

Range Summary

Pump Name		Type	Mixing Capacity
Hand Pumps	Minova MK 1		Min 20kg - Max 40kg
	Minova MK 2	Electric driven	Max 10kg
	Minova MK 3		Min 10kg - Max 20kg
Grout Pumps	Spudnik Pump		
	Pre-Stress Combo 2000	Compressed and air operated	
	SS1	Air operated pump	5 or 6 Litre
	Minova MK 2		2.5 Litre
	TSL Combo Pump		
Aerated Cement Pumps	Small	Electric driven	
	Medium		
	Large		

General Information

Technical Support

Minova RSA provides a technical advisory service supported by a team of specialists in the field. The service includes on site assistance and advice on evaluation trials and laboratory work.

Additional information

Minova RSA is a market leader specialising in the supply of high performance chemical products for the mining and tunnelling industries.

The Minova RSA range of mining products includes anchoring and backfill systems, bagged cement products, high yield grouts, mine sealants, equipment and accessories.

Important note

Minova RSA products are guaranteed against defective materials and manufacture and are sold subject to its

standard terms and conditions of sale, copies of which may be obtained on request. Whilst Minova RSA endeavors to ensure that any advice, recommendation, specification or information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation or information given by it.

Quality Assurance

All pumps are tested using compressed air prior to shipment.

Minova Hand Pumps

Typical Applications

All development ends for primary or secondary support. By simply changing the lances, grout with different viscosities can be pumped.

Description

This range of Minova pumps are nylon hand operated roof bolting pumps. These pumps will pump all forms of liquid and pumpable grouts. The pump incorporates a light weight mixing tank and delivery assembly. These units are very easily dismantled for ease of transportation in difficult working places underground.

Minova MK1

This pump is recommended where more than 20kg of grout is to be mixed at any one time. The pump is equipped with a measuring flask. Recommended maximum mix is 40kg of cable grout.



Data

Material	Nylon/HDPE
Capacity	56 litres
Height	82cm
Weight	30.4kg
Safety	Not a pressure vessel

Minova MK2

Mixer features a water level mark at 4 litres. This is enough to mix 10kg of grout powder (one bag).

Data

Material	Nylon
Capacity	4 litres
Height	80cm
Weight	11.4kg
Safety	Not a pressure vessel

Minova MK3

Mixer features a water level mark at 4 and 8 litres. This pump is recommended for a 10kg or 20kg grout mixture.



Data

Material	Nylon
Capacity	4 or 8 litres
Height	82cm
Weight	19.4kg
Safety	Not a pressure vessel

Minova Hand Pumps

Typical Applications

All development ends for primary or secondary support. By simply changing the lances, grout with different viscosities can be pumped.

SS1 Grout Pump (5 or 6 Litres)

Description

This pump is available in either 5 or 6 litre capacity. This pump is air operated with no moving parts and low maintenance.



Data – 5 Litre Capacity

Material	Steel
Capacity	5 litres
Height	1250mm
Weight	21.5kg
Safety	Not a pressure vessel

Data – 6 Litre Capacity

Material	Steel
Capacity	6 litres
Height	1450mm
Weight	22kg
Safety	Not a pressure vessel

MK2 Grout Pump (2.5 Litres)

Description

A 2.5 litres air operated pump with no moving parts and low maintenance.



Material	Steel
Capacity	2.5 litres
Height	750mm
Weight	18kg
Safety	Not a pressure vessel

Thin Spray Liner Combo Pump

Description

A continuous mix and pumping unit electric or air driven for the application of Minova's range of Thin Spray Liners (TSL's) and bagged pumpable grouts.



Data

Material	Steel, Aluminum, Plastic	
Capacity		
Dimensions	H	
	L	
	W	
Mass	60kg	

Pre-Stress Combo 2000 Pump

Typical Applications

For filler packs, pre-stress bags and stopes.

Description

The Minova Pre-Stress Combo 2000 Pump is a combination of a hand operated mixer and compressed air driven pump.

This unit incorporates a light weight mixing bowl made out of nylon, with a steel scroll and mounting frame.

This unit is very easily dismantled for ease of transport in difficult working places underground.



Data

Material	Nylon/HDPE
Capacity	56 litres
Height	82cm
Weight	30.4kg
Safety	Not a pressure vessel

Spudnik Pump

Description

The Spudnik grout pump consists of a spherical shell and internal rubber diaphragm. The diaphragm divides the interior into two chambers. Grout is loaded into the upper chamber and the loading port closed. Compressed air or water admitted to the lower chamber displaces the diaphragm upwards, expelling the grout through the delivery hose. The diaphragm is retracted by a venturi system which is operated by opening both air valves. The diaphragm is formed to fit the interior of the spherical shell, ensuring maximum utilisation of the interior volume.



Specifications

Grout delivery per stroke	6 litres
Mass	11kg
Height on standard base	600mm
Inlet hose	25mm
Outlet hose	25mm

Uses

The Minova Spudnik grout pump is a compact, high capacity pump for filling of rockbolt holes with cement grouts.

It is designed to be simple and rugged, for full column cement grouting of rockbolt

holes up to about 3m in length. For best results use one of Minova RSA's Capcem range of pumpable grouts, such as Capcem PLG, Capcem PLGF or Capcem Pumpable Grout (25 and 35), for use with water at approximately 25°C and 35°C.

Advantages

- High volume capacity – fewer opening and closing cycles needed.
- Positive displacement of grout – minimal grout left behind in pump.
- Rugged – continues working even if dented; no internal valves.
- Low air consumption – air use is limited to grout volume pumped.
- Light and compact – easily carried, moved and operated, even in low stopes.
- Suitable for a variety of grout types.
- Automatic retraction of the diaphragm.

The Spudnik pump is delivered complete with inlet valve and hose fitting and a standard 3 m outlet hose with lance. Other configurations are available on request. The standard Spudnik Pump is powered by compressed air; water powered models are also available.

Instructions

Initial Set-up

- Wear prescribed PPE.
- Check that all the components are present and clean.
- Close the air inlet valve. Open the air exhaust valve.
- Connect the SPUDNIK pump to the compressed air supply.
- Open the top port and fill the pump with water.
- Close and seal the port. Check that the seal is firm and the lock is in place. Close the air exhaust valve.
- Open the air valve and expel all the water.

- Release the air pressure and retract the diaphragm by opening both valves. Open the air exhaust valve.
- Repeat until water comes out of the hose.

Grout Pumping

- Prepare the grout (soak capsules or mix with water, according to type and specification).
- If Capcem Pumpable grout, open the capsules and pour grout into the pump. If mixed grout, pour into the pump.
- Close the top port. Check that the seal is firm and the lock is in place. Close the air exhaust valve.
- Open the feed valve and pump the grout into the hole.
- When the pump is empty open both air valves to retract the diaphragm.
- Repeat as required.

Cleaning

- Fill the pump with water.
- Pump the water through the pump and delivery hose.
- Repeat until the pumped water is clean.
- Wash grout off the outside of the pump with water.
- Store in a safe place.

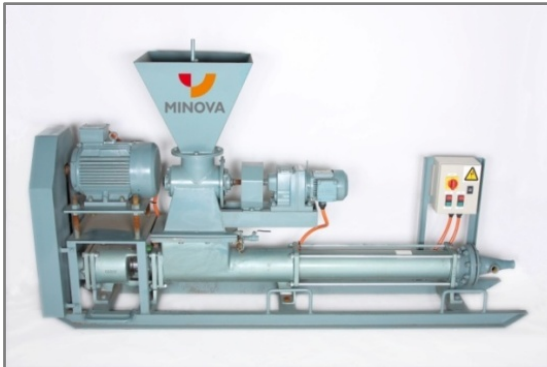
Precautions

Use only as directed.

Aerated Cement Pumps

Description

An electric driven positive displacement worm pump and feeder unit. This pump is suitable for use with Minova's range of aerated cement products.



Data - Small

Material	Steel
Capacity	1-1½ bags per minute
Dimensions	Height - 1.4m
	Length - 2.1m
	Width - 0.4m
Mass	600kg



Data – Medium

Material	Steel
Capacity	2-3 bags per minute
Dimensions	Height - 1.2m
	Length - 3.1m
	Width - 0.65m
Mass	1000kg

Data – Large

Material	Steel
Capacity	3-4 bags per minute
Dimensions	Height - 1.2m
	Length - 3.1m
	Width - 0.65m
Mass	1000kg

Typical Application

For use in void filling operations.

Company Information

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Reg. No. 2001/027226/07, ISO 9001:2008
Company

Minova RSA

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