

AT – Manx Bolt

Product code: AT/MX

Product specification: Manx Bolt – AT Bar

Category: Rock Bolts – Solid Bar

Introduction

The Manx bolt system eliminates threaded bar protruding beyond the tensioning nut of the rock bolt. This system can be utilised where clearance is an issue in low seam heights.

Key features

- Eliminates potential damage and injury from protruding bolt threads.
- Tensioning applied through Male Bolt and Female Coupling Connection System
- Internal M24 thread on nut end to allow hanging of accessories.
- Manufactured from a special hot rolled deformed bar designed by Sandvik.
- This bolt features a rib pattern which actively assists with mixing the chemical anchors during installation.
- The AT bolt typically provides marginally higher fracture toughness results over standard AX bar when measured by Charpy Impact Test.
- Shear Pin Break Out System.
- The deformed rib pattern improves load transfer properties.
- The rolled thread strength nominally equals the column strength of the bar.
- Corrosion protection may be provided by thermal diffused Obduro coatings.



Product Code Guide

Bolt Type	Diameter	Length	Drive Nut & Accessories	Coating	Packaging
AT	4	150	MXH	TD	050

Mechanical Properties

	Minimum	Typical
Yield Strength	600MPa 200kN	650MPa 240kN
Tensile Strength	840MPa 305kN	890MPa 340kN
Calculated Shear Strength	200kN	225kN
Elongation (After Fracture)	15%	19%
Mass per Metre	2.97kg	
Bar Core Diameter	Φ21.7mm	
Major Bar Diameter	Φ23.6mm	
Cross Sectional Area	370mm ²	
Rolled Thread	M24 x 3.0mm Pitch	
Impact Toughness	19 Joules	

Installation Guidelines

28mm hole diameters are preferred with a 38-42mm reamer.
 Hole depth is critical. Hole depth should be the length of the bolt being installed.
 It is important to follow the resin anchor recommended mixing and hold times as printed on the resin anchor cartons. Do not over mix.

Packaging

Standard bolt lengths range from 600mm to 3000mm in 300mm increments.
 Non-standard requirements are available by negotiation.
 Bolts are packaged in bundles of 50 with sub bundles available on request.
 Bolt fittings, such as nuts, anti-friction washers and domed balls, are supplied fitted to rock bolts in the configuration requested.

Notes

Sandvik is Quality Assured to ISO 9001:2015

Product range and accessories

Typically products used

Product Group	Round Plate	Octo Plate	Butterfly Plate	Resin
Product Imagery				
Product Code Prefix	RD	OCP	BUTT	RO

Phone app

Want to know more; our full product range, knowledge centre, and other details are available via the App; available on iOS and Android devices by searching "Ground Support".



iOS



Android

Legal disclaimer

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