- Allows a resin anchored bolt to be installed in competent coal behind the crush-zone Improves rib bolting efficiency in broken rib conditions
- Designed to complement existing rib bolting processes and acts as a physical support to prevent borehole collapse
- Installed with a specialized drill steel and the coverdrive is left in the hole as the drill steel is retracted
- To suit bolt anchorage holes drilled with 27–28 mm drill bits
- Patented

Length (mm)	Diameter (mm)	Mass (kg)
600	50	0.157

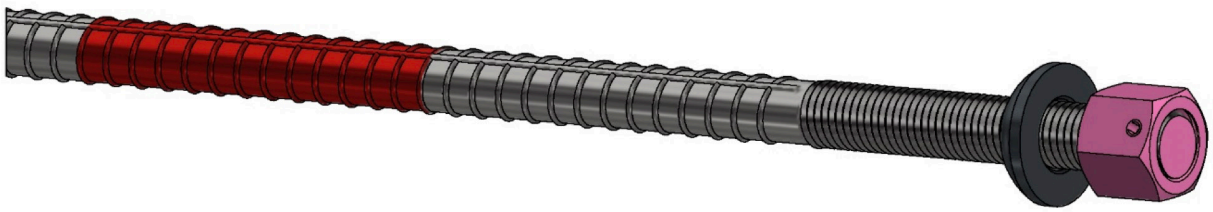
Floor Bolt Extension

Features:

- Commonly used for forming floor bolts for pinning boot ends etc, this section is removed and re-used
- Can be used as extensions to existing mild steel rock bolts for hanging
- Hex drive allows for easy removal from floor bolts
- Optional to come with or without nut and dome balls
- After removal, no bolt tails are left protruding from the floor eliminating trip hazards

Property	Typical Value
Threaded Stem Yield strength (kN)	118
Threaded Stem UTS (kN)	177
Threaded Stem Elongation %	27
Threaded stem length (mm)	300
Coupler diameter (mm)	35
Coupler steel grade	K1137
Coupler length (mm)	75
Drill hole diameter	43-45
Hex drive (mm)	18

Torque Test Nut



Features:

- A high torque roll pin with break-out set to 250-270 N.m break-out
- Colour coded bright pink nut to distinguish from regular bolts
- Can be placed within every bolting pod to ensure bolting rigs are regularly checked for torque output
- The bolt can be installed as part of the normal support pattern, with the high tensile nut being fully rated for X grade roof bolts
- A successful break-out indicates the bolting rigs are able to exceed 8 tonnes pre-tension on normal roof bolts

Bolt Thread	Torque Break-out (Nm)
M24	250-270

MM_B_M24CPIN_Rev1

36 A.F. Dolly

Features:

- 36 mm A.F. socket to suit standard rock bolt installations
- 25 mm locking square drive suitable for common coal mining rock bolting rigs

Drive (mm)	Length (mm)	Socket (mm)
25 square	300-600	36 Hex

MM_D_JDO650300-Rev1

“U” Hanger Nuts

Features:

- 10 mm diameter “U” hanger
- Available in all thread types
- Readily threaded onto the base of rock bolts for use as a hanger
- Recommended for carrying static loads
- Not recommended for lifting or pulling
- Avoid side loading of the “U” hanger

Length (mm)	Width (mm)	Mass (kg)	Load Rating (tonne)
92	56	0.28	2

MM_N_NUTHM24H125D_Rev1

M24 Nut

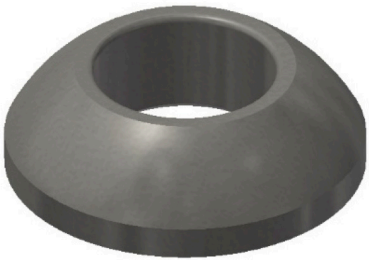
Features:

- M24 x 3 hot forged nut to suit M24 Rock Bolts
- Suitable for ‘X’ and ‘S’ grade rock bolts

Hex dimension (mm)	Length (mm)	Mass (kg)	Proof Load (kN)	Steel grade
36 A.F.	30	0.17	379.5	AS/NZS 4291.2:1995 class 8

MM_N_NUTRM24H125D-Rev1

M24 Dome Ball Washer



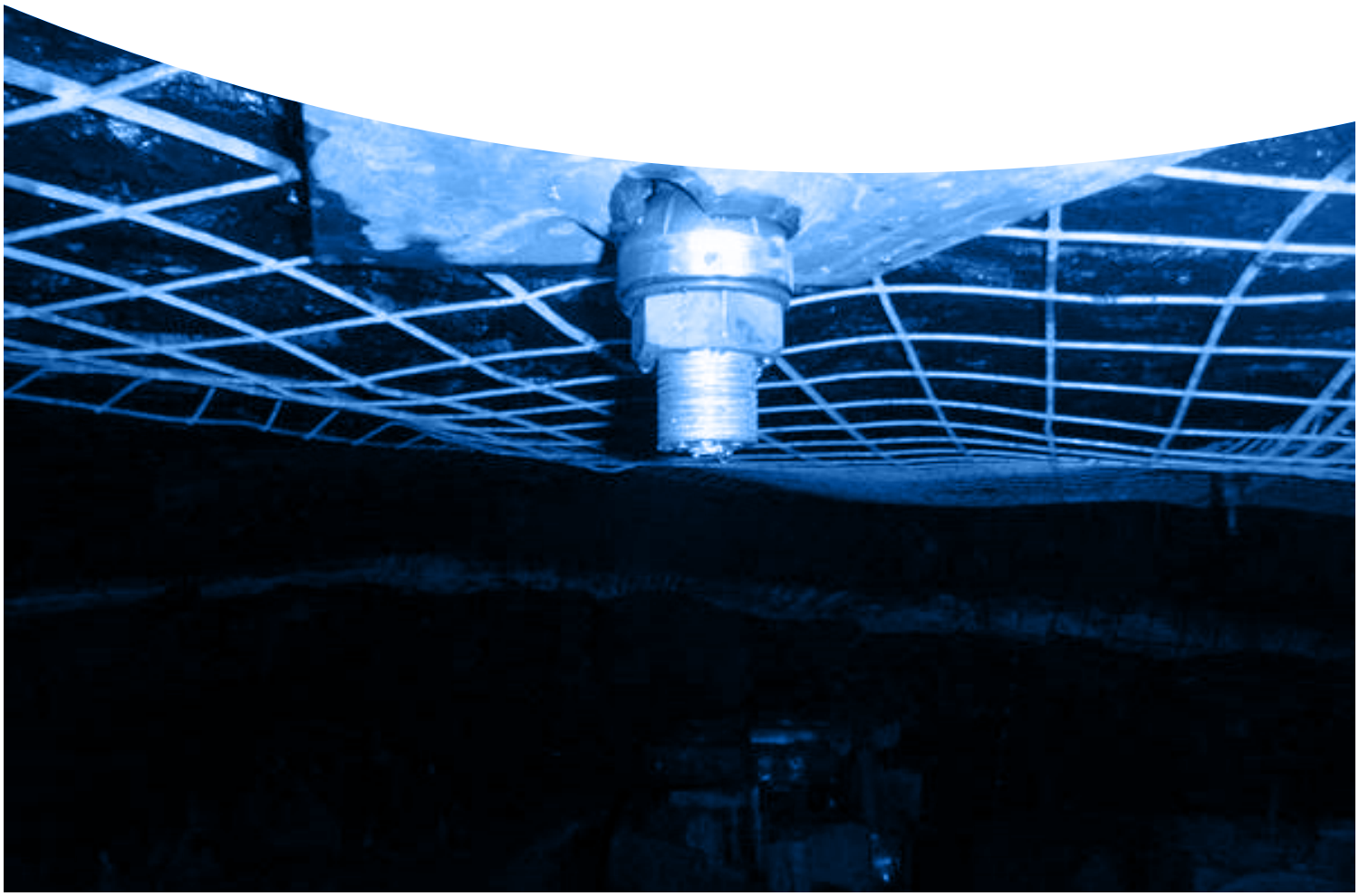
Features:

- Hot forged dome ball washer to suit M24 rock bolts

Outside Diameter (mm)	Length (mm)	Mass (kg)	Steel Grade
50	15	0.13	Medium carbon steel

MM_N_WASHM24DB-Rev1

CABLE BOLTS &
CABLE BOLT ACCESSORIES



31 mm 95T GOLIATH Cable

Features:

- To suit drill bit 36-45 mm

Property	Typical Value
Yield strength (kN)	890
Ultimate Tensile Strength UTS (kN)	960
Breaking load with B&W (kN)	900
Elongation %	5-7
Strand Diameter (mm)	31
Wire Type	Spiral
Cross sectional area (mm_2)	528
Number of wires	19
Mass/Meter (kg/m)	4.1

Bolt length (m)	Colour code
4	
6	
8	
9	
10	
11	
12	

31 mm 95T GOLIATH TEX Cable

Features:

- To suit drill bit 36-45 mm

Property	Typical Value
Yield strength (kN)	890
Ultimate Tensile Strength UTS (kN)	960
Breaking load with a TEX (kN)	830
Elongation %	5-7
Thread diameter	M42
Strand Diameter (mm)	31
Wire Type	Spiral
Cross sectional area (mm^2)	528
Number of wires	19
Mass/Meter (kg/m)	4.1

Bolt length (m)	Colour code
4	
6	
8	
9	
10	
11	
12	

31 mm 70T SUMO TEX Cable

Features:

- 70 tonne capacity, 12 wire hollow cable bolt
- Fully bulbed, smooth wire for both high axial and shear performance when fully grouted
- Eliminates the need for hazardous hydraulic tensioners
- 8-10 tonne pre-tension is achievable off most hydraulic bolting rigs
- The threaded TEX end fitting achieves full tensile capacity of the wires
- Light weight high capacity 12 mm plates available

Property	Typical Value
Strand diameter (mm)	31
Number wires	12
Wire type	smooth
Bulb diameter (mm)	36
Bulb spacing (mm)	500
Steel area (mm^2)	385
Mass (kg/m)	3.5
Typical yield strength (kN)	640
Typical Ultimate tensile strength (kN)	705
Breaking load with TEX end fitting (kN)	705
Elongation %	5-7

Cable length (m)	Colour code
4.0	
6.0	
8.0	
10.0	

To suit drill bit 42-45 mm

70T 12 Wire SUMO Cable Bolt

Features:

- Higher 70 tonne capacity SUMO cable bolt
- 12 wires increases flexibility and capacity
- Large 14 mm I.D. central flexible corrugated grout tube
- Increased flexibility makes handling in confined areas easier and reduces the risk of manual handling related injuries
- Standard 31 mm diameter and hex drive to suit existing cable bolting accessories i.e. dollies, tensioners and grout lances
- Birdcaged along the entire length for maximum load transfer
- Smooth wires for optimum performance in shear
- Plated with new higher capacity 12 mm thick volcano plates with grout indicator slots.
- Plates available for trussing
- Lengths available up to 14 m

Property	Typical Value
Strand diameter (mm)	31
Number wires	12
Wire type	smooth
Bulb diameter (mm)	36
Bulb spacing (mm)	500
Steel area (mm^2)	362
Mass (kg/m)	3.5
Typical yield strength (kN)	640
Typical Ultimate tensile strength (kN)	705
Breaking load with barrel & wedge (kN)	640
Elongation %	5-7

Cable length (m)	Colour code
4.2	
6.2	
8.2	
10.2	

To suit drill bit 42–45 mm

31 mm JW10 TEX Cable

Features:

- 70 tonne capacity, 10 wire hollow cable bolt
- Fully bulbed, smooth wire for both high axial and shear performance when fully grouted
- Eliminates the need for hazardous hydraulic tensioners
- 8-10 tonne pre-tension is achievable off most hydraulic bolting rigs
- The threaded TEX end fitting achieves full tensile capacity of the wires
- Light weight high capacity 12 mm plates available

Property	Typical Value
Strand diameter (mm)	31
Number wires	10
Wire type	smooth
Bulb diameter (mm)	36
Bulb spacing (mm)	500
Steel area (mm^2)	385
Mass (kg/m)	3.5
Typical yield strength (kN)	640
Typical Ultimate tensile strength (kN)	705
Breaking load with TEX end fitting (kN)	705
Elongation %	5-7

Cable length (m)	Colour Code
4.2	
6.2	
8.2	
10.2	

To suit drill bit 42–45 mm

70T 10 Wire Hollow Cable Bolt

Features:

- 70 tonne capacity, 10 wires
- Smooth wires for improved strength against shearing
- Standard 31 mm diameter and hex drive to suit existing cable bolt accessories i.e. dollies, tensioners and grout lances
- Birdcaged along entire length for maximum load transfer
- Point anchored with J-LOK “Post-Grout” resin capsules, specifically designed for mixing in larger drill holes
- Top-down grouted using thixotropic grout
- Plated with new higher capacity 12 mm thick volcano plates with grout indicator slots. Available in 200x200 mm and 300x300 mm sizes.
- Plates available for trussing
- Lengths available up to 10 m

Property	Typical Value
Strand diameter (mm)	31
Number wires	10
Wire type	smooth
Bulb diameter (mm)	36
Bulb spacing (mm)	500
Steel area (mm^2)	362
Mass (kg/m)	3.5
Typical yield strength (kN)	640
Typical Ultimate tensile strength (kN)	705
Breaking load with barrel & wedge (kN)	640
Elongation %	5-7

Cable length (m)	Colour code
4.2	
6.2	
8.2	
10.2	

To suit drill bit 42–45 mm

31 mm JW9S Cable

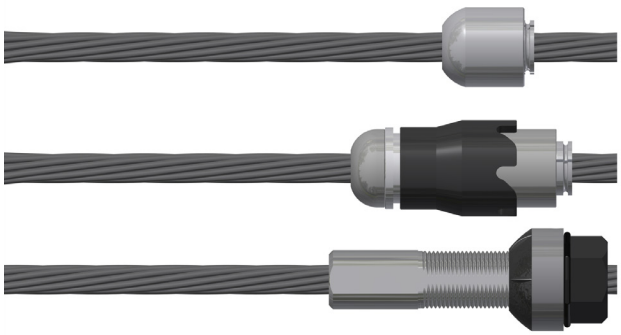
Features:

- 62 tonne capacity, 9 spiral wires
- Standard 31 mm diameter and hex drive to suit existing cable bolt accessories i.e. dollies, tensioners and grout lances
- Birdcaged along entire length for maximum load transfer
- Point anchored with J-LOK “Post-Grout” resin capsules, specifically designed for mixing in larger drill holes
- Top-down grouted using thixotropic grout
- Plated with new higher capacity 12 mm thick volcano plates with grout indicator
  Available in 200x200 mm and 300x300 mm sizes
- Plates available for trussing
- Lengths available up to 10 m
- To suit drill bit 42-45 mm

Property	Typical Value
Yield strength (kN)	540
Ultimate Tensile Strength UTS (kN)	613
Breaking load with a B&W (kN)	550
Elongation %	5-7
Strand Diameter (mm)	31
Wire Type	Spiral
Bulb diameter (mm)	36
Bulb spacing (mm)	500
Cross sectional area (mm^2)	347
Number of wires	9
Mass/Meter (kg/m)	3.2

Bolt length (m)	Colour code
4	
6	
8	
9	
10	
11	
12	

Superstrand Cable Bolt



Features:

- Flexible and easy to handle even around the tight working areas of bolting rigs and continuous miner platforms
- Plain SuperStrand of any length can be readily installed with hand bolters as point anchored, pre-tensioned support
- The 4 m SuperStrand can be “fully encapsulated” with resin installed alongside primary support at the face. Installation time between 6–8 minutes
- Special “through-the-chuck” drill motors allow full resin encapsulation of SuperStrands up to 8 m in length

Property	Typical Value
Strand diameter (mm)	21.8
Number wires	19
Wire type	smooth
Steel area (mm2)	313
Mass (kg/m)	2.5
Typical yield strength (kN)	525
Typical Ultimate tensile strength (kN)	590
Breaking load with barrel & wedge/ ToTo/TEX (kN)	510
Elongation %	5-7

Type	Thread Diameter	Tail Length
ToTo	48	Min 150
TEX	42	Min 70

Cable length (m)	Colour code
4.0	
6.0	
8.0	
10.0	

To suit drill bit 27–28 mm

Resin capsules available to obtain encapsulation length up to 4 m

15.2 mm Twin Strand Tendons & Trusses

Features:

- Low cost to capacity cable bolt configurations for the coal mining industry
- Can be used in either top-down or bottom-up grouting applications
- Typically fitted with fish-hooks to hold the cables inside the drill holes
- Truss configurations are available for ease of manually bending and tensioning cross members
- Birdcage spacing at 180 mm for maximum bond strength with the grout and rock

Property	Typical Value
Strand diameter (mm)	15.2
Wire type	smooth
Bulb diameter (mm)	25
Bulb spacing (mm)	180
Steel area (mm^2)	280
Mass (kg/m)	2.3
Typical yield strength (kN)	490
Typical Ultimate tensile strength (kN)	530
Elongation %	5-7

Cable length (m)	Colour code	Cable length (m)	Colour code
4.0		10.0	
6.0		11.0	
8.0		12.0	
9.0			

To suit drill bit 52–55 mm

15.2 mm Triple Strand Tendons & Trusses

Features:

- Low cost to capacity cable bolt configurations for the coal mining industry
- Can be used in either top-down or bottom-up grouting applications
- Typically fitted with fish-hooks to hold the cables inside the drill holes
- Truss configurations are available for ease of manually bending and tensioning cross members
- Birdcage spacing at 180 mm for maximum bond strength with the grout and rock

Property	Typical Value
Strand diameter (mm)	15.2
Wire type	smooth
Bulb diameter (mm)	25
Bulb spacing (mm)	300
Steel area (mm^2)	420
Mass (kg/m)	3.4
Typical yield strength (kN)	735
Typical Ultimate tensile strength (kN)	795
Elongation %	5-7

Cable length (m)	Colour code	Cable length (m)	Colour code
4.0		10.0	
6.0		11.0	
8.0		12.0	
9.0			

To suit drill bit 52–55 mm

18 mm Twin Strand Tendons & Trusses

Features:

- Low cost to capacity cable bolt configurations for the coal mining industry
- Can be used in either top-down or bottom-up grouting applications
- Typically fitted with fish-hooks to hold the cables inside the drill holes
- Truss configurations are available for ease of manually bending and tensioning cross members
- Birdcage spacing at 180 mm for maximum bond strength with the grout and rock

Property	Typical Value
Strand diameter (mm)	18
Wire type	smooth
Bulb diameter (mm)	25
Bulb spacing (mm)	230
Steel area (mm^2)	380
Mass (kg/m)	3
Typical yield strength (kN)	600
Typical Ultimate tensile strength (kN)	706
Elongation %	5-7

Cable length (m)	Colour code	Cable length (m)	Colour code
4.0		10.0	
6.0		11.0	
8.0		12.0	
9.0			

To suit drill bit 52–55 mm

18 mm Triple Strand Tendons & Trusses

Features:

- Low cost to capacity cable bolt configurations for the coal mining industry
- Can be used in either top-down or bottom-up grouting applications
- Typically fitted with fish-hooks to hold the cables inside the drill holes
- Truss configurations are available for ease of manually bending and tensioning cross members
- Birdcage spacing at 180 mm for maximum bond strength with the grout and rock

Property	Typical Value
Strand diameter (mm)	18
Wire type	smooth
Bulb diameter (mm)	25
Bulb spacing (mm)	300
Steel area (mm^2)	570
Mass (kg/m)	4.5
Typical yield strength (kN)	900
Typical Ultimate tensile strength (kN)	1059
Elongation %	5-7

Cable length (m)	Colour code	Cable length (m)	Colour code
4.0		10.0	
6.0		11.0	
8.0		12.0	
9.0			

To suit drill bit 52–55 mm

31 mm Barrel & Wedge

Features:

- Domed barrels & wedges are used with volcano plates to achieve installation angles of up to 18 degrees
- All barrels & wedges have an oil film coating and are pre-packaged in strong 4 litre buckets for corrosion protection
- All barrels & wedges to be pretensioned to a minimum 8 tonnes to ensure the wedge teeth penetrate the strand to achieve maximum load capacity
- To suit 31 mm 12 wire SUMO and 31 mm 10 wire Hollow cable
- Bucket lid colour = white for 70 mm barrel
- Bucket lid colour = black for 90 mm barrel

Cable Diameter (mm)	Barrel Length (mm)	Barrel Diameter (mm)	Unit Weight (kg)	Qty/Bucket
31	74	70	1.53	5
31	74	90	2.16	5

28.6 mm Barrel & Wedge

Features:

- Domed barrels & wedges are used with volcano plates to achieve installation angles of up to 18 degrees
- All barrels & wedges have an oil film coating and are pre-packaged in strong 4 litre buckets for corrosion protection
- All barrels & wedges to be pretensioned to a minimum 8 tonnes to ensure the wedge teeth penetrate the strand to achieve maximum load capacity
- Suit Goliath cable bolts

Cable Diameter (mm)	Barrel Length (mm)	Barrel Diameter (mm)	Qty/Bucket
28.6	73	75	5

MM_CA_BW286MMD-Rev1

21.8 mm Barrel & Wedge

Features:

- Domed barrels & wedges are used with volcano plates to achieve installation angles of up to 18 degrees
- All barrels & wedges have an oil film coating and are pre-packaged in strong 4 litre buckets for corrosion protection
- All barrels & wedges to be pretensioned to a minimum 8 tonnes to ensure the wedge teeth penetrate the strand to achieve maximum load capacity
- Suit 21.8 mm Superstrand Cables
- Bucket lid colour = yellow

Cable Diameter (mm)	Barrel Length (mm)	Barrel Diameter (mm)	Qty/Bucket
22	60	58	10

MM_CA_BW218MMD-Rev1

18 mm Barrel & Wedge

Features:

- Flat barrels & wedges are used with flat plates
- All barrels & wedges have an oil film coating and are pre-packaged in strong 4 litre buckets for corrosion protection
- All barrels & wedges to be pretensioned to a minimum 8 tonnes to ensure the wedge teeth penetrate the strand to achieve maximum load capacity
- Suit 18 mm Twin and Triple Strand Tendons and Trusses
- Bucket lid colour = white

Cable Diameter (mm)	Barrel Length (mm)	Barrel Diameter (mm)	Unit Weight (kg)	Qty/Bucket
18	57	50	0.72	10

MM_CA_BW18MM-Rev1

15.2 mm Barrel & Wedge

Features:

- Flat barrels & wedges are used with flat plates
- All barrels & wedges have an oil film coating and are pre-packaged in strong 4 litre buckets for corrosion protection
- All barrels & wedges to be pretensioned to a minimum 8 tonnes to ensure the wedge teeth penetrate the strand to achieve maximum load capacity
- Suit 15.2 mm Twin and Triple Strand Tendons and Trusses
- Bucket lid colour = white

Cable Diameter (mm)	Barrel Length (mm)	Barrel Diameter (mm)	Unit Weight (kg)	Qty/Bucket
15.2	44	42	0.42	20

MM_CA_BW15MM-Rev1

Trussing Splice Tube

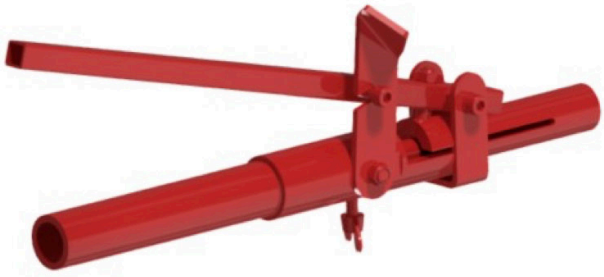
Features:

- Designed for joining truss tails
- All barrels & wedges to be pretensioned to a minimum 8 tonnes to ensure the wedge teeth penetrate the strand to achieve maximum load capacity
- Suit 15.2 mm or 18 mm Twin and Triple Strand Trusses

Length (mm)	Width (mm)	Unit Weight (kg)	Qty/Bucket
200	95	3.8	5

MM_CA_1518SPLICE-Rev1

Grout Guns



Features:

- Pressure rated quick connection to poly grouting hose
- Easy to use even with heavy rubber grouting gloves
- Colour coded to suit the grout hose colour code

Suit Tube Diameter (mm)	Colour code	Rated Working Pressure (Bar)	Length (mm)	Unit Mass (kg)
16		34.5	340	1.4
20		34.5	340	1.4

MM_CA_GROUTGUN16-GROUTGUN20-Rev1

Grout Lance – Screw In

Features:

- Suits common industry post groutable cable bolts
- Pressure rated
- Available with swivel to assist with screw in connection
- Available in length ranging from 200 mm to 2000 mm
- Available with either Minsup or Surelock fittings

Length (mm)	Thread Connection	Rated Working Pressure (Bar)
200 - 2000	½" BSP	200

MM_CA_LANCE31-Rev1

Push-Clamp on Grout Guns

Features:

- Light weight
- Fast push and clamp on grout lance
- Available to suit numerous different cable bolts and hollow dowels

Suit Cable	Colour Code	Rated Working Pressure (Bar)	Length (mm)
SUMOTEX	Red	34.5	500 - 1800
JW10TEX	Yellow	34.5	500 - 1800
JW10	N/A	34.5	500 - 1800

MM_CA_GROUTGUN70T500_Rev1

Grout and Breather Tube

Features:

- Pressure rated
- Available in rolls or cut to length

Tube O.D. (mm)	Tube I.D. (mm)	Pressure rating	Mass (kg/m)	Length per roll	Colour code
5	3	n/a	0.01	200	
16	12.5	PN16	0.07	300	
20	16	PN16	0.11	200	

30T Tensioners

Features:

- 30 tonne cable bolt tensioner
- MDG41 specification
- Light weight
- Low operating pressure (370 Bar)
- Double acting to release tensioner off the cable under hydraulic power
- Patented design has engineered out possible pressure intensification within the double acting cylinder by having equal advance and retract ram areas.
- Suits up to 29 mm diameter cable
- Patented design used special high capacity wedge setting springs to minimize tensioning bleed-off while maintaining a short tail on the cable bolts

Typical Applications:

- 31 mm Hollow cables, Goliath cables, Sumo Cables and SuperStrand
- Can be connected to continuous miners, air tracks or portable air/hydraulic power packs

Tensioning Capacity (kN)	Max. Operating Pressure (Bar)	Ram Area (cm2)	Stroke (mm)	Weight (kg)	Min. strand length required (mm)
294	370	79.9	87	14	100

Tiger Dollie

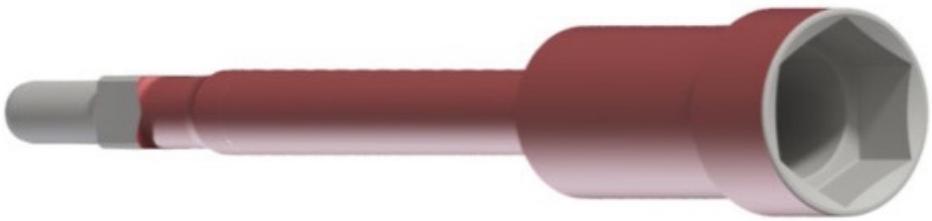
Features:

- Exclusively used for tensioning of the “TOTO” device
- Suitable for both TG “TOTO” and SuperStrand “TOTO”
- Locking square drive
- Hardened socket for long life
- Sealed components to prevent contaminants entering and interfering with spring function

Drive (mm)	Length (mm)	Maximum Diameter (mm)	Mass (kg)	Socket
25 mm square	460	70	5.5	ToTo device

MM_D_JDOTIGER-Rev1

Dolly suit TEX cables



Features:

- Lightweight design
- Long spigot to suit standard rigs and those with lobster rollers
- 55 mm A.F. Hex socket

Drive (mm)	Length (mm)	Cable drive (mm)
25 square	500	55 A.F.

MM_D_JDO650055TWH-Rev1

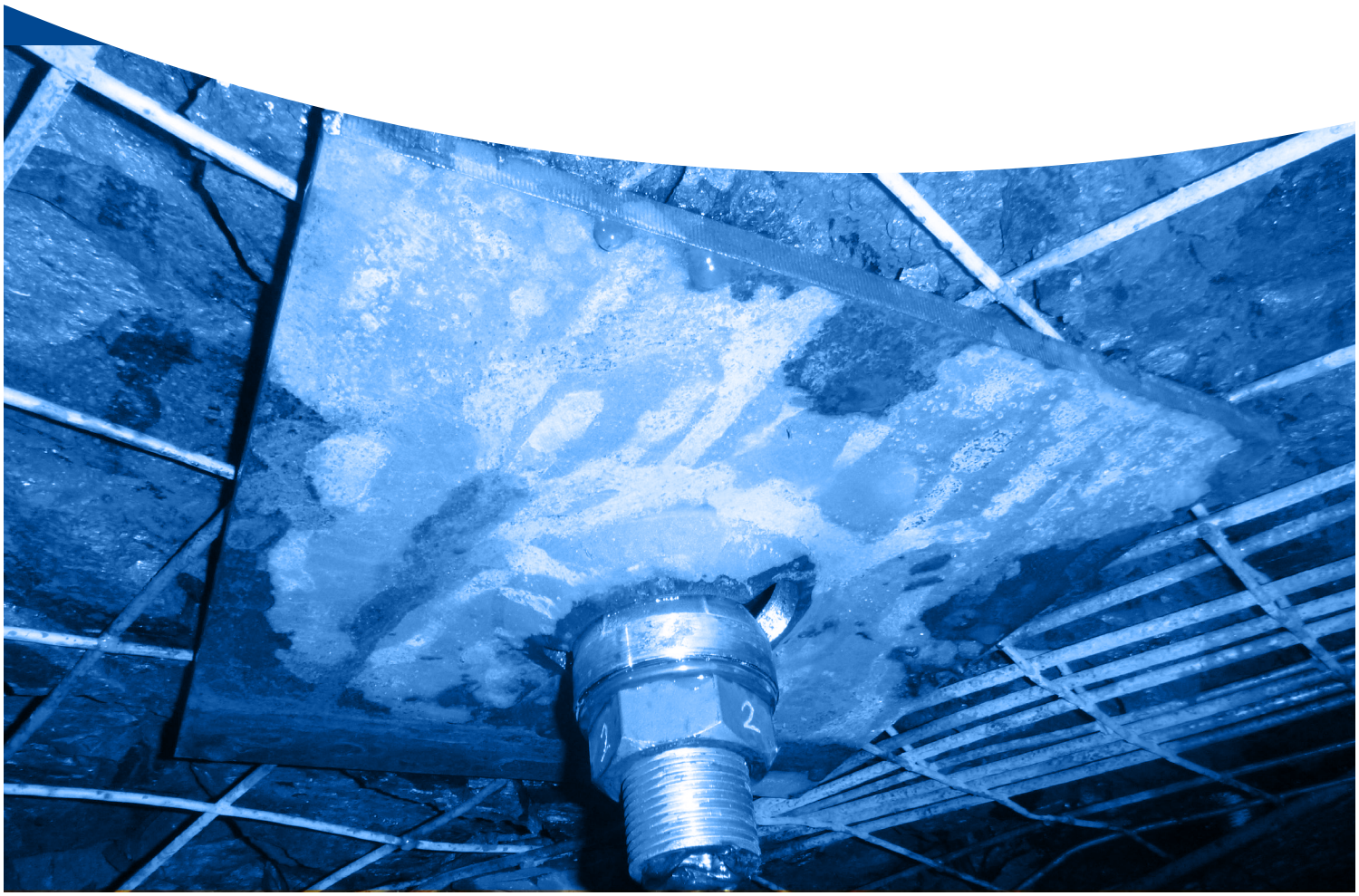
Dolly to suit 21.8 mm Superstrand

Features:

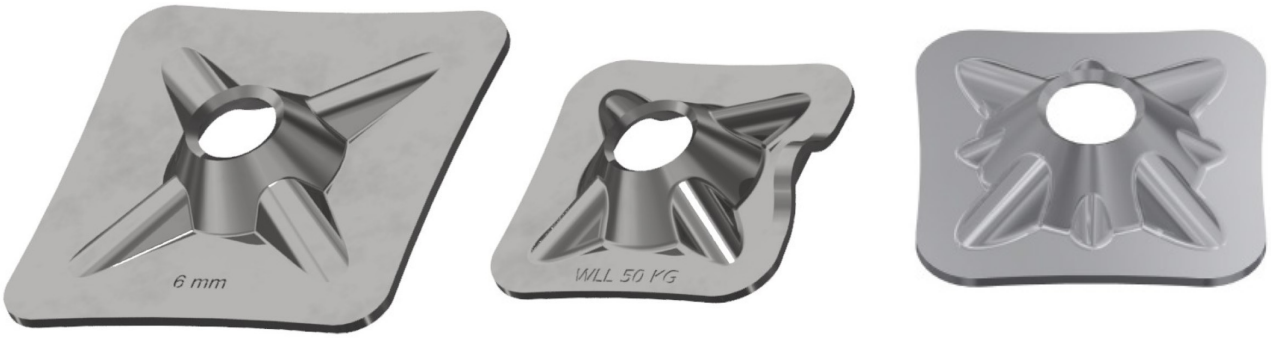
- Use for installation of 19 wire 21.8 mm Superstrand Cables
- Additional 36 A.F. Hex allows dual purpose use on M24 rock bolts
- Internal flower drive with water flush cleaning feature
- 25 mm locking square drive for use with common coal mining bolting rigs

Drive (mm)	Length (mm)	Cable drive	Socket (mm)
25 square	350	Superstrand	36 A.F.

PLATES



Kanga Plate



Features:

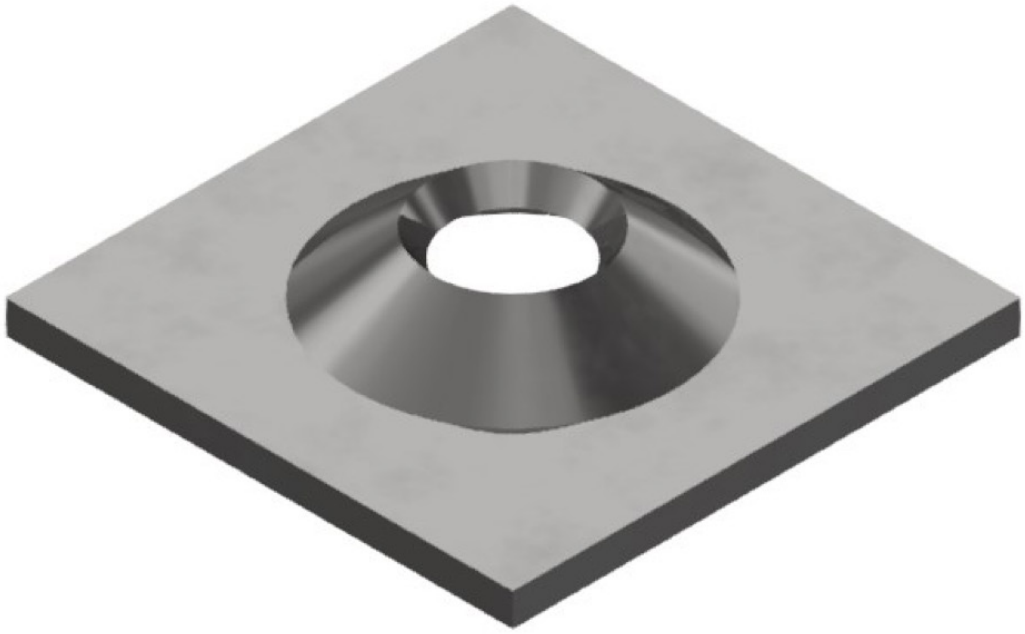
- High load bearing characteristics
- Light weight and rounded corners
- Lesser tendency to cut mesh upon loading
- Varying combination plate applications available

Square dimension (mm)	Thickness (mm)	Hole diameter (mm)	Mass (kg)	Quantity/Pallet	Min Collapse Load (kN)
150 x 150 (4 rib)	5	38	0.85	980/pallet	201
150 x 150 (8 rib)	5	38	0.85	980/pallet	201
150 x 150	6	38	1.02	980/pallet	245
200 x 200	5	38	1.53	500/pallet	201
200 x 200	6	38	1.83	500/pallet	245

Available with hanger slots

Available plain or hot dipped galvanised

Roof Bolt Volcano Plate



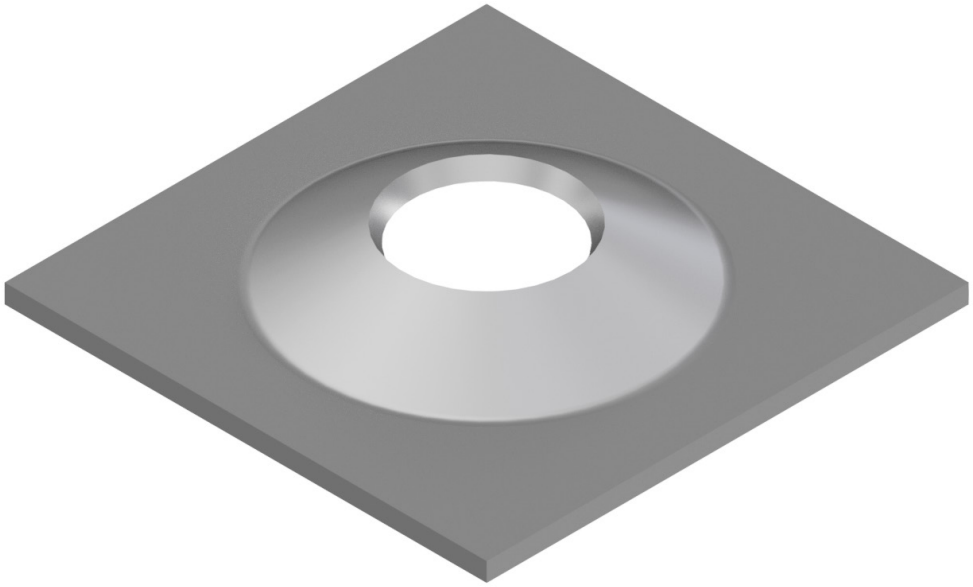
Features:

- Dome profile allows for 18° angles of alignment when installing the rock bolt with a domed ball washer
- Available as “rumbled” to take off sharp edges

Square dimension (mm)	Thickness (mm)	Hole diameter (mm)	Minimum Collapse load (kN)	Minimum Pull Through load (kN)	Mass (kg)	Standard pack
150 x 150	10	36	216	294	1.76	980/pallet

Available plain or hot dipped galvanised

Hawkeye Bolt Volcano Plate



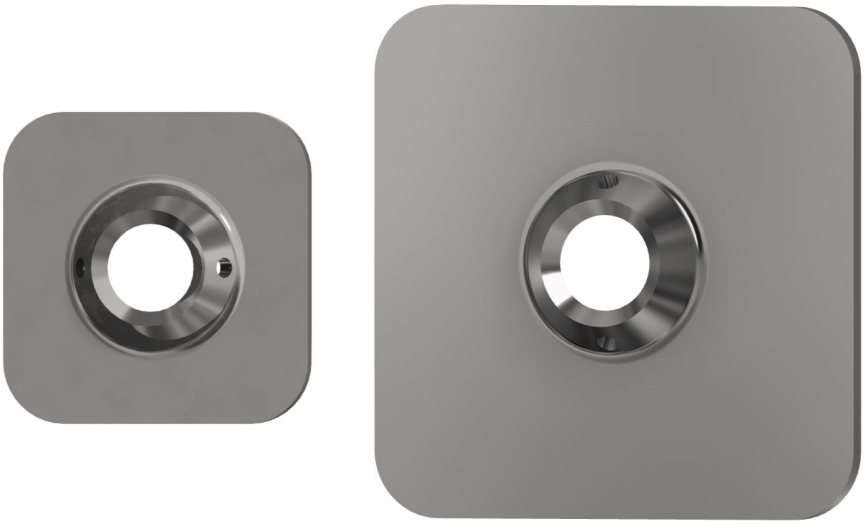
Features:

- Designed to suit the low profile Hawkeye 'X' grade bolt
- Dome profile allows for 15° angles of alignment when installing the rock bolt with a domed ball washer
- Available as "rumbled" to take off sharp edges

Square dimension (mm)	Thickness (mm)	Hole diameter (mm)	Minimum Collapse load (kN)	Minimum Pull Through load (kN)	Mass (kg)	Standard pack
150 x 150	6	46	200	200	1.0	980/pallet

Available plain or hot dipped galvanised

Cable Volcano Plate - TEX, 70T SUMO & Hollow Cables



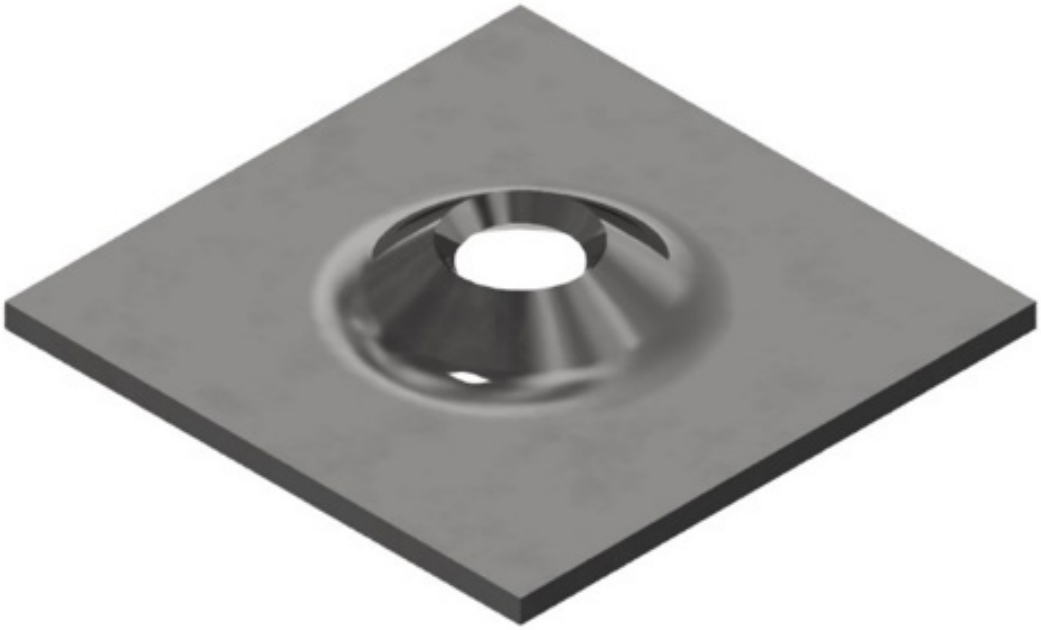
Features:

- Dome profile allows for 18° angles of alignment when installing the cable bolt with a domed barrel
- Grout indicator slots

Dimension (mm)	Thickness (mm)	Hole diameter (mm)	Minimum Collapse Load (kN)	Minimum Pull through load (kN)	Mass (kg)	Standard pack
300 x 300	12	56	294	441	8.5	100
200 x 200	12	56	294	441	3.8	200

Tested over a 150 mm span

Cable Volcano Plate - Goliath



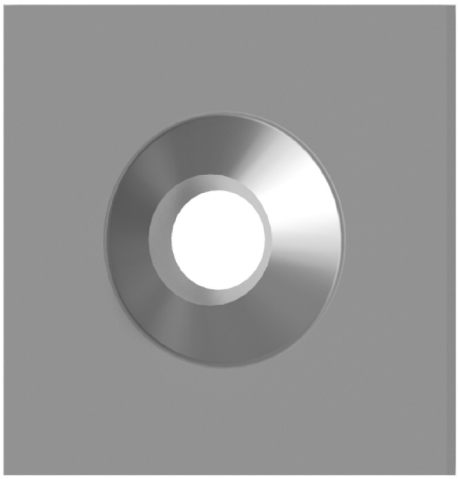
Features:

- Dome profile allows for 18° angles of alignment when installing the cable bolt with a domed barrel

Dimension (mm)	Thickness (mm)	Hole diameter (mm)	Minimum Collapse load (kN)	Minimum Pull through load (kN)	Mass (kg)	Standard pack
300 x 300	14	54	491	785	9.7	100

Tested over a 150 mm span

Volcano Plates to suit Superstrand B&W and ToTo



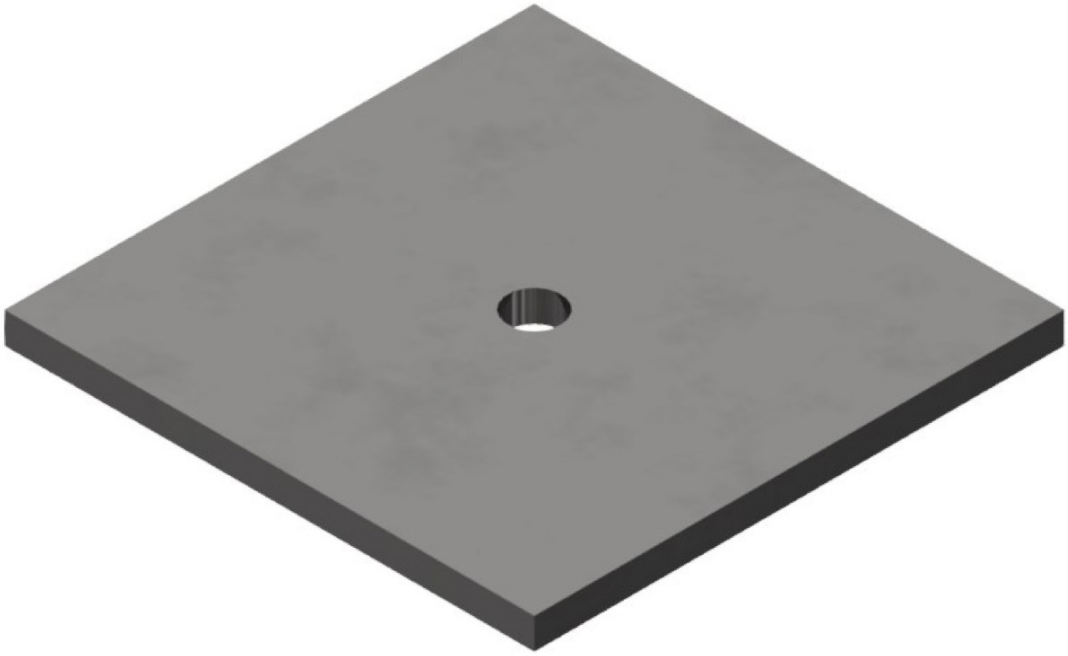
Features:

- Dome profile allows for 18° angles of alignment when installing the cable bolt with a domed barrel

Property	JV20201242	JV20201242C	JV30301242
Length (mm)	200	200	300
Width (mm)	200	200	300
Thickness (mm)	12	12	12
Hole Diameter (mm)	42	42	42
Mass (kg)	3.8	3.8	8.5
Standard Pack size	200	200	100
Min Collapse Laod (kN)	147	196	147
Min Pull Through Load (kN)	343	441	343

Tested over a 150 mm span

Flat Plate



Features:

- Can be supplied “rumbled” to take off edges. Unless specified, plates are supplied un-rumbled
- Used predominately with 15.2 mm cable bolts. Can be supplied with 2 holes for cable bolting and grout tube application
- 200 x 200 mm plates are often used on single tail twin-strand cable bolts with a flat barrel and wedge, Can be used in conjunction with a pizza pan
- Available as galvanised or black

Dimension (mm)	Thickness (mm)	Hole diameter (mm)	Mass (kg)	Standard pack
200 x 200	10	20	3.1	250

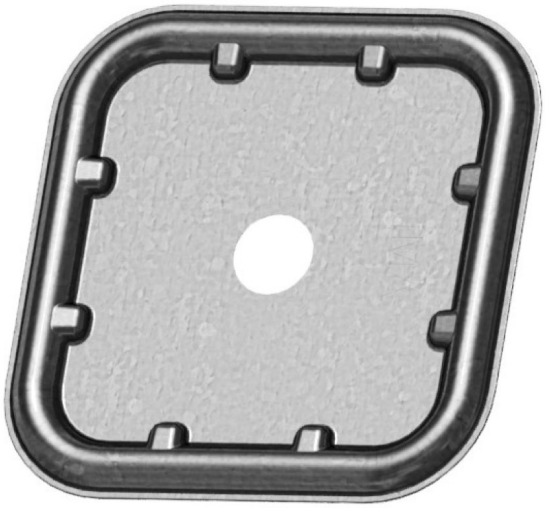
Domed Butterfly Plate

Features:

- A high tensile 2.4 mm thick domed profile to provide the strength in a single bearing plate for rib support applications
- Has service slots for suspension of light items
- Has user friendly rounded corners
- Available as galvanised

Length (mm)	Width (mm)	Thickness (mm)	Hole diameter (mm)	Minimum Collapse load (kN)	Minimum Pull Through load (kN)	Mass (kg)	Standard pack
300	280	2.4	34	27	78	1.75	960/pallet

Surface Support Plates

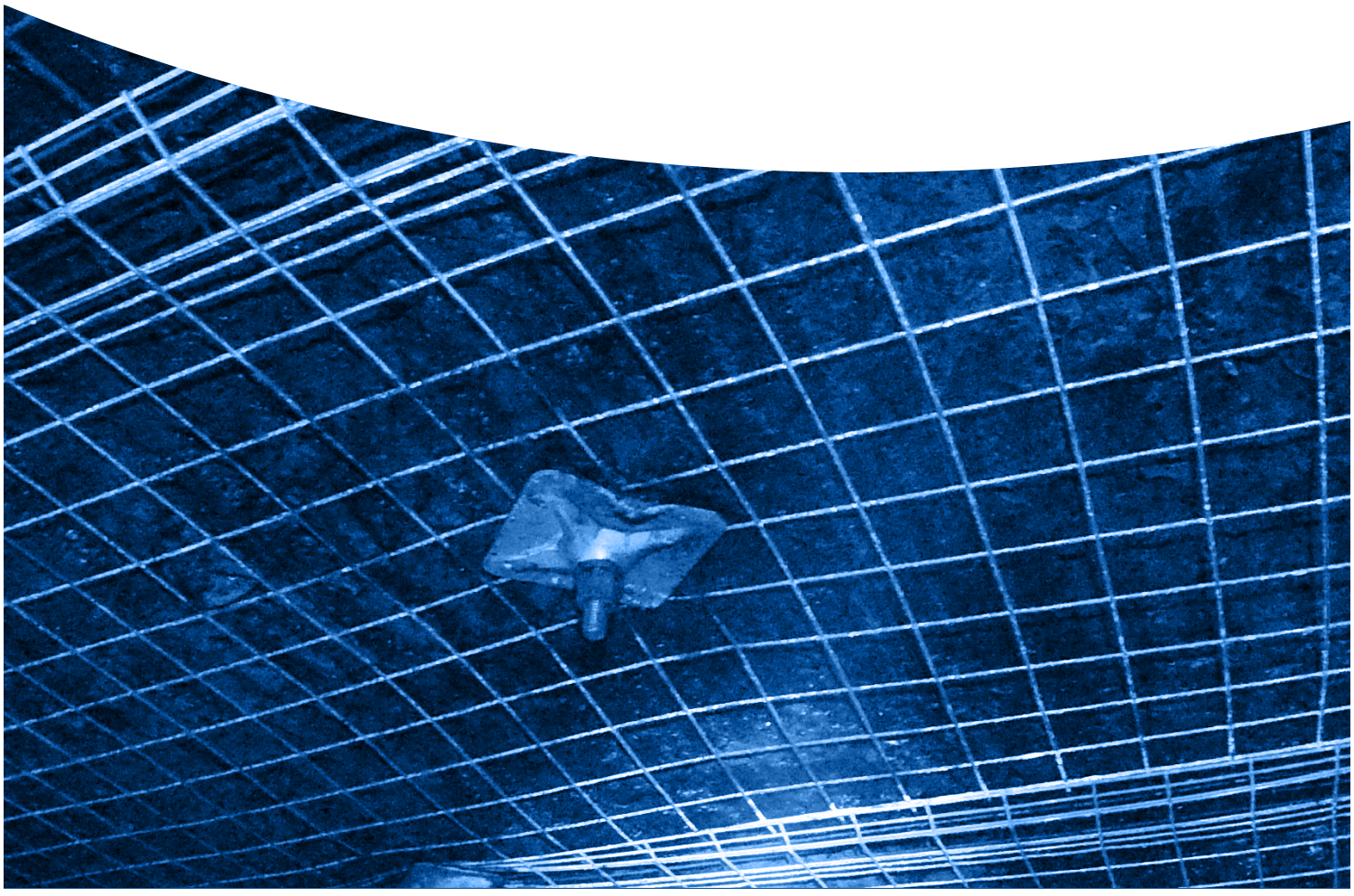


Features:

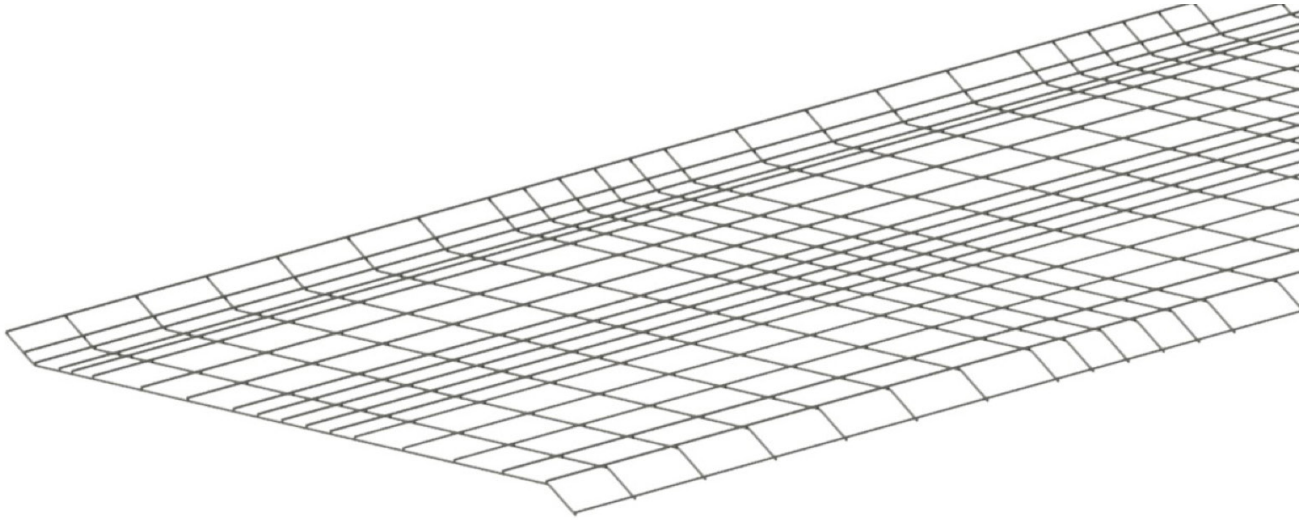
- Rolled safety edges and corners to eliminate handling cuts
- Re-inforced rolls around the perimeter for extra rigidity
- Used in combination with a bearing plate, ideal for rib confinement
- Ideal for use on Husker Mesh on longwall bolt-ups

Length (mm)	Width (mm)	Thickness (mm)	Hole diameter (mm)	Mass (kg)	Standard pack
300	280	1.9	50	1.32	960/pallet
300	300	0.8	50	0.84	1000/pallet
450	450	0.8	50	1.59	250/pallet

MESH



Steel Roof Mesh Module



Features:

- Turned edges for interlocking of modules and to maintain stiffness for ease of handling over the top of a continuous miner
- Re-inforced areas for lateral linking of bolts across the strata
- Wire diameters, spacing and overall dimensions can be customised to suit particular applications
- Customised paint lines along the modules to suit roof bolt patterns

Standard Mesh

Wire diameter (mm)	Wire Typical UTS (kN)	Weld Strength* (kN)
4.0	6.3	4.7
5.0	9.8	7.4
5.6	12.3	9.2

MM_M_RIBMESH_Rev2

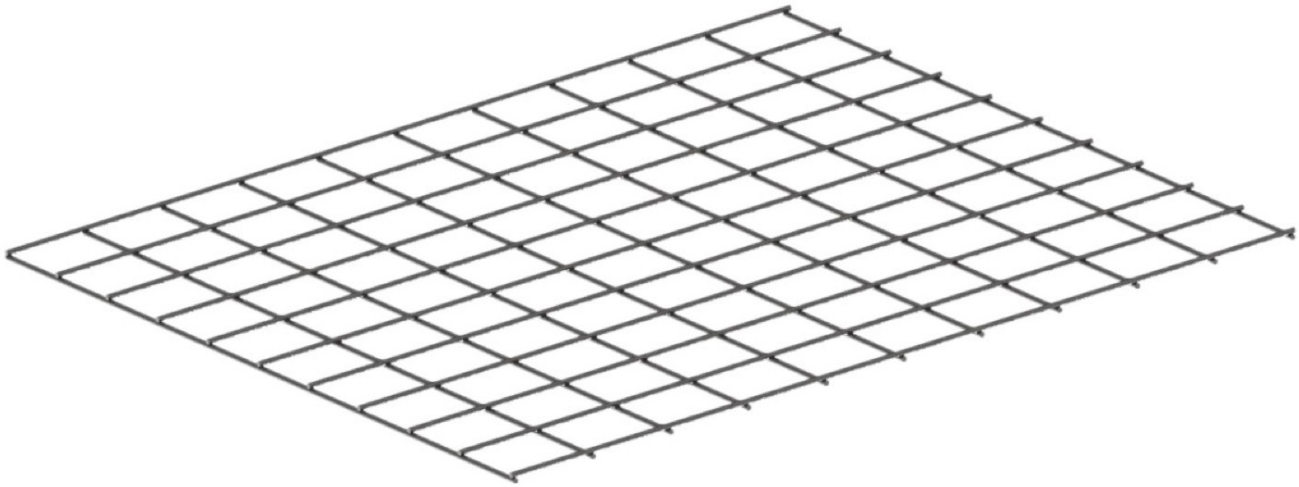
GX Mesh

Wire diameter (mm)	Wire Typical UTS (kN)	Weld Strength* (kN)
4.0	9.4	7.1
4.75	13.3	10.0
5.0	14.7	11.0
5.6	18.5	13.9

MM_M_GXBMESH_Rev1

**for weld shear, if it is a combination of different wire diameter, the spec is based on the smallest wire diameter specification

Steel Rib Mesh Sheet



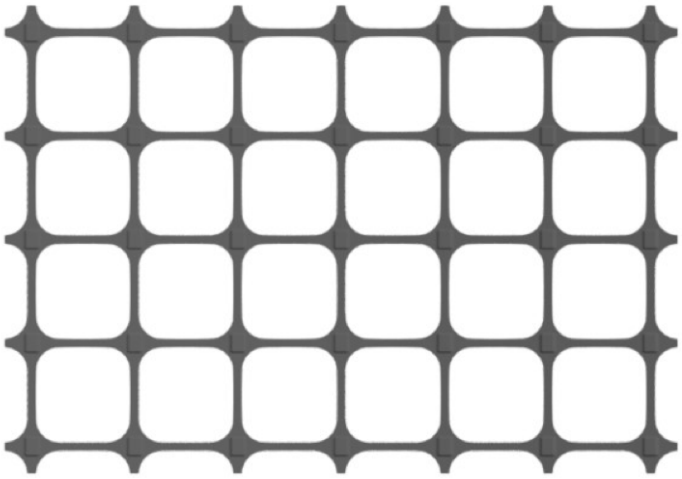
Features:

- Typically flat sheets of smaller wire diameter and dimensions suitable for rib support
- Wire diameters, spacing and overall dimensions can be customized to suit particular applications

Wire diameter (mm)	Wire Typical UTS (kN)	Weld Strength (kN)
3.15	3.1	2.5
4	6.3	4.7
5	8.5	7.5

Available galvanised

Plastic Mesh



Features:

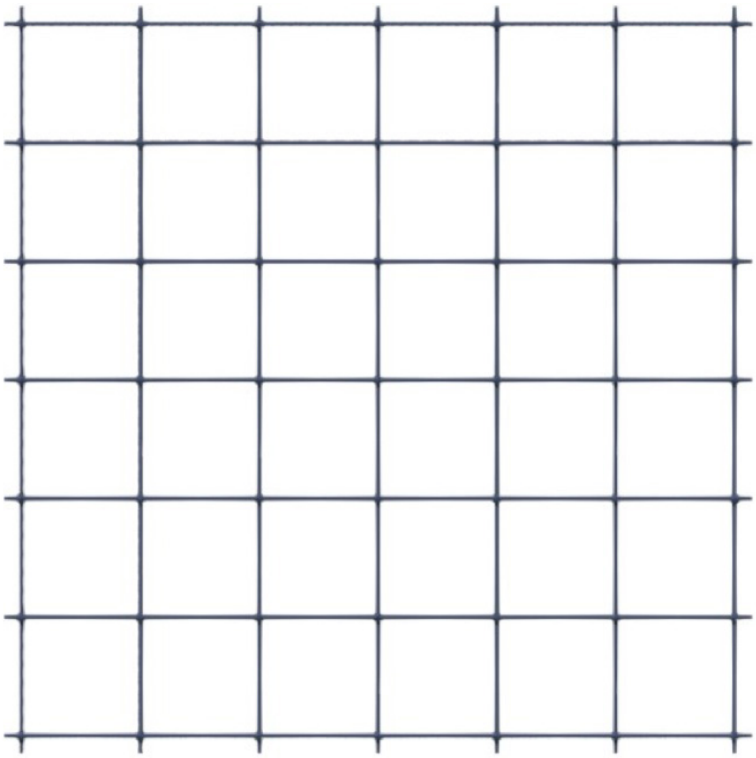
- Available in rolls or custom cut flat sheets
- Commonly used for surface support that will later be cut by the continuous miner or longwall shearer

Minimum Tensile Strength (kN/m)	Minimum Elongation at Yield %	Aperture (mm)	Roll Dimensions (m)
22	10	61 x 61	28 x 2
45	10	65 x 65	50 x 2

Fire resistant to MDG3608

Available in flat sheets cut to custom dimensions

Fibreglass Mesh



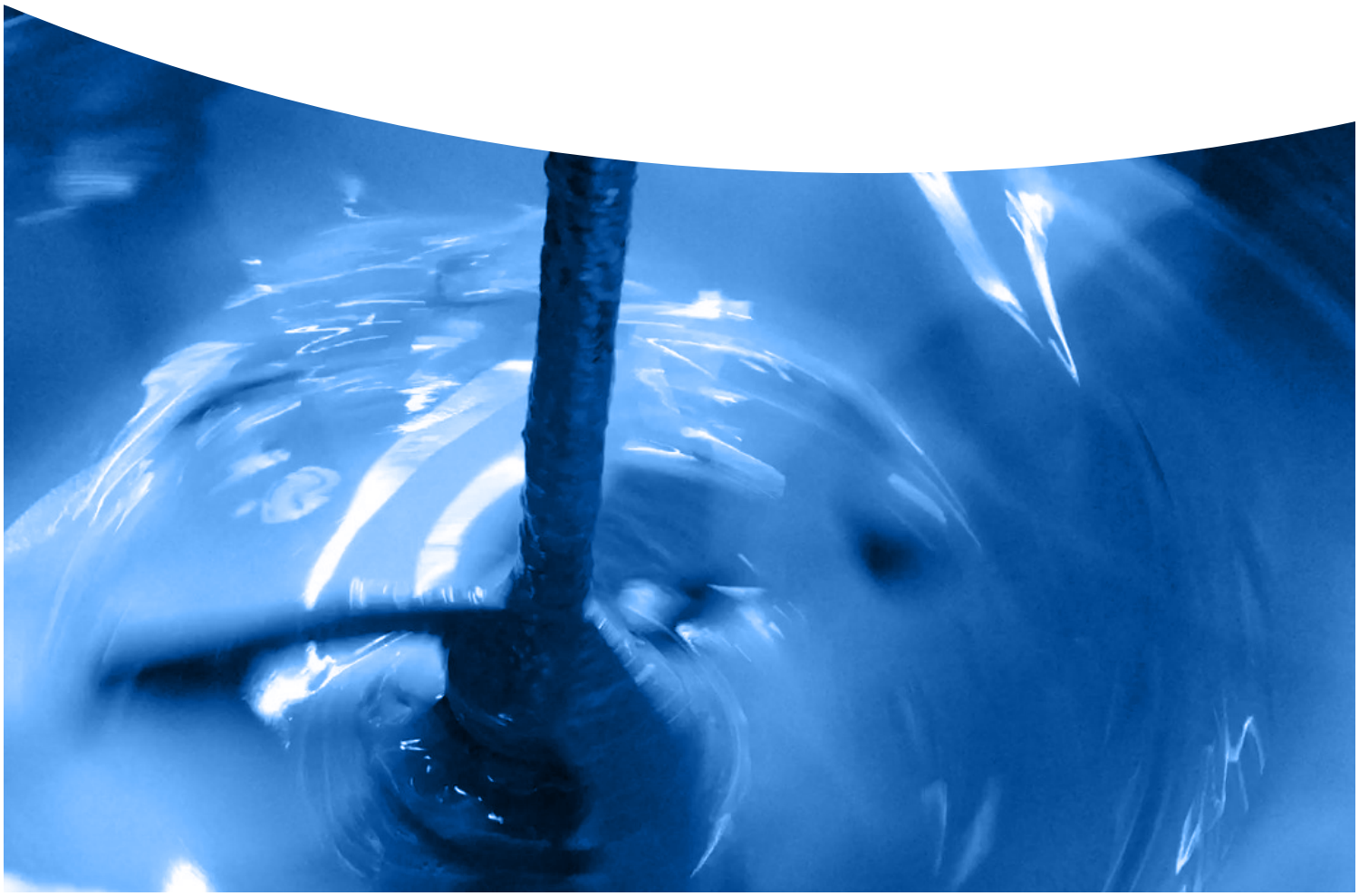
Features:

- Available in custom rigid flat sheets
- Commonly used for surface support that will later be cut by the continuous miner or longwall shearer

Rod Diameter (mm)	Breaking load of rod (kN)	Load at knot (kN)	Aperture (mm)
4	12.5	2-3	100 x 100
6	28	3-5	100 x 100

Available in flat sheets to custom dimensions

SPECIALTY GROUT & CEMENT



Bottom-Up 100 MPa Grout (BU100)

Bottom-Up 100 grout is a pumpable cementitious grout for use as a bonding agent between a reinforcing member and the borehole wall in ground support systems. The product is packaged in durable moisture resistant 20 kg bags for use in remote and harsh underground mining environments.
The product is designed to minimise the risk of hard lumps entering pumping injection systems, which in turn minimises hazardous pressurisation and blockages.

Features:

- Low water addition – 5-6 litres per bag
- Very high strength – 100 MPa
- Thinner consistency suits bottom-up grounting and promotes migration into fractured strata to aid in consolidation
- Excellent pumpability
- Shrinkage compensation maintains full grout contact between the ground support and borehole wall

Applications:

- Bottom-up grouting
- Strata consolidation

Freshly Wet Density	2100 kg/m^3
Yield Estimate	12-13 litres per bag
Set Time	7 hours
Expansion	1-3%

Uniaxial Compressive Strength* (MPa)

	1 Day	7 Days	28 Days
5 L/bag	60	100	105
6 L/bag	55	90	100

Top-Down 80 MPa Grout (TD80)

TD-80 grout is a pumpable cementitious grout for use as a bonding agent between a reinforcing member and the borehole wall in ground support systems. The product is packaged in durable water resistant 20 kg bags for use in remote and harsh underground mining environments. The product is designed to minimise the risk of hard lumps entering pumping injection systems, which in turn minimises hazardous pressurisation and blockages.

Features:

- High strength 80 Mpa thixotropic cable bolt grout for "top-down" grouting
- Ready to use, requires only the addition of water and mixing
- Non shrink, unique shrinkage compensation formulation
- Excellent pumpability

Application:

- Top-down grouting of groutable cable bolts

Packaging:

- TD80 Grout is packaged in 20kg woven polypropylene bags. Bags are stacked and stretch wrapped onto a wooden pallet for transport. 56 x 20kg bags per pallet

Technical Data

Fresh Wet Density	2000 kg/m^3 (6L water per 20kg bag)
Yield Estimate	13-14 L per bag
Set Time	7 hours
Expansion	1-3%

Uniaxial Compressive Strength* (MPa)

Days	1 Day	7 Days	28 Days
6L/20kg bag	35	78	107
7L/20 kg bag	25	70	96
8L/20 kg bag	16	46	78

*UCS independent test results were obtained using 50x50x50 mm cubes, tested per AS 1478.2

Shelf Life:

- 12 months from manufacture when stored in a cool, dry area, away from direct sunlight and in original packaging.

Storage:

- Store in original packaging in a dry cool area

JURR Grout (Jennchem Underground Roadway Repair)

Jennchem JURR Grout is a specially formulated fast-setting concrete designed for the mining and tunnelling industries. JURR Grout is designed specifically for demanding applications where quick return to service is required, or where traditional concrete mixing equipment is unavailable or impractical. JURR Grout is formulated to absorb water and gain strength rapidly with no mixing. JURR Grout is ideal for rehabilitating underground roadways and filling mud holes and swillies. JURR Grout is a safer, more permanent solution than temporary bridges or traditional fill methods.

Features:

- Extremely fast setting
- Simple application
- Quick return to service
- Safe to use
- Minimal dust make
- No mixing required
- Packaged in 1 tonne or 20kg bags
- Increases underground development production in wet conditions
- Fit for purpose QDS applicator available

Packaging:

- 20kg bags. (56 per pallet)
- 1 tonne bulk bags

Shelf Life:

- One year when stored in cool dry conditions

Yield:

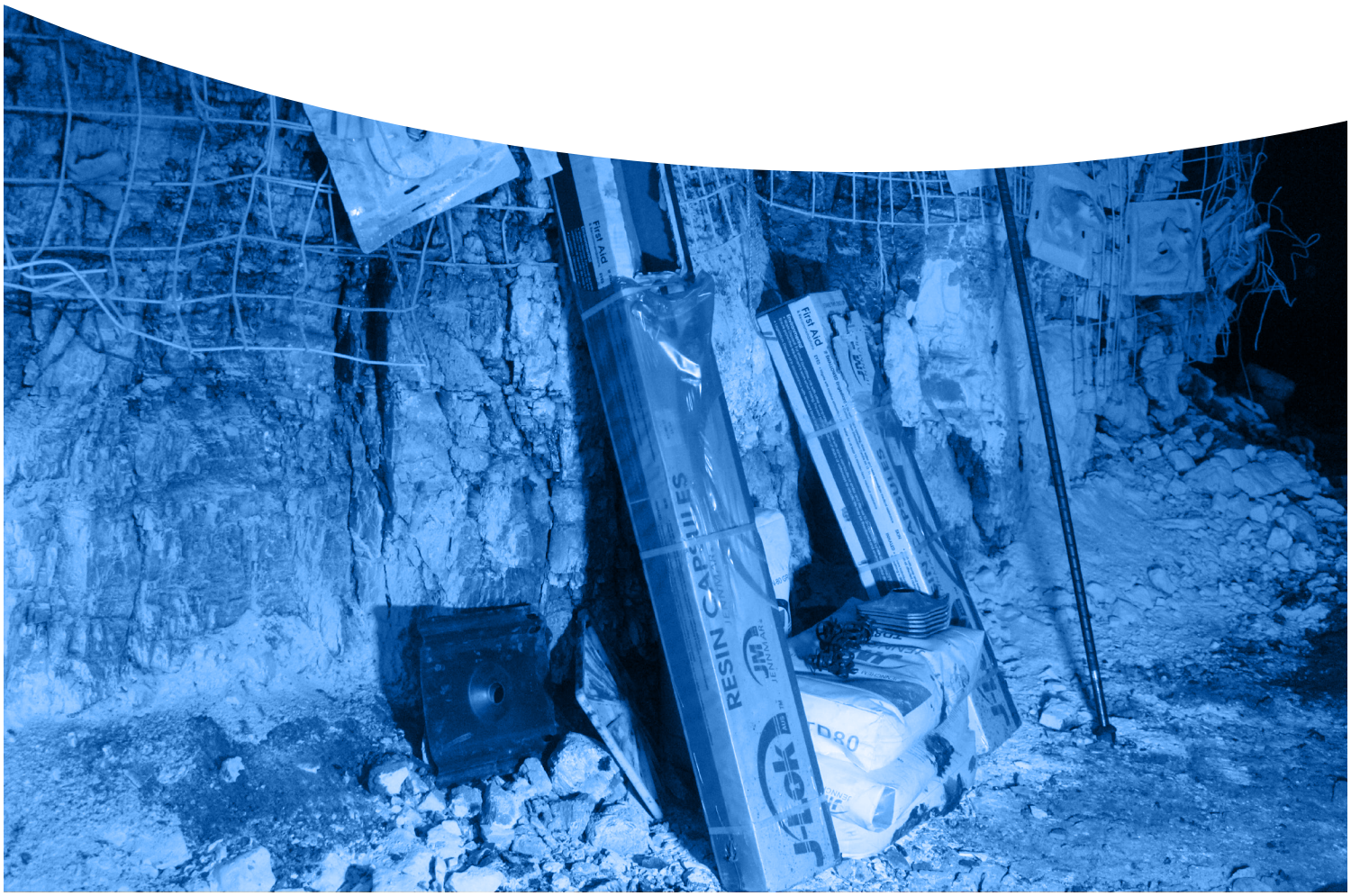
- 20kg: Approx. 15.4 litres
- 1000kg: Approx. 0.77m3

Set / Cure Time

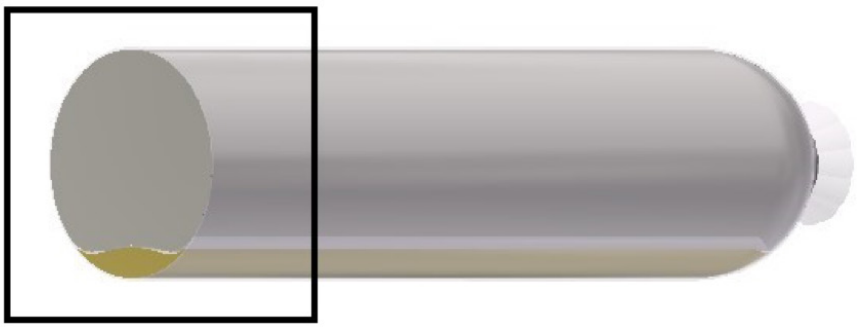
Foot Traffic	Light Duty Traffic (Driftrunner)	Heavy Duty Traffic (Shuttle car, Jumbo)	Extreme Duty Traffic (Continous miner)
10 minutes	30 minutes	4 hours	8 hours

Note: Hot materials (and/or water) will accelerate set times and strength gain. Cold materials will slow set times and strength gain. pH and chemistry of water may affect set time and strength gain.

RESIN CAPSULES



SPIN2STALL® Resin Capsules



Features:

- Increased productivity – no waiting around for resin to cure before tightening the nut
- No counting of spin or hold times – consistent installations
- Self-auditing bolt installation – based upon remnant thread length of the bolt which provides an indication of the standard of installation
- High pre-tension levels can still be achieved
- Extensive research and independent testing shows minimal damage to resin bond using spin to stall technique
- Uses a J-Lok dual speed cure accelerated specifically formulated resin capsule and Jennmar bolt with engineered accurate and reliable pin break out level
- Available in fast set speeds usually incorporating 50:50 proportions of Fast A speed: slow set

Punched shear strength (MPa)	>22 MPa	
Shelf life (months)	4	
Capsule length (mm)	800 – 1000	1100 – 1400
Quantity / box	25	20
Quantity / pallet	1050	840

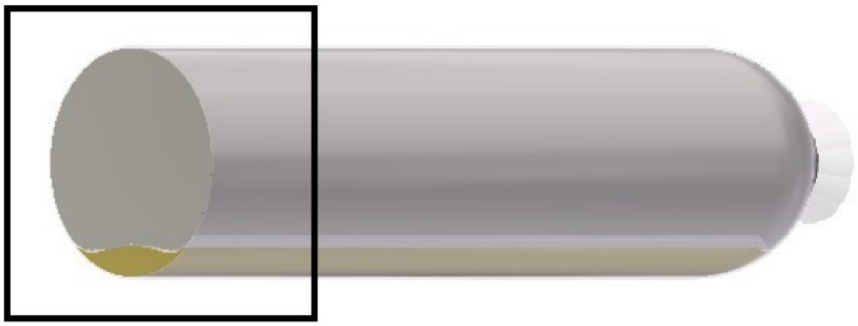
Grit limestone filler configuration
Must only be installed using spin2stall technique when used with the appropriate JX bolt and shear-pin.

*Relevant specifications are taken at 25°C

SPIN2STALL® is a registered trade mark of FCI Holdings Delaware, Inc

To mix, apply rotation and feed bolt up through the capsule at a rate of 1 sec per 100 m of capsule (eg 1200 mm capsule = 12 sec). Continue mixing at the back of the hole until the bolt is tightened to motor stall.

Standard Dual Speed (Oil Based Catalyst) Resin Capsules



Features:

- Separate resin mastic and catalyst encased within a thin plastic film, sealed at each end by wire clips
- Standard oil based catalyst as approximately 7% of capsule volume
- For full encapsulation of pre-tensioned rock bolts
- Available in diameters of 25, (nominal), 26, 30, 36 mm
- Available in dual speed ratios 50:50, 40:60
- Other combinations available on request

Punched shear strength (MPa)	>22 MPa		
Shelf life (months)	4		
Capsule length (mm)	800 – 1000	1100 – 1500	1600 – 1700
Quantity / box	25	20	15
Quantity / pallet	1050	840	720

Speed	Superfast/slow	Extrafast/slow	Fast/slow	Medium/slow
Hold time (s)	10 - 60	12 - 60	14 - 60	19 - 60

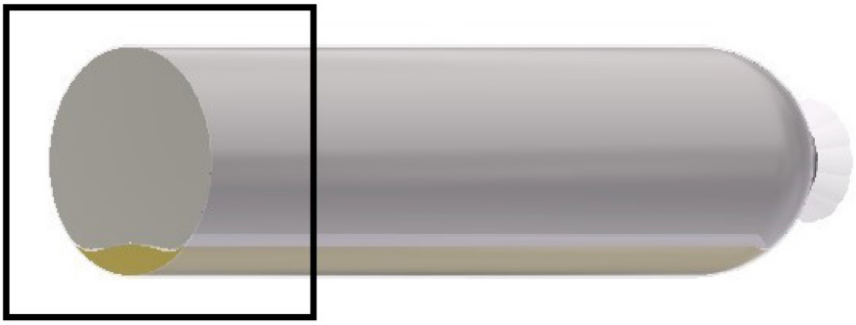
Refer to individual box label for spin and hold installation instructions

Available in standard, grit and LIF limestone filler configurations

Capsules ≥ 1000 mm in length: To mix, apply rotation and feed the bolt up through the capsule at a rate of 1 sec per 100 mm of capsule (eg 1200 mm capsule = 12 sec). Continue mixing at the back of the hole for an additional 2-4 seconds then wait for the resin to set.

Capsules < 1000 mm in length: To mix, apply rotation and feed the bolt up through the capsule at a rate of 1 sec per 100 mm of capsule. Continue mixing until the total mix time = 10 sec then wait for the resin to set.

Standard Single Speed (Oil Based Catalyst) Resin Capsules



Features:

- Separate resin mastic and catalyst encased within a thin plastic film, sealed at each end by wire clips
- Standard oil based catalyst as approximately 7% of capsules
- For general purpose anchoring of typical rebar rock bolts
- Available in diameters of 25, (nominal), 26, 30, 36 mm
- Available gel times range from 10 seconds to 1.5 minutes

Punched shear strength (MPa)	>22 MPa		
Shelf life (months)	4		
Capsule length (mm)	800 – 1000	1100 – 1500	1600 – 1700
Quantity / box	25	20	15
Quantity / pallet	1050	840	720

Speed	Superfast	Extrafast	Fast	Medium	Slow
Hold time (s)	4	4	4	8	80

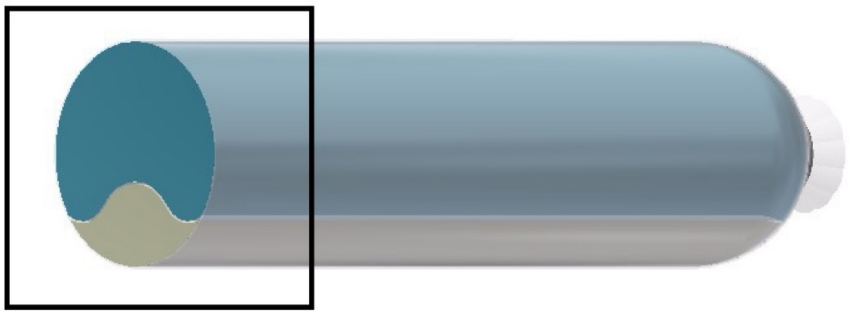
Refer to individual box label for spin and hold installation instructions

Available in standard, grit and LIF limestone filler configurations

Capsules ≥ 1000 mm in length: To mix, apply rotation and feed the bolt up through the capsule at a rate of 1 sec per 100 mm of capsule (eg 1200 mm capsule = 12 sec). Continue mixing at the back of the hole for an additional 2-4 seconds then wait for the resin to set.

Capsules < 1000 mm in length: To mix, apply rotation and feed the bolt up through the capsule at a rate of 1 sec per 100 mm of capsule. Continue mixing until the total mix time = 10 sec then wait for the resin to set.

‘5 Star’ Dual Speed (Water Based Catalyst) Resin Capsules



Features:

- Water based catalyst as 20–30% of capsule volume compared to the traditional 5-10%
- Provides superior mixing
- Available in diameters of 25, (nominal), 26, 30, 36 mm
- For full encapsulation of pre-tensioned rock bolts
- Cost effective

Punched shear strength (MPa)	>22 MPa		
Shelf life (months)	4		
Capsule length (mm)	800 – 1000	1100 – 1500	1600 – 1700
Quantity / box	25	20	15
Quantity / pallet	1050	840	720

Speed	Superfast/Slow	Extrafast/Slow	Fast/Slow	Medium/Slow
Hold time (s)	10 - 60	12 - 60	14 - 60	19 - 60

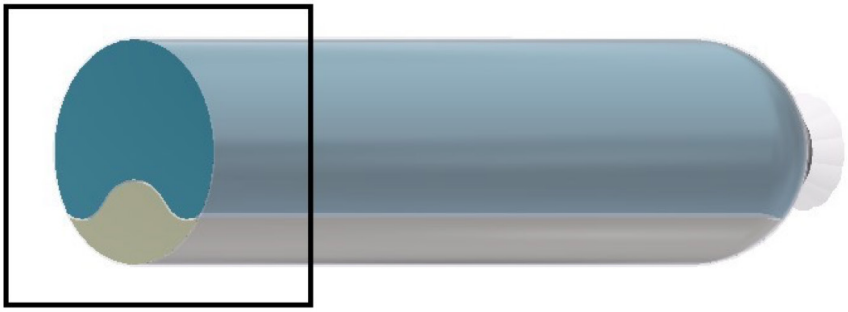
Refer to individual box label for spin and hold installation instructions

Available in standard or grit limestone filler configurations

Capsules ≥ 1000 mm in length: To mix, apply rotation and feed the bolt up through the capsule at a rate of 1 sec per 100 mm of capsule (eg 1200 mm capsule = 12 sec). Continue mixing at the back of the hole for an additional 2-4 seconds then wait for the resin to set.

Capsules < 1000 mm in length: To mix, apply rotation and feed the bolt up through the capsule at a rate of 1 sec per 100 mm of capsule. Continue mixing until the total mix time = 10 sec then wait for the resin to set.

‘5 Star’ Single Speed (Water Based Catalyst) Resin Capsules



Features:

- Water based catalyst as 20–30% of capsule volume compared to the traditional 5-10%
- Provides superior mixing
- Available in diameters of 25, (nominal), 26, 30, 36 mm
- For anchoring of all types of rock bolts
- Cost effective

Punched shear strength (MPa)	>22 MPa		
Shelf life (months)	4		
Capsule length (mm)	800 – 1000	1100 – 1500	1600 – 1700
Quantity / box	25	20	15
Quantity / pallet	1050	840	720

Speed	Superfast	Extrafast	Fast	Medium	Slow
Hold time (s)	4	4	4	8	80

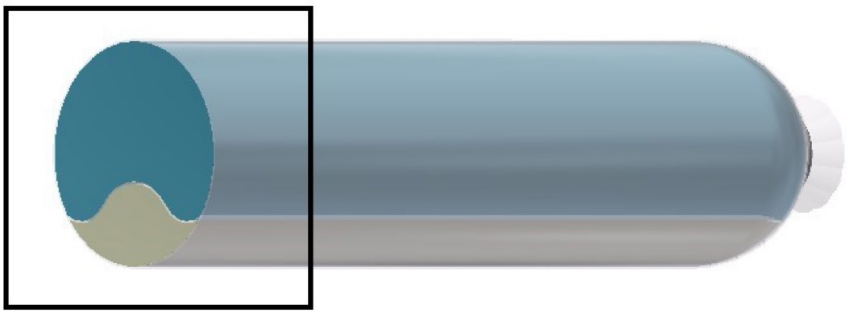
Refer to individual box label for spin and hold installation instructions

Available in standard or grit limestone filler configurations

Capsules ≥ 1000 mm in length: To mix, apply rotation and feed the bolt up through the capsule at a rate of 1 sec per 100 mm of capsule (eg 1200 mm capsule = 12 sec). Continue mixing at the back of the hole for an additional 2-4 seconds then wait for the resin to set.

Capsules < 1000 mm in length: To mix, apply rotation and feed the bolt up through the capsule at a rate of 1 sec per 100 mm of capsule. Continue mixing until the total mix time = 10 sec then wait for the resin to set.

Post Grout Cable (Water Based Catalyst) Resin Capsules



Features:

- Designed for Point Anchoring of cable bolts for tensioning prior to being post grouted
- Catalyst compartment comprising 20% of the capsule volume
- Improved mixing of resins in larger diameter drill holes
- Cost effective
- Comes with resin retainer

Punched shear strength (MPa)	>22 MPa		
Shelf life (months)	4		
Capsule length (mm)	650	800 – 1000	1200
Quantity / box	15	10	9
Quantity / pallet	720	420	378

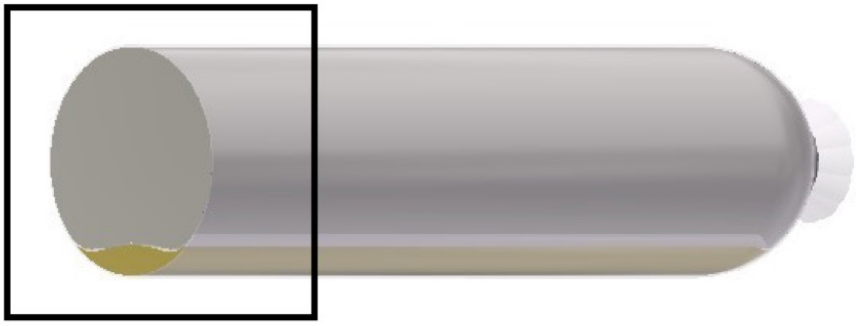
Speed	Medium	Slow
Hold time (s)	19	80

Refer to individual box label for spin and hold installation instructions
Available in standard or grit limestone filler configurations

Capsules ≥ 1000 mm in length: To mix, apply rotation and feed the bolt up through the capsule at a rate of 1 sec per 100 mm of capsule (eg 1200 mm capsule = 12 sec). Continue mixing at the back of the hole for an additional 2-4 seconds then wait for the resin to set.

Capsules < 1000 mm in length: To mix, apply rotation and feed the bolt up through the capsule at a rate of 1 sec per 100 mm of capsule. Continue mixing until the total mix time = 10 sec then wait for the resin to set.

Post Grout Cable (Oil Based Catalyst) Resin Capsules



Features:

- Designed for Point Anchoring of cable bolts for tensioning prior to being post grouted
- Catalyst compartment comprising 7% of the capsule volume
- Comes with resin retainer

Punched shear strength (MPa)	>22 MPa		
Shelf life (months)	4		
Capsule length (mm)	650	800 – 1000	1200
Quantity / box	15	10	9
Quantity / pallet	720	420	378

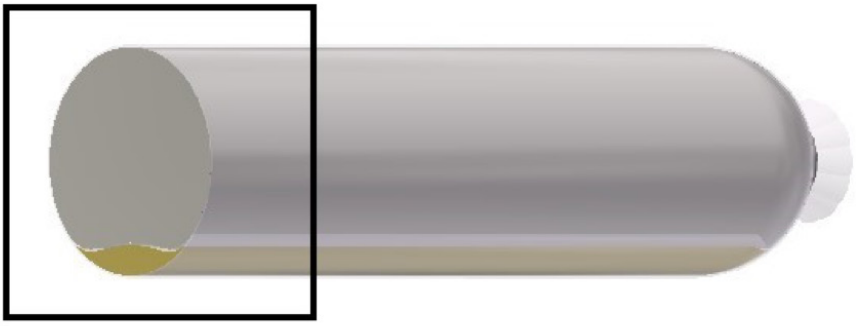
Speed	Medium	Slow
Hold time (s)	19	80

Refer to individual box label for spin and hold installation instructions

Capsules ≥ 1000 mm in length: To mix, apply rotation and feed the bolt up through the capsule at a rate of 1 sec per 100 mm of capsule (eg 1200 mm capsule = 12 sec). Continue mixing at the back of the hole for an additional 2-4 seconds then wait for the resin to set.

Capsules < 1000 mm in length: To mix, apply rotation and feed the bolt up through the capsule at a rate of 1 sec per 100 mm of capsule. Continue mixing until the total mix time = 10 sec then wait for the resin to set.

Twin ‘H’ Resins (Oil Based Catalyst) Resin Capsules



Features:

- Low insertion force formulation
- For anchoring flexible cable tendons in a small annulus
- Separate resin mastic and catalyst encased within a thin plastic film, sealed at each end by wire clips
- Oil based catalyst as 7% of capsule
- Typical nominal diameter of 25 mm
- Available gel times of 90 seconds and 20 minutes

Punched shear strength (MPa)	>22 MPa	
Shelf life (months)	4	
Capsule length (mm)	1650	2200
Capsule diameter (mm)	32	25.5
Quantity / box	8	11

Speed	Fast/XXSlow	Medium/XXSlow
Hold time (s)	12-1200	19-1200

Refer to individual box label for spin and hold installation instructions

Available in standard, grit and LIF limestone filler configurations

Capsules ≥ 1000 mm in length: To mix, apply rotation and feed the bolt up through the capsule at a rate of 1 sec per 100 mm of capsule (eg 1200 mm capsule = 12 sec). Continue mixing at the back of the hole for an additional 2-4 seconds then wait for the resin to set.

CUTTABLE SUPPORT &
CUTTABLE SUPPORT ACCESSORIES

32 mm Torque Tension Bolt

Features:

- High capacity support for coal rib support where extraction includes cutting of bolts
- 46 mm Hex nut
- Break-out cap is designed to break into small pieces to clear easily from spanners/dollies
- “V” Notch end to promote shredding of the resin capsule film
- Continuous rope thread providing deformations for resin mixing and high bond strength with the rock
- J-Lok resin capsules available in 32–36 mm diameter for maximum encapsulation
- Both 200 mm and 300 mm square plastic steel inserted plates with 51mm holes available to suit this product
- Do not store these products in direct sunlight

Property	Minimum Value
Ultimate Tensile Strength of Rod (kN)	500
Ultimate Tensile strength with Nut (kN)	90
Single Shear Strength (kN)	110
Rod Torsional Strength (Nm)	200
Elongation %	2
Cross sectional area (mm2)	730
Thread pitch (mm)	10
Mass/meter (kg/m)	1.45

Break-out Nut	White
Torque Setting (N.m)	130 - 175
Rod Colour	

To suit drill bit 38-42 mm

32 mm GEODOWEL

Features:

- High capacity post groutable fibreglass dowel
- Used where coal extraction includes cutting of rib support dowels
- Suitable for use with common mine site cable bolting consumables:
  - 36 mm diameter resin capsules
  - Cable bolt grouts
- 46 mm Hex Nut
- Purpose designed installation spanners and grout connectors available
- Custom configurations are available including;
  - Resin anchored, tensioned, post grouted dowel
  - Simple fully grouted dowel
- Hollow dowels stocked in 3 m and 4 m lengths
- Do not store these products in direct sunlight

Property	Minimum Value
Ultimate Tensile Strength of Rod (kN)	500
Ultimate Tensile strength with Nut (kN)	160
Shear Strength (kN)	140
Rod Torsional Strength (Nm)	150
Elongation %	2
Cross sectional area (mm^2)	610
Thread pitch (mm)	10
Mass/meter (kg/m)	1.3

Rod Colour	White

To suit drill bit 42-45 mm

22 mm Thrust Dowel

Features:

- Used for coal rib support where extraction includes cutting of bolts
- Patented high strength over-moulded polymer head achieves double the strength of standard fiberglass nuts
- Coloured over-moulding polymer provides length colour code after installation
- Thrust dowels eliminate tails protruding
  - Reducing the risk of damage to rib support by mobile equipment
  - Reduces risk of personal injury when walking around equipment installations
- "V" Notch end to promote shredding of the resin capsule film
- Continuous rope thread providing large deformations for resin mixing and high bond strength with the rock
- 22 mm diameter dowel for high strength and maximum encapsulation by volume
- Do not store these products in direct sunlight

Property	Minimum Value
Ultimate Tensile Strength of Rod (kN)	230
Molded Head Tensile Strength (kN)	110
Single Shear Strength (kN)	50
Rod Torsional Strength (Nm)	80
Elongation %	2
Cross sectional area (mm2)	340
Thread pitch (mm)	10
Mass/meter (kg/m)	0.61

Bolt length (mm)	Head colour code
1150	
1450	
1750	

Rod colour	

To suit drill bit 27–28 mm

25 mm Thrust Dowel

Features:

- Used for coal rib support where extraction includes cutting of bolts
- Thrust dowels eliminate tails protruding
  - Reducing the risk of damage to rib support by mobile equipment
  - Reduces risk of personal injury when walking around equipment installations
- "V" Notch end to promote shredding of the resin capsule film
- Continuous rope thread providing large deformations for resin mixing and high bond strength with the rock
- 25 mm diameter dowel for high strength and maximum encapsulation by volume
- Do not store these products in direct sunlight

Property	Minimum Value
Ultimate Tensile Strength of Rod (kN)	300
Ultimate Tensile strength with Nut (kN)	110
Single Shear Strength (kN)	70
Rod Torsional Strength (Nm)	110
Elongation %	2
Cross sectional area (mm2)	434
Thread pitch (mm)	10
Mass/meter (kg/m)	0.95

Bolt length (m)	Rod & Head colour
1150 mm	
1450 mm	
1750	

To suit drill bit 28 mm

22 mm Extra High Torsion (XHT) Tensionable Bolt

Features:

- Used for coal rib support where extraction includes cutting of bolts
- Extra high torsional strength material minimises risk of damage to fiberglass when tightening
- Break-out cap is designed to break into small pieces to clear easily from spanners/dollies
- “V” Notch end to promote shredding of the resin capsule film
- Continuous rope thread providing large deformations for resin mixing and high bond strength with the rock
- 22 mm diameter dowel for high strength and maximum encapsulation by volume
- Recommended for drill hole diameters 27-28 mm

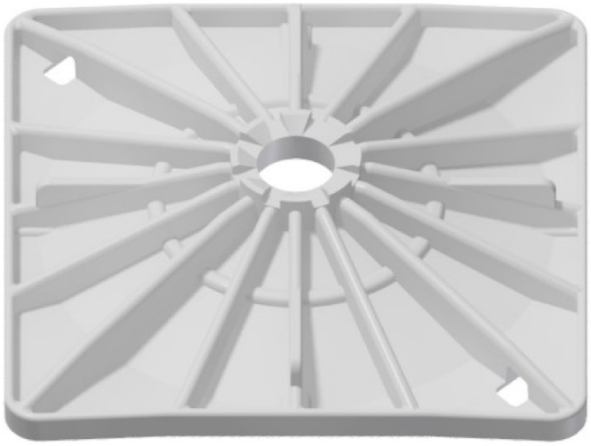
Property	Minimum Value
Ultimate Tensile Strength of Rod (kN)	210
Ultimate Tensile strength with Nut (kN)	60
Single Shear Strength (kN)	50
Rod Torsional Strength (Nm)	250
Elongation %	2
Cross sectional area (mm2)	340
Thread pitch (mm)	10
Mass/meter (kg/m)	0.61

Break-out Nut	Torque Setting (N.m)
White	80 - 110
	30 - 50

Rod colour	

To suit drill bit 27–28 mm

Plastic Plates: 22-25 mm Dowels

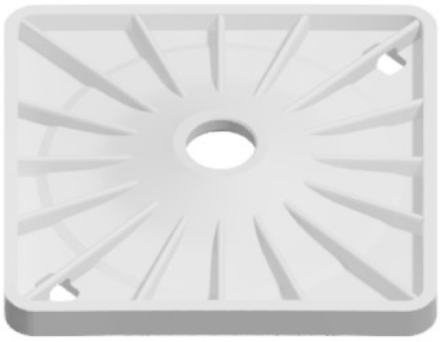


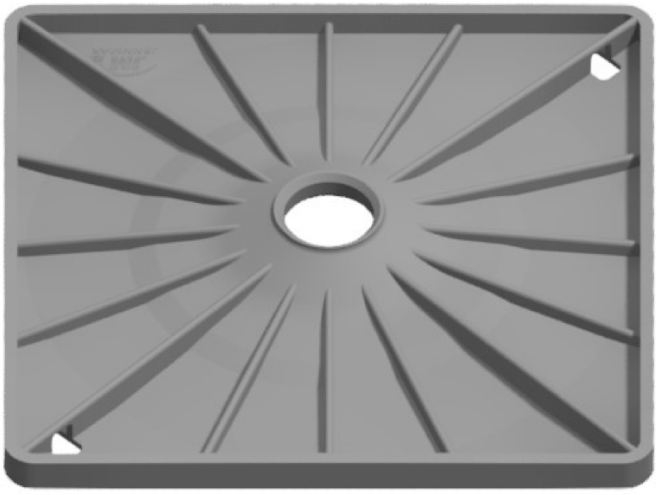
Features:

- Used as coal rib surface support where extraction involved cutting the support
- Compatible with Jennmar 22 mm dowels
- Flexibility of all plastic allow conforming to shape of uneven coal rib
- Tested to ensure no splitting under severe deformation found in uneven coal ribs
- Square plate is designed to visually turn corners upon applying hydraulic rib bolter thrust
- Do not store these in direct sunlight

Dimension (mm)	Hole diameter (mm)	Minimum Pull through load (kN)	Mass (kg)	Standard pack	Compatible Bolt dia (mm)
230 round	33	20	0.3	1000	22 and 25
230 square	33	12	0.3	1000	22 and 25

Plastic Steel Combination Plates: 22-25 mm Dowels





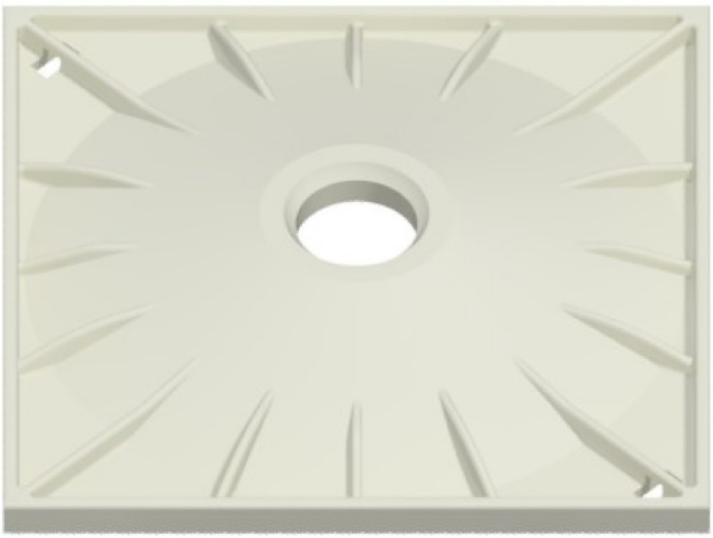
Features:

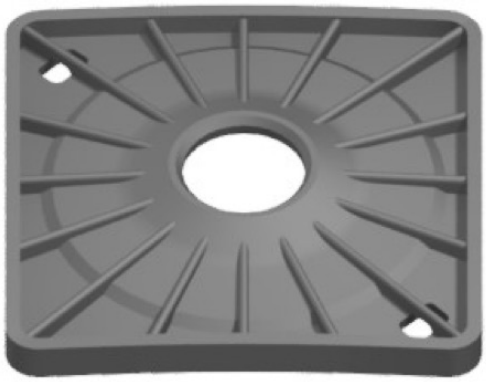
- Used as coal rib surface support where extraction involved cutting the support
- Thin 3 mm steel plate encased within the main plate provides up to 3 times the strength of a standard plastic plate
- Superior strength is compatible with new improved fiberglass dowels
- Steel inserts allow use of bolting rig magnetic holders
- Steel plate thin gauge and rounded corners minimize risk of conveyor belt damage
- Do not store these products in direct sunlight

Dimension (mm)	Hole diameter (mm)	Minimum Pull through load (kN)	Mass (kg)	Standard pack	Compatible Bolt diameter (mm)
230 round	33	50	0.6	500	22
200 x 200 square	33	50	0.7	1000	22
200 x 200 square	42	50	0.7	1000	22 and 25
300 x 300 square	33	50	1	1000	22
300 x 300 square	42	50	1	1000	22 and 25

Tested over a 150 mm span

Plastic Steel Combination Plates: 32 mm Dowels





Features:

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- Superior strength is compatible with new improved fiberglass dowels
- Steel inserts allow use of bolting rig magnetic holders
- Steel plate thin gauge and rounded corners minimize risk of conveyor belt damage
- Do not store these products in direct sunlight

Dimension (mm)	Hole diameter (mm)	Minimum Pull through load (kN)	Mass (kg)	Standard pack	Compatible Bolt diameter (mm)
200 x 200 square	51	90	0.7	1000	32
300 x 300 square	51	90	1	1000	32

46 A.F. Dolly

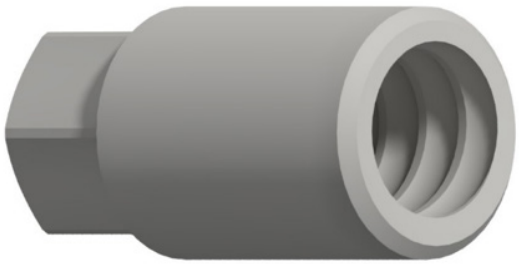
Features:

- 25 mm locking square drive to suit standard coal mining bolting equipment
- Socket designed to promote clean cap break-out on Jennmar 32 mm dowel

Drive (mm)	Length (mm)	Socket (mm)
25 square	300 – 600	46 Hex

MM_D_JDOLENGTH46-Rev1

Grout Connector Suit 32 mm Dowels



Features:

- Adapts to 32 mm hollow fibreglass dowel for:
  - Installation mixing using a standard 36 mm A.F. roof bolt dolly
  - Grouting connection by BSP thread within the Hex section
- Can be re-used

Hex (mm)	Length (mm)	Diameter (mm)	Rated Working Pressure (Bar)
36 A.F.	90	45	34.5

MM_CU_JFG32GROUTCON-Rev1

Can be used to spin the dowel through the resin, and also to pump grout after anchoring

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JENNMAR

NOTE: Please confirm that you have the latest version of this catalogue by visiting www.jennmar.com.au before using any of the technical specifications contained herein.

JC072026F