

# SLOT AND WEDGE BOLT

Product – Ø24 Deformed Bar – Slot Wedge Anchor

Product Code Guide	Bolt Type	Diameter	Length	Drive Nut & Accessories	Slot	Packaging
	CS	4	210	K5	S	050

## Physical Properties

	Minimum		Typical	
Yield Strength	540MPa	225kN	625MPa	260kN
Tensile Strength	625MPa	260kN	720MPa	300kN
Calculated Shear Strength	169kN		195kN	
Elongation (After Fracture)	6%		9-14%	
Mass per Metre	3.44kg			
Bar Core Diameter	Ø23mm			
Major Bar Diameter	Ø27mm			
Cross Sectional Area	415mm <sup>2</sup>			
Rolled Thread	M24 x 3.0mm Pitch			

## Key Features

- The Slot and Wedge Bolt is manufactured from hot rolled reinforcing bar having rib deformations generally in a “herringbone” form. It has a 150mm long slot cut into the up end of the bolt and M24x3mm pitch rolled thread on the other end.
- The 150mm long slot is designed to accept a steel wedge which acts as a mechanical type point anchor. Refer to WE for details of the steel wedges.
- The solid deformed slot and wedge bolt parent bar is reduced in diameter to allow forming of the M24 rolled thread. The thread ed section of the bolt accordingly has reduced physical properties to that of the parent bar.
- The 24mm solid deformed slot and wedge bolt can be pre or post grouted if required with cementitious grouts.
- Corrosion protection may be provided by galvanizing or alternative coatings.

## Installation Guidelines

- 34mm hole diameters are preferred. Larger diameters than these can be used but anchorage capacity may be reduced. Holes larger than 36mm and smaller than 32mm are not recommended.
- Hole depth is critical and should be approximately 50mm shorter than the bolt.
- The wedge is assembled into the slot, just sufficient to support the wedge, for entry into the bolt hole. The nut is also rotated along the bolt thread to leave approximately 50mm of thread exposed.
- The bolt with the wedge is entered into the hole and the nut end of the bolt is fitted into a special spanner contained in a rotary percussive rock drill.
- Using both the thrust of the machine and full impact the bolt is driven onto the wedge to set the bolt. The spanner is then changed and the nut rotated to tighten the bolt.



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## Standard Lengths & 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

- Only DSI Underground rock bolt components should be used to enable the optimum performance of the bolt system to be obtained
- DSI Underground is Quality Assured to ISO 9001:2015

Typically used products with these items are:

	Products			
Product Group	Star Plate	Slot Wedge	Butterflies	W-Strap
Product Imagery				
Product Code Prefix	STP	WE	BUTT	MW

## 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 “DSI Underground”.



iOS



Android