

Solutions for tunneling and mining

# MEYCO Equipment

Expanding Horizons

Underground

**MEYCO**

# MEYCO Equipment | About us



MEYCO® Equipment – worldwide! In over 60 countries our customers have learnt to trust in MEYCO machines, due to their pragmatic design, efficient operation, technical standard and reliability. This is not forgetting the professional after sales and technical support provided by our Customer Services. Our experience counts. Whether training, troubleshooting or just for advice, they are available around the globe, around the clock!



A view of the main production hall, showing the assembly of MEYCO Potenzas. The facilities reflect our philosophy of quality in all our activities, right down to the workshop floor!



MEYCO machines are designed and built to excel in their chosen environment of tunneling, whether mounted as a spraying system on a TBM or as an autonomous mobile spraying unit.

In 1957 the company Meynadier (today MEYCO Equipment) invented the first dry-spraying “guniting” machine according to the rotor principle – and thereby achieved a breakthrough in the field of shotcreting. Since then MEYCO has continued this tradition of innovation and been able to successfully introduce new developments and technologies, which is reflected by our world-wide presence and strong market position.

As a key part of MEYCO Global Underground Construction, who are in turn, part of BASF Construction Chemicals, we benefit from the outstanding know-how and synergies and our products are harmonised to best utilize this advantage. Our objective is to offer a total solution to our customers.

MEYCO machines are developed and manufactured in our plant in Winterthur, Switzerland. Whether for dry or wet spraying or even mobile and roadworthy equipment our products are built for, and tailor-made to, if required, customer requirements and especially the prevailing working conditions.

Spraying manipulators for mechanised or automatic spraying, dosing units and measuring units for testing the early strengths of shotcrete are also part of our range. Whether large projects such as the Transalpino in Switzerland, mining in South America or Hydroelectric projects in the Himalayas, we can offer the best possible solutions.

In over 60 countries our customers have learnt to trust in MEYCO machines due to their efficiency, simple operation, very high technical standard and reliability. This is not forgetting the professional after-sales and technical support provided by our Customer Services. Whether training, trouble shooting or for just for advice they are available around the globe, around the clock!

MEYCO Equipment in Winterthur with research and development, purchasing, production and planning, sales administration, logistics, stores and secretarial department is certified to the highest contemporary industry standards. This is of course reflected in our products and service.

High expectations of our equipment together with the continuously growing demand lead us to expand our production infrastructure. Now thanks to the enormous capacity of our new production hall and associated facilities, we are prepared to provide our customers with the products they require.

We look eagerly towards the challenges ahead and regard the future with optimism.

We look forward to getting to know you.

Your MEYCO Team



# MEYCO Equipment | Product Range

## Dry Spraying | MEYCO Piccola | MEYCO GM



For the pneumatic transportation and spraying of shotcrete/gunitite, repair mortar, dry materials and sprayable membranes. Very robust, simple to operate with easy maintenance. Their versatility allows them to be custom equipped or quickly converted for various site requirements.

Process:	dry
Max. conveying distance, horiz./vert.	≈ 500/100 m
Conveying volume*:	0.3–15.0 m <sup>3</sup> /h
Max. grain size**:	16 mm
Drive:	electric, diesel, air

## Wet Spraying | MEYCO Altera



A twin-piston pump suitable for concrete conveying, hand-spraying, grouting, repair work and spraying with small manipulators. Extremely simple in construction and operation but still maintains CE standards of safety. It is very compact, durable and versatile enough for any site in the world.

Process:	wet
Max. conveying distance:	≈ 300/100 m
Conveying volume*:	1–6 m <sup>3</sup> /h
Max. grain size**:	16 mm
Drive:	electro-hydraulic

## Wet Spraying | MEYCO Suprema



Designed especially for the spraying of medium to large amounts of concrete. Equipped with integrated MEYCO TDC (Total Dosing Control) and patented push-over system. Operation through interactive display and including MEYCO Data for compiling and extracting performance data for analysis and quality control.

Process:	wet
Max. conveying distance:	≈ 300/100 m
Conveying volume*:	2–14, 3–20, 8–30 m <sup>3</sup> /h
Max. grain size**:	16 mm
Drive:	electro-hydraulic

## Spraying Mobile | MEYCO Poca



Extremely compact, very mobile spraying unit designed for smaller tunnel profiles and incorporating basic MEYCO technology. MEYCO Rama spraying manipulator, MEYCO concrete pump, peristaltic dosing pump mounted on a rigid 4WD, 4WS chassis.

Process:	wet
Conveying volume*:	3–14, 6–20 m <sup>3</sup> /h
Max. grain size**:	16 mm
Drive options:	for operation – electro-hydraulic for tramming – diesel or diesel for all functions
Max. spraying height:	9 m

## Spraying Mobile | MEYCO Cobra



Compact, robust, spraying mobile, with articulated chassis and MEYCO Minima manipulator designed for the mining industry and smaller tunnel profiles. Complete with all necessary integrated accessories, MEYCO TDC, MEYCO Data, compressor plus central lubrication and heating for electrics.

Process:	wet
Conveying volume*:	3–20 m <sup>3</sup> /h
Max. grain size**:	16 mm
Drive:	for operation – electro-hydraulic for tramming – diesel
Max. spraying height:	9 m

## Spraying Mobile | MEYCO Potenza



Complete spraying mobile with integrated accessories, perfect for large profile tunnelling. Equipped with MEYCO TDC, MEYCO Data, compressor (as option) all mounted on site proven 4x4 chassis. MEYCO Robojet as standard manipulator, MEYCO Maxima (pictured) and MEYCO Logica as option.

Process:	wet
Conveying volume*:	8–30 m <sup>3</sup> /h
Max. grain size**:	16 mm
Drive:	for operation – electro-hydraulic for tramming – diesel
Max. spraying height with Robojet:	14.5 m
Max. spraying height with Maxima:	17 m

## Spraying Mobile | MEYCO Roadrunner



Totally mobile spraying system with all necessary components on roadworthy carrier vehicle. Power take-off enables operation with or without site power supply ensuring absolute flexibility. MEYCO Maxima, a specially developed manipulator with huge spraying range but can be extended in small tunnels.

Process:	wet
Conveying volume*:	8–30 m <sup>3</sup> /h
Max. grain size**:	16 mm
Drive:	for transport – diesel for operation – diesel engine + PTO or electro-hydraulic
Max. spraying height:	17 m

Important | \*Pump performances including maximum volumes are based on theoretical, 100% filling capacities. Conveying heights and distances are based on experience but are strongly dependent on the granulometry, the cement content and the plasticity of the concrete. \*\*Maximum grain size for pumping is 1/3 of the minimal pipe diameter.

## Spraying Unit | MEYCO Oruga



A mobile spraying unit with MEYCO Rama 4 spraying manipulator for mechanising the application of shotcrete, for slope protection or tunnelling. Mounted on a very agile, solidly constructed carrier vehicle with independently driven caterpillar tracks.

Process:	wet or dry
Nozzle size:	up to 80 mm
Drive:	for transport – diesel for operation – electric
Max. spraying height:	8 m
Max. spraying width:	11.5 m

## Spraying Manipulator | MEYCO Robojet



Spraying manipulator with a large range, can be mounted on various carriers.

Has been proved on hundreds of sites over the last three decades. The operating principles are simple to understand and handling is easy. With 8 independent movement functions plus nozzle oscillation and parallel spraying action.

Process:	wet or dry
Nozzle size:	up to 80 mm
Drive:	electro-hydraulic
Max. spraying height (from 1 m platform):	14.5 m
Max. parallel spraying height:	10.5 m

## Robotic Spraying | MEYCO Logica



Spraying robot for either mining or civil tunnelling the MEYCO Logica system is able to measure the tunnel profile using a laser scanner. It then provides various modes of spraying operation, from manual to semi-automatic and fully automatic, within selected underground areas.

Process:	wet or dry
Nozzle size:	up to 80 mm
Drive:	electro-hydraulic
Max. spraying height:	up to 14.5 m
Max. spraying width:	up to 20 m

## MEYCO Spraying Systems



Diverse spraying systems, customised to exactly suit application conditions, be it for large civil projects, tight mining tunnels, shafts or even integrated into a TBM.

Using the experience gained from completed projects around the world over many years, equipment is individually designed and built in-house in cooperation with the customer. MEYCO can also assist with on-site installation and start-up.

## Dosing unit | MEYCO Mixa



Dosing unit for liquid admixtures for any sprayed concrete applications. Peristaltic hose pump mounted within steel frame and cover. Volume of additive is set with hand wheel on variable drive. The amount supplied is visible on flow indicator display.

Process:	wet or dry
Delivery volume:	0–4 or 3–18 l / min.
Max. delivery pressure:	7.5 or 10 bar
Drive:	electric
Weight:	100 or 200 kg

## MEYCO Spare parts / Accessories



Measuring instruments such as MEYCO Kaindl and MEYCO Penetration Needle for determination of early strength of sprayed concrete. Pressure increasing water pump HP012 for dry spraying.

Original MEYCO wear parts, spare parts and accessories such as nozzle systems are available around the world. We also maintain service support centres in many countries worldwide. MEYCO knows this is essential and we realise how valuable your downtime could be!

	Piccola	GM	Alterra	Suprema	Potenza	Cobra	Poca	Roadrunner	Oruga	Robojet	Logica	Spraying systems	Mixa
<b>Tunneling:</b>													
Sprayed concrete – wet													
Sprayed concrete – dry													
Anchor grouting, mortar back filling													
TBM													
<b>Mining:</b>													
Sprayed concrete – wet													
Sprayed concrete – dry													
Anchor grouting, mortar back filling													
<b>Shafts</b>													
<b>Slope stabilisation:</b>													
Sprayed concrete – wet													
Sprayed concrete – dry													
Anchor grouting													
<b>Repair:</b>													
Reconstruction and repair – wet													
Reconstruction and repair – dry													
<b>Refractories</b>													
<b>Fire protection</b>													
<b>Sandblasting</b>													
<b>Sprayable membrane</b>													

■ Ideal application

■ Possible for this application, perhaps adaption necessary



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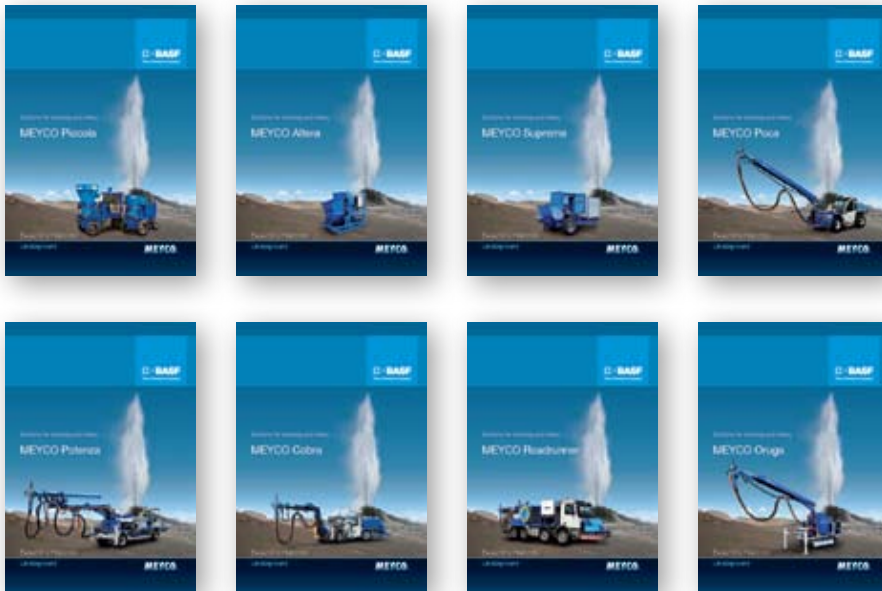
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Further brochures on our equipment solutions are available:



**MEYCO Customer service**

MEYCO, its affiliated companies and selected representatives worldwide offer competent advice, prompt service and efficient training for your personnel. We maintain service support centres in Switzerland, Germany, Norway, Turkey, USA, South and Central America, Middle East, China, India, South East Asia and Australia.

Being a part of BASF, The Chemical Company, is a major factor in our success. Technical and design modifications remain reserved at all times.

Technical properties have been achieved under theoretical and normal conditions. Please consult the respective machine manual for all matters related to safety, operation and maintenance.

**Certified quality**



Our products conform  
to EU standards



MEYCO® 03/10/AB C/rea