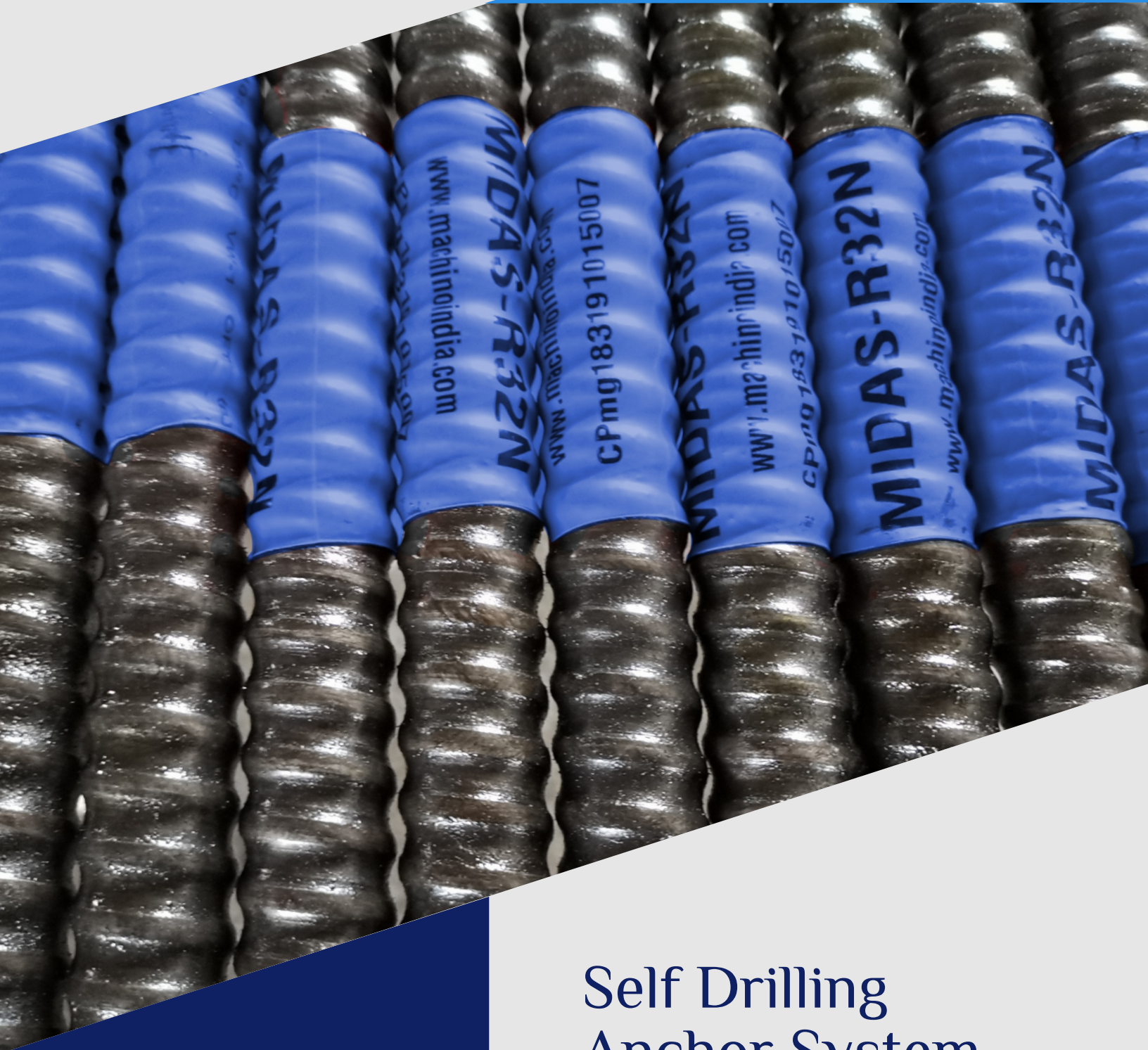


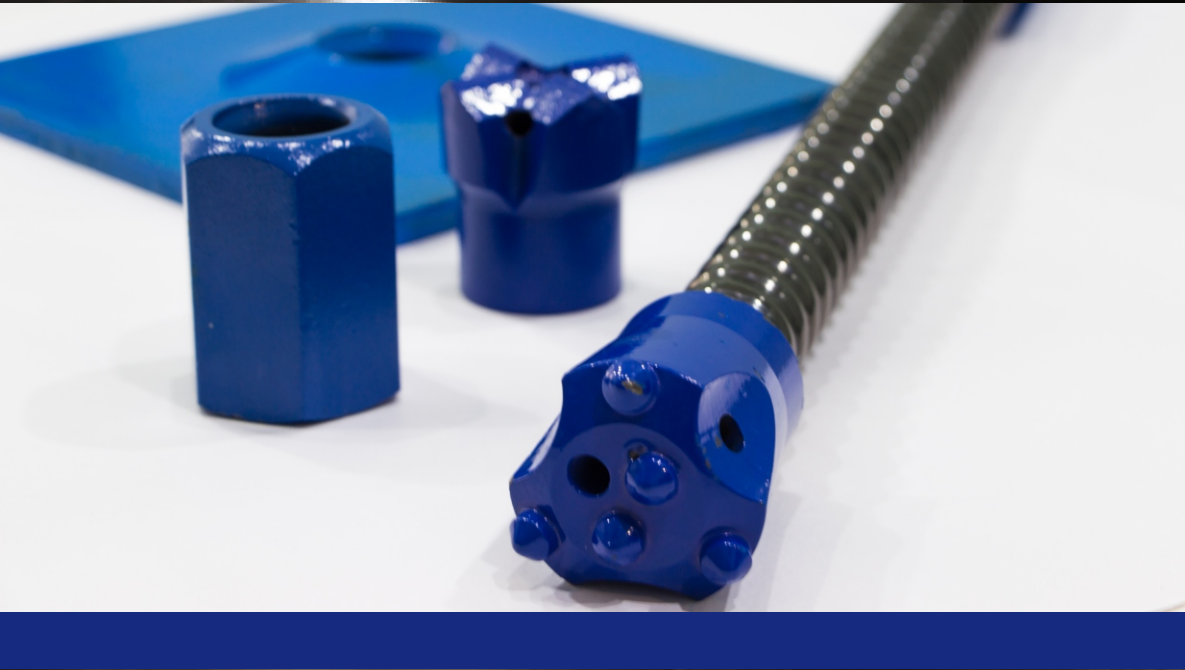
Superior & Cost Effective Bolting Solution



Self Drilling Anchor System

ISO 9001 : 2015
ICIUK

Self Drilling Anchor System

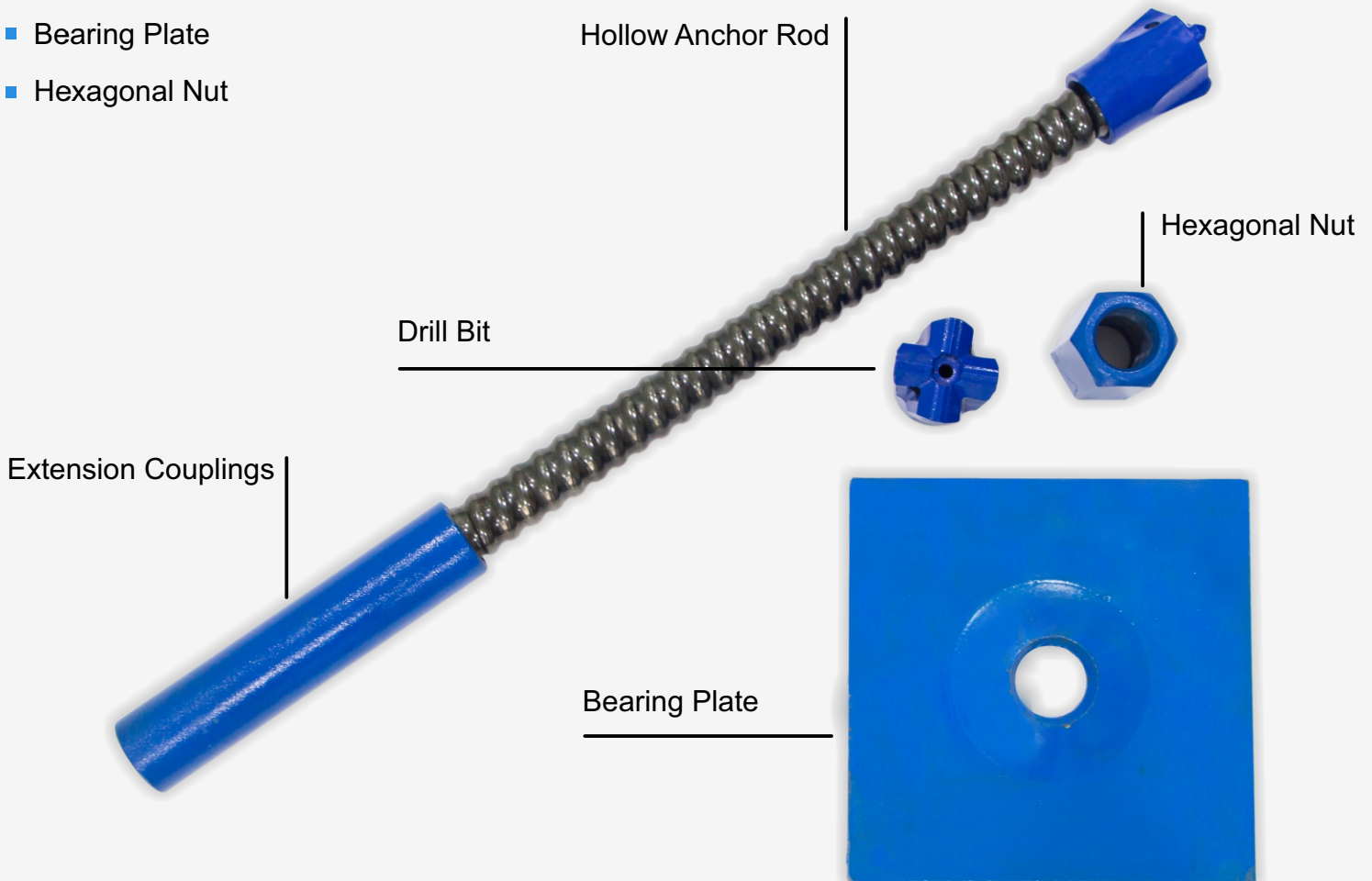


The MIDAS Hollow Bar is a fully threaded self-drilling anchorage system which can be simultaneously drilled and grouted into loose or collapsing soils and brittle rock without the need for a casing. MIDAS Self Drilling Anchor System provide superior and cost effective bolting solution for unstable ground 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.

The self drilling anchor bolt works with drilling a hole in cohesive and non-cohesive soil or loose rock, with a sacrificial drill bit and a hollow rod. A resin is injected at high pressure into the hollow and cavity which reinforces the surrounding area, later the hollow rod is locked with a retaining plate.

A Self-Drilling Anchor Consists of:

- Hollow Anchor Rod
- Drill Bit
- Extension Couplings
- Bearing Plate
- Hexagonal Nut



Hollow Anchor Rods

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 API standard thick wall steel tubing, cold rolled to a standard ISO rope thread profile. The rolling process refines the crystalline structure of the steel, increasing the yield strength, and producing a durable drill rod suitable for a wide range of applications. The standard rope thread of the anchor rod produces an excellent bond between the rod and grout.

Extension Couplings

The couplings enable direct end-to-end energy transmission between each bar, reducing losses and ensuring maximum percussive energy at the drill bit. To enable the correct seating of each bar within the coupler, all bars are chamfered with precision to enable the bar ends to have face-to-face contact.

Anchor Drill Bits

The Anchor drill bit is the most crucial part of the anchoring system and is responsible for the productivity of the installation. MIDAS offers a wide variety of drill bits to suit the changing geology encountered during projects with reliable performance and cost efficiency.

Anchor Drill Bits includes: EX, EXX, ESF, ESSF, EW.

Bearing Plates

The bearing plates are forged steel plates with a centre hole, allowing articulation of seven degrees in all directions.

Hexagonal Nuts

The hexagonal nuts are manufactured from high precision steel with chamfered edges on both ends and tempered. All nuts exceed the ultimate strength of the bar.

Technical Specification

ANCHOR BAR	R32L	R32N	R32S	R38N/21	R38N/19	R51L	R51N	T76N	T76S
Outside Diameter (mm)	32	32	32	38	38	51	51	76	76
Internal Diameter (mm)	21	20	18	22	19	36	33	51	47
Cross Section (mm ²)	356	363	433	611	700	713	993	2000	2400
Ultimate Load (kN)	260	280	360	500	500	550	800	1600	1900
Yield Load (kN)	200	230	280	400	400	450	630	1200	1500
Weight (kg/m)	2.8	2.85	3.3	4.8	5.5	6.3	7.8	16.5	19
Thread Type	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
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
Length (m)	(1) x2, x3, x4, x5, x6				(1) x2, x3, x4, x5, x6				



Machino International Pvt. Ltd.

875, Aggarwal Cyber Plaza-2, Netaji Subash Place,

Pitampura, New Delhi-110034

Tel. : +91-11-45105930

Email : inquiry@machinoindia.com

Web : www.machinoindia.com