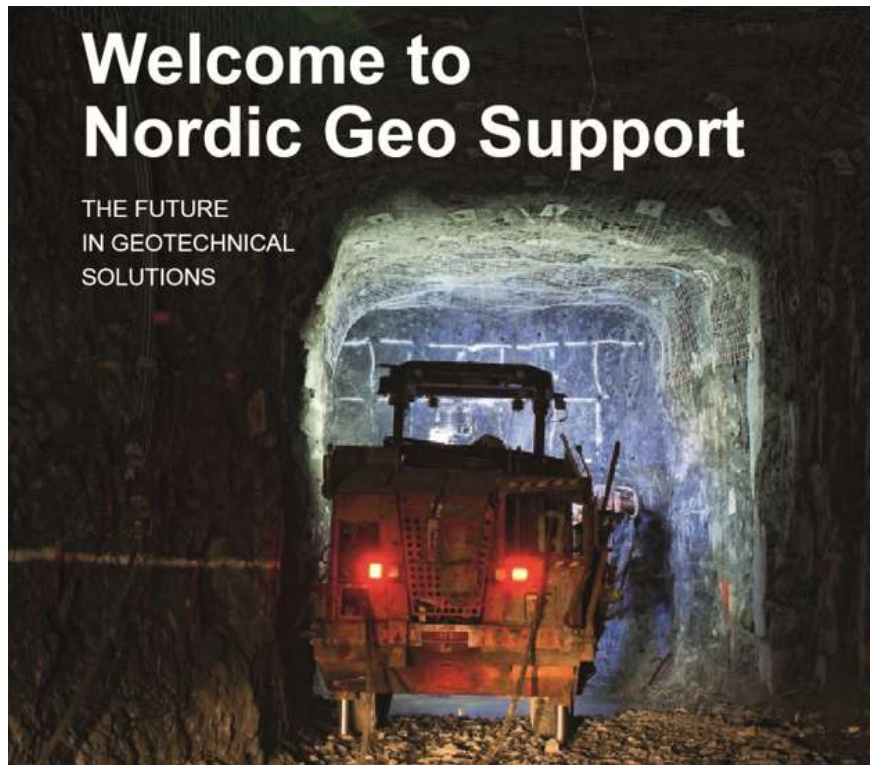




# Nordic Geo Support

Cement Mixers, Pumps and Controllers

# About us

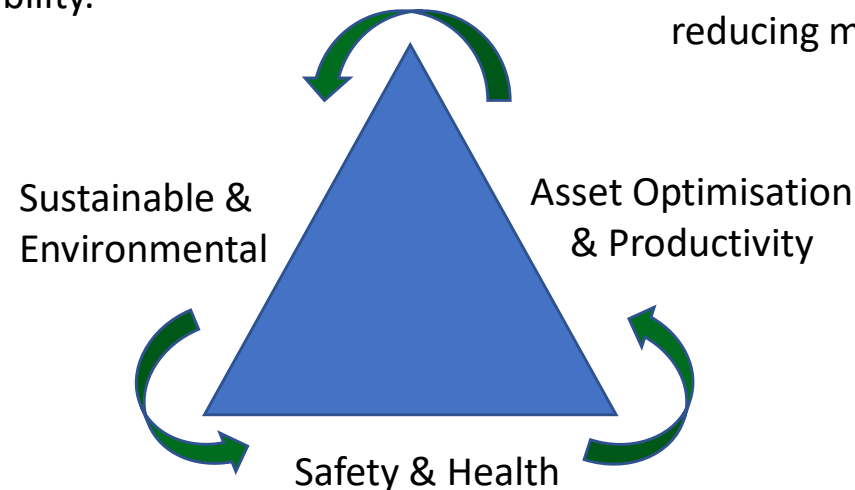


- Originating from the Nordics with leading edge technical solutions for global customers.
- We specialise in innovative products with an emphasis on improving sustainability for mining, tunnelling and construction industries.
- Partnering with leading technology companies globally for improving our world's future.
- Nord Geo Support and its partners are focusing on bringing the production of technology closer to customer, reducing the global CO<sub>2</sub> footprint and reliance on global supply chains.

# Reducing Project Impacts

**Sustainability & Environmental:** Solutions that drastically reduce CO<sub>2</sub> emissions in manufacture and transport and energy usage as well as offering longer life cycles and reusability.

**Asset Optimisation & Productivity:** Solutions that are faster, more efficient, easier to use and reusable, optimising advance rates and ore recovery as well as reducing maintenance costs.



**Safety & Health:** Solutions that remove humans and equipment from unsecured ground, faster ground securing, ensuring stability and consolidation, reduce manual operations and weight in manual handling.

# Product range

## Drilling Consumables

High Performance rock drilling tools and consumables:

- DTH Hammers
- Bits
- Shanks
- Rods
- Drill Pipes
- Adapters
- Augers, Accessories

## Injection Grouts

Leading edge resin injection technology for demanding cases:

- Water Stopping
- Sealing
- Ground Consolidation
- Ground Stabilisation
- Construction and structural repairs

## Anchoring & Bolting Grouts

Grouting technologies offering ease of use, clean and fast setting:

- Capsules
- Cartridges
- Pumpable grouts
- Additives

## Anchoring & Bolting

A broad range of rock bolting and anchoring technologies:

- Double and single coated protected steel
- Steel Self Drilling Anchors
- GFRP bolrs of all types
- Standard bolts and meshes

## Cement-Based Additives

Cement based admixtures and additives:

- Concrete Repair
- Admixtures
- Modifiers
- Waterproofing
- Joint Sealants

## Pumps & Accessories

Cement and resin mixing and pumping technologies:

- Cement Pumps
- Resin Pumps
- Transfer systems
- Dataloggers
- Hoses, lances, packers

## Water control

Waterproofing, drainage and pumping:

- TunnelDrain innovative strip drainage system
- Drainage pipes
- Waterproofing grouts, additives and sealants
- A broad range of dewatering pumps

## Ventilation

Air quality, ventilation and safety solutions:

- Ventilation bags and systems, including Mecanicad's rigid ducts
- Fans & inline coolers
- Water atomisers

## Re-usable Hangers

Developed in the Nordics, fast, easy to use & reuse:

- Services Hooks for ventilation systems, water and pneumatic lines, electrical cables and distribution boards
- Blasting hooks

## Other products

A range of other products:

- Coatings & sealants
- Personal protective products
- Mining accessories

# Pumps & accessories

- MAI pumps for **cementitious** products are renowned world-wide for their high performance, easy maintenance and user-friendly nature.
- For **resin** grouts, we offer a wide range of single component and two component pumps.
- We offer a full range of accessories for all grout technologies.





# MAI 400NT



The MAI 400NT grout mixing pump was developed specially for extreme stresses in underground situation and has been used globally in mining, tunnel and underground construction excavation pits and slope stability applications.

- Patented and proven mixing & conveying technology
- Continuous, non-pulsing pressure
- Consistent mixing ratios
- Constant grout quality
- 75% Less waste than conventional systems
- Compact design, easy mobility
- Low weight

# MAI 440 GE

This pump allows large conveying distances and high pressure levels even when using materials which are difficult to process. The modular machine concept allows wet spraying with and without accelerators, filling, backfilling and grouting works with different pressure control options. The dual mixing principle guarantees top mixing quality and allows variable flow rates for almost every application.

## Save time and money

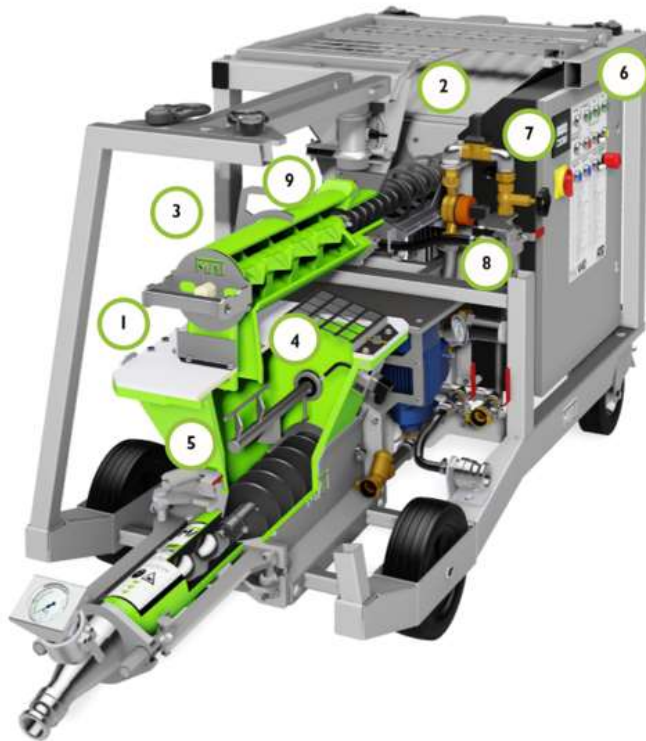
- 40% time saving due to fully automatic, continuous mixing
- 15% reduction in operator handling, automatic process flow control reduces error rate
- 23% cost reduction - Simplified cleaning, waste reduction and lower disposal costs and higher machine efficiency



Flow rate:	5 to 50 l / min
Operating pressure:	Max 45bar
Hose lengths:	Up to 100m
Dimensions:	201 x 75 x 103 cm
Weight	360 kg
Feeding height:	103 cm

- Typical applications:
- Injections Concrete repair
- Geothermal drilling
- Tunnel repair
- Backfilling
- Grouting of tendons
- TBM (Tunnel Boring Machines) Grouting
- Shotcreting
- Slope stability applications

# MAI 440 GE - Features



**DUAL MIXING SYSTEM**, the separation of mixer and pump allows variable flow rates and prevents fluctuations in consistency at high pressures, and reduces screw pump wear.

**DRY MATERIAL PROBE** and water tolerance monitoring guarantee a constant mixing quality (no consistency fluctuations).

**MIXING ZONE** The patented mixing device secures homogeneous mixing satisfying highest demands.

**AGITATOR** prevents stiffening, segregation and tunnel formation of the mixed material in the pump hopper.

**MAI®CODUR** All components in wet zones are made of highly wear-resistant plastic and can be cleaned easily and residue free.

**MULTIFUNCTION-DISPLAY** informs about water settings, error messages and operating conditions and allows individual application-specific parametrisation as well as the selection of different pressure control programs, and emergency running functions.

**WATER SYSTEM** with adaptive pressure reducer for changing job site conditions. Its vertical layout enables automatic drainage and to prevent frost damage.

**STAINLESS STEEL HOPPER** guarantees high durability and corrosion protection



# MAI<sup>®</sup> 4EVERSUPER



An advanced mortar mixing pump which was specifically designed for wherever heavy materials, long transport distances and/or large feed pressures are required. Delivery rate: 6 to 35 l/min with operating pressures of over 40 bar and capable of delivering to hose lengths of up to 60 metres.

The mortar mixing pump is fitted with a special mixing zone for the processing of even the heaviest special materials such as industrial screeds, underwater concrete, monocapa, fibre-reinforced materials for concrete restoration and jointing work.

- Renovation work
- The processing of special screeds
- Injections
- Backfill work .....

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**SG3**

Stephen Greer, 2020-04-19

# Delivery Pumps

## MAI 2Pump Pictor

Compact and modular design

Output 0,6 to 9,5 l/min working pressure up to 25 bar, Hose lengths 35 m

Applications: Slurries., decorative coatings, renders, micro cements, suspensions



## MAI 2Pump Lyra

Ideal for small construction sites providing delivery of premixed mortars & adhesives.

Output 1,5 - 25 l/min, easy speed regulation

Applications: External renders, concrete renovation materials, dry fiber reinforced materials

## MAI 2Pump Taurus

Efficient construction site pumping with generous pumping distances and up to 6 floors in one transfer

Output 5 - 100 l/min, easy speed regulation

Applications: Most construction materials requiring long distant & consistent transfer



## MAI 4Spark

Airless, high performance, universal pump able to transport pumpable materials up to 80 metres

Output 5 - 100 l/min, high pressure Pumping 50 - 150 bar

Applications: Most construction materials requiring long distant, consistent transfer and spraying



# Render and Plaster Pumps

## MAI®4EVERLIGHT

Compact and modular design. Output 14 to 18 l/min  
Applications: Renders, plasters, micro cements, suspensions



## MAI®4JOBBUSINESS

A fully automatic, modular mortar mixing pump easily disassembled and reassembled on site. Feed capacity: 7 to 35 l/min.

## MAI®4ONESIRIUS PLUS

Used to process practically any pumpable dry mortar, paste - like compounds and adhesive mortars. For manually processing bagged dry materials as well as fully automatic delivery from a silo. The typical areas of application include: Interior and exterior lime, lime-cement-based plasters, renovation plaster, scraped render, frame mortar, levelling compounds, the application of adhesive in composite thermal insulation systems and the embedding of textiles in particular. Easily disassembled and reassembled on site. Two different systems for delivery rates: 7 - 35 l/min or 2 – 20 l/min depending



# Flow / Horizontal Mixers

## **MAI®2MIXMAIA MOBIL / FIXED**

Flexible flow mixer that is capable of a broad range of mortars, including: masonry mortar, plaster mortar, flooring mortar, tiling mortar, adhesive mortar, gap filling mortar, reinforcing mortar, scraped renderings, renovation plaster, light plaster, floating and set, cement plaster, insulation plaster, setting coat, levelling mortar, etc. Variable Feed capacity: 40 to 80 l/min.

Available as mobile or fixed pump arrangement



## **MAI®2MIXMAIA MOBIL**

A versatile horizontal mixer for precision work like the pasting of insulating materials. Due to the easy-to-adapt MAI®CODUR mixing tube even adhesive remains can be washed out easily and residue-free. Delivery rate: 20 l/min.





# Silo Pumps & Conveyers

## MAI®HICOMP

PUMPCAPACITY UP TO 180 L / MIN The pump capacity can be adjusted in steps from 70 -180 l / min at the control cabinet and by the remote control. Modular design technology consisting of pump, continuous mixer, control panel and water system.



## MAI®4MIX Saturn

The modular feeding and mixing system, which is fixed to the silo, consists of the feed pump, continuous-flow mixer and a separately mounted control and water system, provides maximum functionality and the best possible ergonomics.



## MAI 2Pump Taurus

Efficient construction site pumping with generous pumping distances and up to 6 floors in one transfer

Output 5 - 100 l/min, easy speed regulation

Applications: Most construction materials requiring long distant & consistent transfer



# Screeding Module

## MAI®2FLOOR Commander

This automatic screeding module, a mobile unit mounted on an undercarriage, triggers complex control tasks for screeding systems in a brilliantly simple way. The material feed is fully automatic from the silo. Despite even extremely rough site conditions the MAI®2FLOOR Commander ensures the production of even difficult screed and concrete mixtures with constant quality.

The MAI®2FLOOR Commander can be run with all commonly available pneumatic or electrically driven screeding machines. All parameters which are relevant for the material's quality can be set by the operator simply and easily.

- ✓ no operating personnel required at the screeding machine
- ✓ constant mixtures - controllable product quality
- ✓ fully automatic conveying, mixing and metering
- ✓ automatic trouble-shooting, shut-off at error
- ✓ cycle continues after power failure
- ✓ selection of half or whole mixture at the press of a button
- ✓ easy-to-read error messages on the display
- ✓ automatic phase adjustment for connected equipment

OPTIONS • control of an external metering pump for additives • separate monitoring of the screed conveyor to prevent overloading • silo level monitoring which can interrupt processing when there isn't enough material.



# Data Logger

## MAI®LOG

The new MAI®LOG enables the recording of all grouting data relevant for later records of grouting operations. Whether grouting rock, masonry or concrete, jet grouting or pile installation, the easy operation and the simple to use software for data transfer to Microsoft Excel makes construction site assurance and billing even easier. This record of the actual work done dovetails perfectly with the demands of BIM for as-built records.



# MAI 400 EX

The skid-mounted mixing pump for cementitious grout was specially designed for tough working environments, often found in underground mining. This machine will continuously mix and pump the widest range of grouting materials from thin to thick consistencies. The rugged steel frame stands up to the toughest conditions on the job site. Operator controls are centrally located for efficient production. All components are easily accessible for operating, cleaning, and maintenance

**SAFETY RELEVANT FUNCTIONS** • Pressure relief button to prevent accidental injury • Thermal, water Flow & pressure monitoring • Dry running & overheating safeguard • Antistatic & flame resistant design



## TECHNICAL DATA

500V/3/PE/50Hz/660V/3/PE/50Hz

Nominal power:	10 kW / 16 A
Discharge flow:	15 to 60 l/min
Feeding height:	107 cm
Transport weight:	985 kg

# Accessories

- Nordic Geo Support offer a broad range of accessories ensuring a turn-key solution is at hand pumping and cement grouting, injection work, curtain grouting, sealing, plastering and wood applications applications.

- Internal Packers
- Annulus packers
- Hoses
- Mixing tubes
- Couplings
- .....

