



### **About MIPL**

### Strategic Partner for your Tunnelling needs

MIPL is the leading manufacturer, importer & solution provider for Tunnelling & Mining Projects.

#### **Knowledge & Experience**

Our management is having more than 30 years of experience in underground projects consists of highly skilled personnel, engineers, mechanical technicians and quality control. We are constantly investing in new technology, working closely with our business partners to meet our customer's current and future needs and expectation.

#### **Professional Service**

A professional but caring approach, flexibility and quick delivery times combined to provide the ideal service in support of our quality product range.

#### **Quality Products**

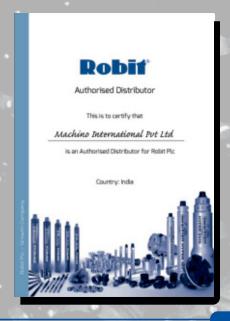
When assessing quality of our products we carefully consider a number of criteria including environmental suitability, ease of use, design, safety, reliability and packaging.

#### A Partner to Rely on

We understand the value of long term business relationships, our aim is to develop trusting relationships, which foster success and bring benefits to both our partners and ourselves.

### **Our Certifications**















# Reliable Ground Support

| 1. Self Drilling Anchor System          |        |
|---|--------|
| 2. Pipe Roofing System                  |        |
| 3. Water Expandable Bolt & Pumps        |        |
| 4. Fiber Glass Bolt                     |        |
| 5. Sleeved Grouting Pipes               |        |
| 6. Inflatable Packers                   |        |
| 7. Mechanical Packers                   |        |
| 8. Drainage Pipe                        |        |
| 9. Robit Rock Drill Tools               |        |
| 10. Rentals                             |        |
| 11. Spare Parts for Tunneling Equipment | Anno K |



### Some of Our Esteemed Clients

Client logos are registered trademark of respective companies and these are used here for client list representation purpose only.

















































### **SELF DRILLING ANCHOR SYSTEM**

R32, R38, R51, T76

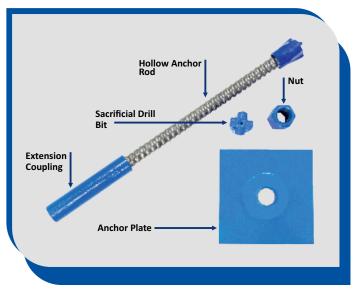
### **Superior & Cost Effective Bolting Solution**

The MIDAS Hollow Bar is a fully threaded self-drilling anchorage system which can be simultaneously drilled and grouted into loose or collapsing soils and brittle rock without the need for a casing. MIDAS Self Drilling Anchor System provide superior and cost effective bolting solution for unstable ground conditions such as sand, gravel, silt and clays and in fractured rock formations. The Self Drilling Anchor is optimized and tailored to the projects needs. Lean manufacturing methods are adopted to keep the lead times low and deliveries reliable. The production process is closely monitored and quality is controlled at every stage of the manufacturing process.

www.machinoindia.com

### A Self-Drilling Anchor Consists of:

- Hollow Anchor Rod The anchor rod has a hollow bore for flushing and grouting and has a left-hand thread for connection to standard drill tooling. It is manufactured from seamless thick wall steel tubing, cold rolled to a standard ISO rope thread profile.
- Drill Bit The Anchor drill bit is the most crucial part of the anchoring system and is responsible for the productivity of the installation.
- Extension Couplings The couplings enables direct end-toend energy transmission between each bar, reducing losses and ensuring maximum percussive energy at the drill bit. All extension couplers exceed the tensile strength of bars by minimum 20%.
- Bearing Plate The bearing plates are forged steel plates with a center hole, allowing articulation of seven degrees in all directions.
- Hexagonal Nut The hexagonal nuts are manufactured from high precision steel with chamfered edges on both ends and tempered. All nuts exceed the tensile strength of bars by minimum 20%.





EX
Hardened cross bit
for loose to medium
dense ground conditions



EXX
TC cross bit
for soft to medium
rock formations



ESF
Hardened button bit
for unconsolidated
rock with boulders



ESSF
TC button bit
for medium rock
formations

#### **Technical Specification**

| ANCHOR BAR                | R32L  | R32N/20       | R32N          | R32S/17       | R32S/15       | R38N/21               | R38N/19         | R51L          | R51N            | T76N          | T76S          |
|---------------------------|---|---------------|---------------|---------------|---------------|-----------------------|-----------------|---------------|-----------------|---------------|---------------|
| Outside Diameter (mm)     | 32  | 32            | 32            | 32            | 32            | 38                    | 38              | 51            | 51              | 76            | 76            |
| Internal Diameter (mm)    | 21  | 20            | 18            | 17            | 15            | 22                    | 19              | 36            | 33              | 52            | 47            |
| Cross Section (mm2)       | 356   | 363           | 410           | 445           | 509           | 611                   | 700             | 713           | 993             | 2000          | 2400          |
| Ultimate Load (kN)        | <u>≥</u> 260                                    | <u>≥</u> 280  | <u>≥</u> 280  | ≥360          | ≥360          | <u>≥</u> 500          | <u>&gt;</u> 500 | <u>≥</u> 550  | <u>&gt;</u> 800 | ≥1600         | ≥1900         |
| Yield Load (kN)           | <u>≥</u> 200                                    | ≥230          | <u>≥</u> 230  | ≥280          | ≥280          | <u>≥</u> 400          | <u>≥</u> 400    | <u>≥</u> 450  | <u>&gt;</u> 630 | ≥1200         | ≥1500         |
| Weight (kg/m)             | 2.8   | 2.85          | 3.2           | 3.5           | 4             | 4.8                   | 5.5             | 6.3           | 7.8             | 15            | 19            |
| Thread Type               | ISO10208  | ISO10208      | ISO10208      | ISO10208      | ISO10208      | ISO10208              | ISO10208        | ISO1720       | ISO1720         | T-Thread      | T-Thread      |
| Type of Steel             | EN10083-1                                       | EN10083-1     | EN10083-1     | EN10083-1     | EN10083-1     | EN10083-1             | EN10083-1       | EN10083-1     | EN10083-1       | EN10083-1     | EN10083-1     |
| Thread (Left/Right Hand)  | Left or Right                                   | Left or Right | Left or Right | Left or Right | Left or Right | Left or Right         | Left or Right   | Left or Right | Left or Right   | Left or Right | Left or Right |
| Length (m)                |   |               |               |               |               | (1) x2, x3, x4, x5, x | 6               |               |                 |               |               |
| Ontions of Anti-Corrosion | No. Hot-diagonal superioration / Enough Coating |               |               |               |               |                       |                 |               |                 |               |               |





## **Pipe Roofing System**

MIDAS - Pipe Roofing System / Umbrella System is a support system used in loose ground conditions in conventional and mechanized tunneling. It is used to enhance ground properties to stabilize and reduce risk in tunnel works. It is a method of supporting tunnel by driving pipes ahead of excavation. It is also used in developing the portal sections and for the re-excavation of collapsed sections in underground works

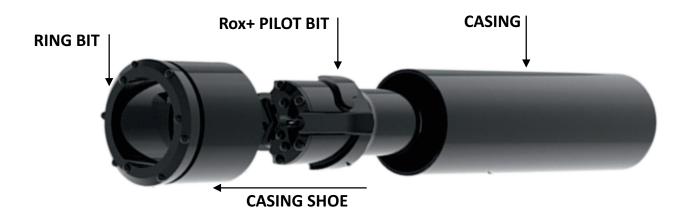
### Pipe Roofing System

#### **Economical Benefits**

- More holes in time unit
- Low set-up times
- Long pilot bit lifetime
- Low investment and running costs
- Even quality

#### **Fields of Application**

- Weak Ground Structure
- Portal Sections
- Frequently Changing Ground Conditions
- Re-Excavation of Collapsed Tunnels
- Urban Tunneling



#### **Pipe Roofing Components**

- Starter Pipe: First Pipe Welded with Ring Bit on one end & male/female threading on other end, which can be perforated /
  non perforated as per the design requirement.
- Extension Pipe: Male Female threaded pipe for extension, which can be perforated / non perforated as per the design requirement.
- Pilot Bit
- Drill Rods
- Grouts Plugs / Injection Cap

Threads: Pipes have trapezoidal thread with double start.

*Sizes* for Pipe Roofing System: 76.1, 88.9, 101.6, 114.3, 139.7, 159, 168.3

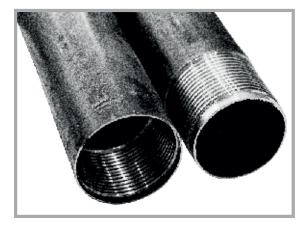


**Pilot Bit** 





### Types of Thread Connection



#### **Standard Thread Connection**

Male and Female Connections are cut into both ends of Seamless Casing Pipes. Outer Diameter and Internal Diameter of the Seamless Casing Pipe at threaded portion is constant. Thread design can be standard Acme Thread or Trapezoidal Thread.



#### **Nipple Connection**

It consists of Male and Female Threaded Connection with Special Nipple Fittings which are pressed and welded into the ends of standard pipes. The internal diameter of the casing tube is reduced in the nipple threaded portion of the casing pipe. The nipple connection having a more Bending Moment compares to the Standard thread connection.

#### The installation of the Pipe Roof System is simple and quick and has the following effects.

- Reducing the ground loss by creating a boundary of stiff material between the soil and tunnel core.
- Stabilizing the ground in the area of newly excavated and get unsupported excavation round.
- Distributing loads acting upon the tunnel roof above the freshly excavated round into the in-site ground ahead of the
  faceand the lined tunnel behind the face. Confinement of the tunnel excavation area ahead of the tunnel face.
- Enhancing tunnel face stability by reducing loads acting upon the tunnel face.
- Reducing surface settlement.











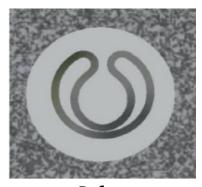
### **Expandable Friction Bolt System**

MIDAS - Expandable Friction Bolt is used for temporary rock reinforcement in underground works. This rock bolt is made of a welded tube folded on itself and sealed at one end while the other end is consisting of special head bushing used for inflation. It is expanded using a high pressure water pump. The high load bearing capacity combined with excellent elongation properties ensure safer working conditions and faster excavation cycles for low costs.

### **Expandable Friction Bolt**

#### Main Advantages of Expandable Friction Rock Bolts

- Full load bearing capacity over the entire installed bolt length.
- Ability to maintain load bearing capacity even during underground deformations.
- Safe & easy installation with no additional building materials required for installations.







After

#### **Installation Procedure**

- Drilling of hole in the rock.
- Insert the Expandable Friction Rock Bolt.
- Inflation of bolt to a set pressure using a high pressure water pump.

Various Capacity 120kN, 160kN, 240kN

• Minimum Elongation 10%, 20%

Delivery Lengths 1-6mtr.

#### **Face Plate for Expandable Friction Bolts**

Face plates are used to create a local surface support around the bore hole collar area. They are also utilized to maintain local roof stability, to prevent key block movement and to retain surface support like mesh. The plates are manufactured from high quality steel and meet or exceed the properties stated in the individual specifications



#### **Technical Specification**

| ANCHOR BAR                 | MID120   MID120+ | MID160   MID160+ | MID240   MID240+ |  |  |
|----------------------------|------------------|------------------|------------------|--|--|
| Bolt Dimeter               | 28mm             | 38mm             | 38mm             |  |  |
| Profile Diameter           | 27.5mm           | 36mm             | 36mm             |  |  |
| Material Thickness         | 2mm              | 2mm              | 3mm              |  |  |
| Upper Bushing Diameter     | 28mm             | 38mm             | 38mm             |  |  |
| Inflation Bushing Diameter | 30/37mm          | 41/48mm          | 41/48mm          |  |  |
| Hole Diameter              | 32 - 39 mm       | 43 – 52 mm       | 43 – 52 mm       |  |  |
| Minimum Breaking load      | 120 kN           | 160 kN           | 240kN 230kN      |  |  |
| Minimum Elongation         | 10% 20%          | 10% 20%          | 10% 20%          |  |  |
| Typical Elongation         | 15% 30%          | 15% 30%          | 15% 30%          |  |  |
| Standard Lengths           | 1.5 - 4.0 m      | 2.4 - 6.0 m      | 2.4 - 6.0 m      |  |  |



### **High Pressure Water Pump**

#### For setting bolts in ceilings of tunnels and mines

We offer multiple high pressure pumps for setting bolts in ceilings of tunnels and mines. The pump model HD is available with an electric or hydraulic drive unit. This standardizes and simplifies the spares inventory for pumps which are equal in volume.



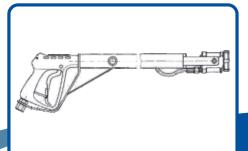
#### High Pressure Electric Pump HD-E

In the 14l water or 21l water per minute at 300 bar model available. The solution depends on your specific task.



#### High Pressure Hydraulic Pump HD-H

from 14l water per minute at 300 bar up to 40l water per minute at 300 bar. Also available without steel frame, e.g. for installation on a tunneling rig.



#### **High Pressure Pump Accessories**

For setting bolts in ceilings of tunnels and mines as well as for cleaning purposes for the offered Hydraulic- (HD-H) and Electric- (HD-E) Pumps.

### **Grout Pump**

#### **Applications**

The grout mixing pump MAI M400 NT developed especially for extremely stressful underground conditions. It has been used successfully around the world in mining, tunnel construction, civil engineering and shoring of slopes , hill sides and building excavations.

#### Areas of Use

The proven mixing and delivery technology is especially suitable for:

- · Injection Work
- · Re-Injection Grouting
- Drill Hole Filling
- · Back Filling
- Anchor Mortar

#### Patented Technology

The MAI M400 NT is fully automatic mortar mixing pump for continuous processing of any type of pumpable anchor mortars and site cements. The material is mixed in one pass by a single main motor and delivered without a problem in the desired quantity. The mixed and delivered quantity can and may be varied at will using worm pumps with different dimensions. The patented and time-tested MAI mixing/conveying technology ensures top mixing results

#### Indestructible

Thanks to its high quality, archived through the most modern manufacturing methods available, and its service-friendly modular construction, the MAI M400 NT stands apart with its long service life, low susceptibility to error and economy.



#### Scope of Delivery

- Spur gear motor 6 kW / 200 rpm
- Vibrator
- Worm pump Mp3 ,, L" (standard equipment) 60 L/h
- 20 m high pressure mortar hose NW25 with quick release couplings
- · Automatic reverse drive
- Automatic screen safety feature
- Tools
- Cleaning equipment
- Water pump-optional
- Automatically polarity control-optional





### Fiber Glass Bolt-FRP/GFRP

MIDAS Fiberglass Rock Bolts are used in both permanent and temporary ground support applications. It's ideal applications include Hard Rock Mining. Ground Stabilization, Salt Mines, Tunneling and Tibacks. Our Fiberglass Rock Bolts are non-corrosive, non-magnetic and non-conductive which guarantees that your project will not weaken due to rust. In addition, Fiberglass Rock Bolts are one quarter the weight of steel rock bolts or soil nails. It will save you money in transportation and labor costs.

### Fiber Glass Bolt

#### Feature & Benefits:

- High Corrosion Resistance.
- · Extremely High Embedment Strengths
- 1/4 the Weight of Steel
- 2x Tensile Strength
- Easy to Post Tension
- Non-Magnetic
- · Low Electric Conductivity
- Flexibility
- · Customization Option Available.



#### **Technical Specification**

|                   | Unit |            | Hollow Rockbolt |            | Self Drilling Rockbolt |
|-------------------|------|------------|-----------------|------------|------------------------|
| Diameter          | mm   | 25/12      | 28/14           | 32/15      | 38/20                  |
| External Diameter | mm   | 25         | 28              | 32         | 25                     |
| Internal Diameter | mm   | 12         | 14              | 15         | 20                     |
| Cross -Section    | mm²  | 250        | 310             | 400        | 540                    |
| Thread Di rection |      | Right/Left | Right/Left      | Right/Left | Right/Left             |
| Tensile Load      | KN   | 220        | 280             | 365        | 490                    |
| To rsion Strength | Nm   | 180        | 250             | 360        | 450                    |
| Thread Type       |      | R25        | R28             | R32        | R38                    |

#### **MIDAS GFRP Round Bars**

MIDAS GFRP glass fiber bars impregnated with polyester resin are used to pre-contine and stabilize the tunnel front in order to temporarily control deformations induced by excavation. MIDAS GFRP products can be afterwards destroyed without damaging the excavating equipment.

#### MIDAS GFRP ® PIPES & HOLLOW BAR

| Internal/External Diameter (mm) | Туре            | Nominal breaking load<br>KN |
|---------------------------------|-----------------|-----------------------------|
| 14/28                           | Blind           | 450                         |
| 40/60                           | Blind / Sleeved | 900                         |





### **Sleeved Grouting Pipes**

Sleeved Port Pipes used to perform injections of cement based mixtures in soil consolidation and waterproofing. They are essentials in the excavation of tunnels, construction of dams and the reduction of the settlement in urban areas.

#### **Pipe**

Density: UNI EN ISO 1183-1: 1.5 + 0.1g/cm3 Tensile Strength: UNI EN ISO 527:>30 Mpa

Elastic Modulus: UNI EN ISO 527:>2500 Mpa

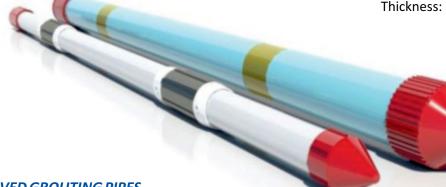
#### Manchette

Thermoplastic vulcanized elastomer with excellent flex fatigue resistance, compression set<30% (22hr@

70°C), black color

Nominal length: 80mm, Nominal

Thickness: 2 mm



#### **SLEEVED GROUTING PIPES**

The sleeved TAM Pipe is manufactured with rigid PVC. It has a smooth internal surface and spaced perforations (Standard sleeve spacing is 330 mm or 500 mm). These perforations are covered by "flush" or "external" rubber sleeves, also called "manchette", which act as non-return valves.

The pipes are delivered in standard lengths of 3 or 5 meters. Both extremities are threaded and by means of external ABS connection couplings, they can be connected to each other to reach the total length required.

| NOMINAL DIAMETER   | INNER/OUTER DIAMETER | SLEEVE TYPE | PACKER       |
|--------------------|----------------------|-------------|--------------|
| 1"                 | 27/34mm              | External    | Spring 27    |
| 1"1/8              | 28/38mm              | External    | Rigid 28     |
| 1"1/2              | 40/48mm              | External    | Hydraulic 30 |
| 1"1/2 <sup>f</sup> | 40/50mm              | Flush       | Hydraulic 30 |
| 2"                 | 50/60mm              | External    | Hydraulic 42 |
| 2"                 | 50/60mm              | Flush       | Hydraulic 42 |

**REINFORCED SERIES** Sleeved grouting pipes are manufactured with a special shock resistant PVC with extra wall thickness and sealing gasket. These pipes have higher bursting pressure and are recommended to be used with preventer or HDD applications.

| NOMINAL DIAMETER | INNER/OUTER DIAMETER | SLEEVE TYPE | PACKER       |
|------------------|----------------------|-------------|--------------|
| 1"1/2            | 40/55mm              | Flush       | Hydraulic 30 |
| 2"1/2            | 55/75mm              | Flush       | Hydraulic 42 |

In case of specific needs, grouting pipes can be ordered with different sleeve's spacing, reinforced Alu-Coupling and in custom lengths.

#### **GROUND ANCHOR TAM PIPE**

1. Grouting pipes can be made using a special shockproof PVC which enables the sleeved pipes to be more flexible. This product is used with pre-assembled strand anchors to perform selective and repetitive injections in the bonded section around the anchor's bulb.

| NOMINAL DIAMETER | INNER/OUTER DIAMETER | SLEEVE TYPE | PACKER    |
|------------------|----------------------|-------------|-----------|
| 1"               | 27/34mm              | External    | Spring 27 |

#### **GROUND ANCHOR GROUTING HOSE**

small diameter grouting pipes are used to perform injection of cement mixtures and resins in post grouting application with strand or rebar anchor. They could be used also in soil consolidation and waterproofing without the packers. They are supplied in bars or rolls, with external manchette, couplers and plugs

| NOMINAL DIAMETER                                   | INNER/OUTER DIAMETER          | SLEEVE TYPE | PACKER                      |
|--|-------------------------------|-------------|-----------------------------|
| 3/8"   | 12/16mm                       | External    | NO                          |
| 1/2"   | 17/20mm                       | External    | NO                          |
|  |                               |             |                             |
| Grouting Hose<br>to connect the injector to the pa | Obturator<br>cker MPSP Tech   |             | Reel with injection trestle |
| Replaceable sealing rings                          |                               |             |                             |
| Sliding Double Ring Packer<br>Rigid or Spring      | Hydraulic Packer with fitting |             | Plastic Centers             |



### **Inflatable Packers**

#### **General Description**

Inflatable packers are used around the world (universal), as underground test devices for liquid pressure measurements and major elements used where drilling and injection are done by injection consolidating or waterproofing grouts, and have many applications related to construction sites mentioned below.

We offers an exceptional range of different packers's diameter (28 to 170mm) for used in boreholes of (50 to 350 mm).

Packers are manufactured using layers in of steel cable bedded into natural rubber giving them the strength to resist the rough conditions of work site used. The exception expansion capacity by using hydraulic liquid or gas pressure enables a good seal either in regular or uneven boreholes, as well as facilitating running in and retrieving.



#### **Packers Technical Specification**

We manufacturer exceptional range of complete inflatable packers different w.r.t. Diameter and length as mentioned Below.

#### **Technical Specification**

| Diameter (mm) | Length (L) mm | Inflated Diameter (in air) mm | Maximum safety pressure bar |
|---------------|---------------|-------------------------------|-----------------------------|
| 28            | 300-1000      | 55                            | 75                          |
| 32            | 300-1000      | 60                            | 75                          |
| 44            | 300-1000      | 85                            | 75                          |
| 54            | 500-1000      | 115                           | 75                          |
| 64            | 500-1000      | 130                           | 75                          |
| 74            | 500-1000      | 155                           | 75                          |
| 84            | 500-1000      | 165                           | 75                          |
| 94            | 500-1000      | 185                           | 75                          |
| 120           | 500-1000      | 220                           | 75                          |

### **Mechanical Packer**

Mechanical Packer is a reusable packer used as a seal when grouting, it is placed inside the grout hole and tightened against the wall of the hole by a mechanically expanding rubber sleeve.

The rubber bush expands and is wedged in the drill hole when the handle on the sleeve is turned.

It slides the outer tube on the inner tube thereby expanding the rubber sleeve.

The non return valve at the end prevents the risk of getting hardened grout in the shut off valves and grout hoses.

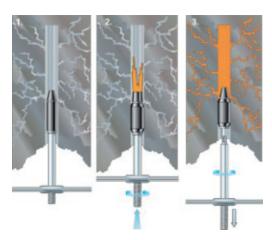
The packer can be flushed clean after the passing of grout is completed.



| Product (mm)    | M 30  | M 32  | M 34  | M 36  | M 38  | M 41  | M 45  | M 48  | M 51  | M 54  | M 57  | M 60  | M 63  | M 66  |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Dimensions (mm) | 28,5  | 31,5  | 33,5  | 33,5  | 36,5  | 39,5  | 43,5  | 45,5  | 48,5  | 52,5  | 54,5  | 57,5  | 60,5  | 62,5  |
| Dim area (mm)   | 30-34 | 32-36 | 34-38 | 36-40 | 37-42 | 40-44 | 44-48 | 46-50 | 49-53 | 53-57 | 55-59 | 58-62 | 61-65 | 63-67 |

#### Injection process when used:

- 1. Connect the gasket at the injection pipe before inserting it into the bore hole. Expand the rubber in the hole by means of manual or hydraulic chucking or chucking using a wrench.
- 2. Inject a cement mixture or chemical material into the crack system in the rock through the gasket.
- **3.** Shut off the pressure behind the gasket once injection is complete. The valve in the gasket then closes automatically due to the tension in the rubber and the pressure, and prevent injected mass from running out. Remove the injection pipe from the gasket. The grommet on the injection gasket is then held in position by a double lock washer. The injection pipe is flushed out so that is can be reused.







### **Drainage System**

#### Introduction

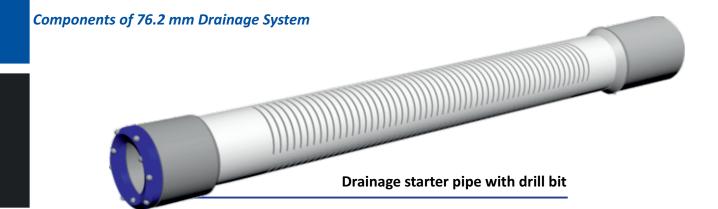
The MIDAS Self Drilling Drainage System is used for deep drainage holes. MIDAS Drainage System consists of an inner steel tube which is sleeved with a PVC slotted pipe directly driven by patent ring and pilot bit system from Robit, Finland. The Drainage System can be applied in drainage works of tunnel and water saturated slopes.

#### **Main Advantages:**

- Ease of use.
- Can be installed with existing equipment.
- Self Drilling System Highly Beneficial for Collapsible Soil Conditions.
- Installation can be done for higher drilling length.
- PVC Drainage Tube Sleeve starts from the Starter Unit until end of extension tube.
- Cost Effective System as Pilot Bit is Multi Use.

#### **System Description**

The MIDAS Self Drilling Drainage System is installed piecewise by drilling jumbo or equivalent drill rigs. Flushing and back flushing during drilling takes place inside the drainage tube.



Drainage Starter Pipe consist of OD 95 mm Ring Bit welded on steel tube of OD 76.2mm and PVC pipe of OD 89mm wrapped on steel tube.

#### **Technical Specification**

| Ring Bit   | OD 95 mm   |
|------------|--|
|            | Driven by suitable Multi Use Pilot Bit (Patented Robit System) |
| Steel Tube | Grade St52 (Y.S. > 355N/mm2) OD 76.2 mm, ID 64.2 mm            |
|            | Perforation 12mm in interval of 50cm on whole side.            |
| PVC Pipe   | OD 89 mm, ID 77 mm   |
|            | Slotting 1mm in whole pipe circumference around three slot.    |



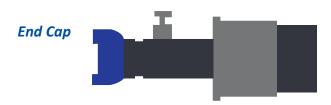
Drainage Extension Pipe consists of steel tube of OD 76.2mm and PVC pipe of OD 89mm wrapped on steel tube.



Drainage End pipe consists of steel tube of OD 76.2mm with no slotted PVC pipe.



Drill Rod R32 is used to drive the drainage starter pipe and subsequently the extension pipe and end pipe.







## **Rock Drilling Tools**



### **ROBIT Rock Drill Tools (RDT)**

Rocktools product line covers all construction, quarrying and mining drill&blast applications from soft to hardest rock conditions. Tunnelling is one of the most important customer segments for Robit bits, and applications like drifting, cuthole and bolthole are well covered. Also major mining and quarrying customers have approved Robit quality worldwide.

### **Buttons Bits**





Couplers

## **Drifter Rods**





**Shank Adapters** 



#### Our Customer gets advantages o

- Budget & Control maintenance costs
- Eliminate equipment obsolescence & depreciation
- Experienced manpower at all times
- Optimize balance sheet
- Young modern fleet
- Intensive fleet maintenance & refurbishment programme to ensure minimal downtime
- Customize rental packages as per customer's requirement

#### **Service Provide by Us:**

- Rental of Underground & Mining Equipment
- Contract for Excavation of Tunnel & Slope Stabilisation
- Contract for Roof Support System Installation like Pipe Roofing, SDA, Swellex along with Grouting Work
- Annual Maintenance Contract of customer's equipment after through inspection and necessary repairs
- Major Repairs & Refurbishment of customer's equipment in our workshop
- Buy & Lease Back of customer's equipment with complete operation and maintenance
- Backup Drill Jumbo during customer's refurbishment undergoing at our workshop

#### **Rental Service**

- Renting an equipment is more profitable than Owing an equipment, it lowers upfront payment thereby increasing projects IRR
- No Maintenance/ breakdown cost our scope includes maintenance as well as operation with experienced & skilled manpower, no spare inventory & planning
- We carry out intensive fleet maintenance & refurbishment programme to ensure minimal downtime of equipment
- Customize rental packages as per customer's requirement

#### **Annual Maintenance Contract:**

MIPL besides owning tunnelling equipment also has dedicated & professional workforces and foresighted management, fully equipped workshop

- Maintain machines always immediate working condition.
- Cost Saving.
- Efficient maintaining from parts procurement to repairing the machines.
- · Reduce down time at site

#### **Our Rental Fleet**

- Sandvik Drill Jumbo DT820, DT920i, DT921i & Dt1131i
- Epiroc Single Boom Drill Jumbo S1D
- Wet Robotic Shotcrete Machine Meyco Potenza, CIFA
   CSS3, Putzmeister, SPM 500, SPM4210

- No need contingency parts stock.
- No paper work for procurement, stock control, delivery, service and maintenance
- No other expenses to maintain your machine.
- Ease budget projection up to end of the work.
   (monthly base or Linear Excavation meter base are available for proposal).
- Increase second hand value when you sell the



#### Buy & Lease back of Equipment & Backup machine program

- We have option to buy the equipment you are looking for refurbishment
- Equipment goes under our refurbishment program while simultaneously we give an Equipment on lease with complete operation & Maintenance
- Once refurbishment in done you can continue with our backup machine / your equipment can be put on lease with operation & maintenance / you can purchase the equipment
- · Backup Machine We also provide backup machine on rental basis, when your equipment is under refurbishment

#### Repair & Refurbishment Programme

- Give a new life to your Equipment under our refurbishment programme
- Skilled Manpower & Maintenance team Specialized on Refurbishment Programme
- Our repair & refurbishment programme is cheaper than the equipment manufacturer due to their high operating cost and also we have direct access to many of the OEM vendors
- We have identified major high performance after market replacement manufacturer whose quality of parts are same equipment manufacturer with huge difference in price
- We undertake warranty on our refurbishment programme upto at least 4-6 months with complete operation and maintenance at site- Giving Customer Peace of Mind.
- Machine are transformed from old to brand new look & many customization works are also done on the equipment which is not offered on the equipment by the manufacturer.





### **Spare Parts**

#### **Drilling Equipment Parts (Epiroc, Sandvik)**

MIPL is a quality supplier of New Replacement Parts / Genuine Parts for Epiroc, Sandvik. Epiroc and Sandvik Drill rig parts and rock drill parts are some of the finest quality construction and mining equipment supplied by MIPL at reasonable prices. Given their durability and reliability, these world class drill rig parts and rock drill with undoubtedly surpass your expectations. MIPL Parts offers a wide selection of quality aftermarket and genuine Epiroc and Sandvik drilling equipment's accessories and spare parts at MIPL, our focus is to provide you with great quality parts at good value. Replacement parts offered by us undergo strenuous and strict inspection procedure to ensure quality of the products. Our basic principle: Quality with Value Guaranteed.

#### **Shotcrete Machine Parts:**

- Complete Spare for CIFA CSS2 / CSS3
- Complete Spare for Aliva Putzmeister
- Wear Parts for Meyco Shotcrete Machine
- Wear Parts for Normet Shotcrete Machine
- Concrete Hoses, Pipelines, Delivery Cylinder, Concrete Pistor





#### **Miscellaneous Products:**

Apart form above parts, we can offer various parts for you machine like Transmission parts (Spicer Dana, Funk, GE), Pumps Gaskets, Hydraulic System, Hydraulic Hoses & Fittings and Electrical Systems.







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