

# PRODUCTIVE HIGH VOLUME OUTPUT GROUTS.

 MINOVA

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# SECURING PERFORMANCE. TOGETHER.

Minova is an international producer of high-performance ground support products for the mining, construction and energy industries.

Our products are engineered to provide safety, efficiency and certainty to your operations, wherever you are.

We provide tailored solutions for a variety of applications, whatever it takes.

We can help you increase project performance and overcome application challenges through a wide range of products that are secure in any conditions, wherever you need to go.

# HIGH VOLUME OUTPUT GROUTS.

Defined by the fact that considerably larger outputs are possible when mixing Minova's high volume output grouts, they clearly outperform traditional cement grouts in a wide range of soft and hard rock mining applications.

Our extensive range of high volume output grouts includes foaming and non-foaming products for a large range of routine and unique applications. These include general underground cavity filling, collapsed roadway recovery, ventilation seals, backfilling behind steel sets and sidewall (rib) stabilisation for soft rock mining, plus rockfill consolidation and pillar replacement for hard rock mining.

## KEY FEATURES

- Rapid placement with quick strength gain
- Remote pumping over distances from 200m - 5km are possible
- Reduced formwork requirement
- Rapid gelling quickly seals leakage paths
- Quality controlled application
- Yields to ground pressure thereby reducing stress concentration
- Supplied pre-blended and pre-packaged, requiring only the addition of set amounts of water in a continuous placer pump to produce high quality grouts
- Can be supplied in 20kg or 1.2 ton bags

**30 years**  
of local experience

with development and manufacture of grouts  
for Australian conditions since 1989

**HIGH VOLUME  
OUTPUT GROUTS  
REDUCE THE  
AMOUNT  
OF GROUT  
TRANSPORTED  
INTO THE MINE**



FB200 plug seals, with 120 psi rating, pumped 160m deep down a borehole.

## HIGH VOLUME OUTPUT GROUTS



**CMT GROUT** is a high strength grout used for standing supports (chock bags) and backfill applications. Low alkalinity for safe handling. **Typical output at 1:1 ratio\*:** 37x20kg bags / m<sup>3</sup>.

### ADVANTAGES

Rapid placement through Minova placer pump

Fast set and rapid strength gain ensures early support

Yields to ground pressure, thereby reducing stress concentration in strata

Non-shrinking - unlike timber cribs



**TEKSEAL™** is a durable foaming grout used for ventilation seals, cavity filling, recovery of longwall and intersection falls, rib stabilisation and general void filling. Low alkalinity for safe handling. **Typical output at 1:1 ratio\*:** 10-12 x 20kg bags per m<sup>3</sup>.

### ADVANTAGES

Yields to ground pressure, maintaining an effective seal, even in areas subjected to extreme ground movement

Excellent durability in both wet and dry conditions, ensures long term life

Simple to install, eliminates the need for hitching into roof, floor and ribs

Up to 15 m<sup>3</sup> can be placed in one hour, - pumpable from up to 150 m from job site



**FB200™** is a low viscosity grout used for consolidation of broken strata, backfilling, pumpable chocks and ventilation seals. Pumps up to 200m. **Typical output at 2:1 ratio\*:** 21 x 20kg bags per m<sup>3</sup>.

**ALSO AVAILABLE:**  
**FB200R** pumps to 400m  
**SLOW SET** pumps to 1000m.

### ADVANTAGES

Low viscosity for penetrating rockfill

Up to 10 m<sup>3</sup> can be placed in one hour - pumpable up to 200m

Fast setting enables chocks to be pumped without additional support

Yields to ground pressure, thereby reducing stress concentration in strata



**ROCKFAST HYDROBLEND** is a fast setting low viscosity grout used for fall recoveries, backfilling and as a replacement for timber chocks in longwall tailgates. Low alkalinity for safe handling. **Typical output at 2:1 ratio\*:** 21 x 20kg bags per m<sup>3</sup>.

### ADVANTAGES

Fast setting, enabling chocks to be pumped without additional support - pumpable up to 250m

Rapid strength gain ensures early support

Yields to ground pressure, thereby reducing stress concentration in strata

Non shrinking - unlike timber cribs

## PRODUCT SPECIFICATIONS / TYPICAL RESULTS

Product	W:P Ratio	20°C Gel Time (min)	Kg Powder per m <sup>3</sup>	Wet Density (Kg/m <sup>3</sup> )	Typical Strength (MPa)		
					24 Hrs	7 Days	28 Days
CMT Grout	2:1	12 - 15	415 - 425	1260	4	5	7
	1.5:1	9 - 11	535 - 545	1340	6	8	12.5
	1:1	4 - 7	735 - 745	1470	10	14	18
Tekseal	1:1	3 - 5	200 - 240	450	0.6	0.8	1.0
	0.8:1	2 - 4	320 - 340	700	1.4	2.3	2.8
FB200	1:1	2 - 4	735 - 745	1470	4	7	18
	1.5:1	3 - 6	535 - 545	1330	1.6	4.9	11.3
	2:1	4 - 8	400 - 440	1250	0.6	3.3	7.5
	2.5:1	8 - 11	340 - 360	1210	0.5	1.4	4.5
	3:1	10 - 14	290 - 310	1170	0.34	1.2	3.1
Rockfast Hydroblend	1.75:1	2 - 3	470 - 480	1300	5.0	5.5	6.5
	2:1	3 - 4	400 - 440	1260	4.0	4.7	5.0
	2.5:1	5 - 6	340 - 360	1225	3.0	4.5	4.8

### WATER QUALITY

All our cement grouts are tested with and should be used with potable water. If water quality is of concern for any proposed application, a 20 litre sample of the intended water should be sent to our Nowra laboratory for grout comparison testing. This testing will confirm the compatibility for use with the selected grout and ensure that the design specifications of the grout can be achieved.

### SUPPLY

Our grouts are available in either 1.2 tonne bulk bags, or 20 kg High Wet Strength (HWS) multi wall plastic lined paper bags. Our HWS bags provide superior performance to traditional stitched or glued plastic bags in relation to strength, durability and moisture absorption.

All grouts are supplied on shrink wrapped pallets.

### APPLICATION SERVICES

Comprehensive training and assessment by qualified Minova representatives is available to all customers. In addition, on site quality control programs can be specifically developed and managed to suit your individual requirements, ensuring the consistent quality of placed grout.

### QUALITY CONTROL

The superior quality of our cement anchoring grouts is assured through a four-part quality control program:

1. Raw Material Testing
2. In-process quality control testing
3. Finished product acceptance testing
4. Quality system management to ISO 9001:2015

All quality control activity is completed by trained personnel using industry recognised equipment, regularly calibrated by an independent and accredited testing company in accordance with our quality management system.

*For further information see the relevant Technical Data or Safety Data sheet, copies of which are available on our website.*

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Kurri Kurri  
Smithfield  
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**QUEENSLAND**

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**Customer Service:**

1800 Minova / 1800 646 682 (free call within Australia)

1300 Minova / 1300 646 682 (local call Australia)

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