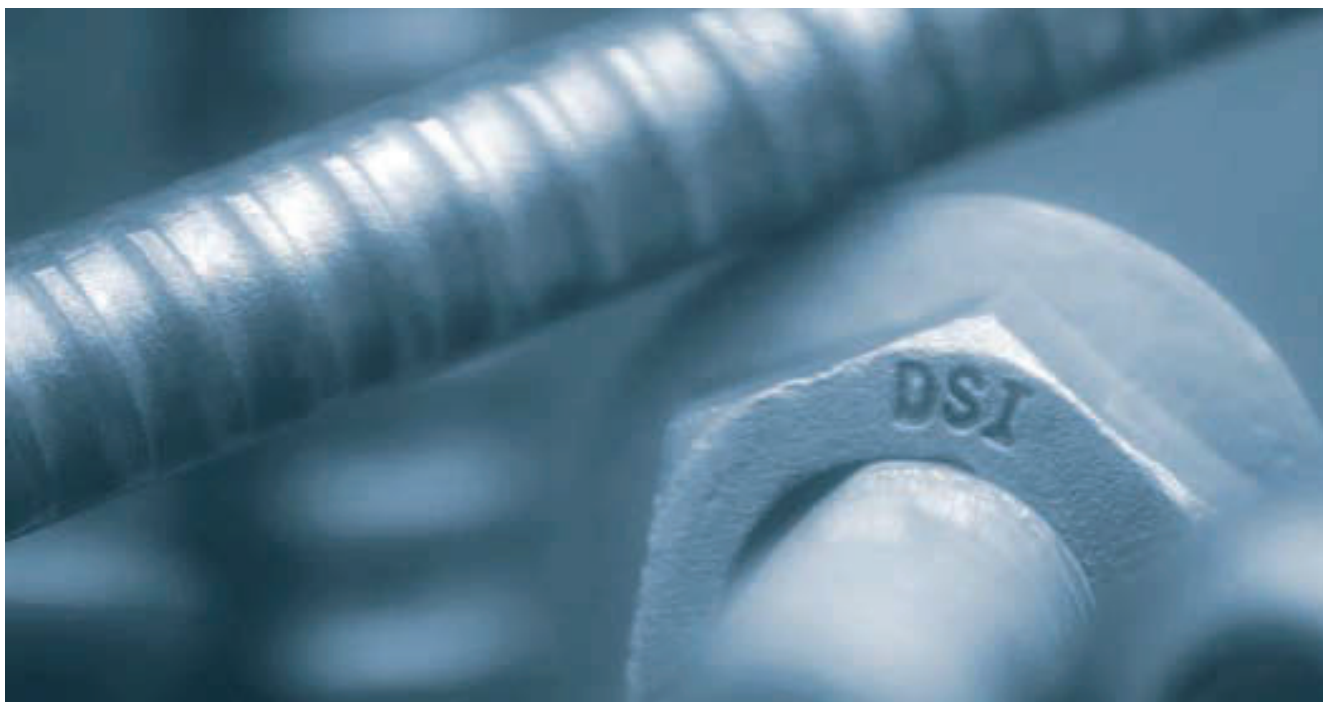


# ***ROCBOLT***<sup>TM</sup> TECHNOLOGIES

ROCBOLT GEWI<sup>®</sup> Geotechnical Systems



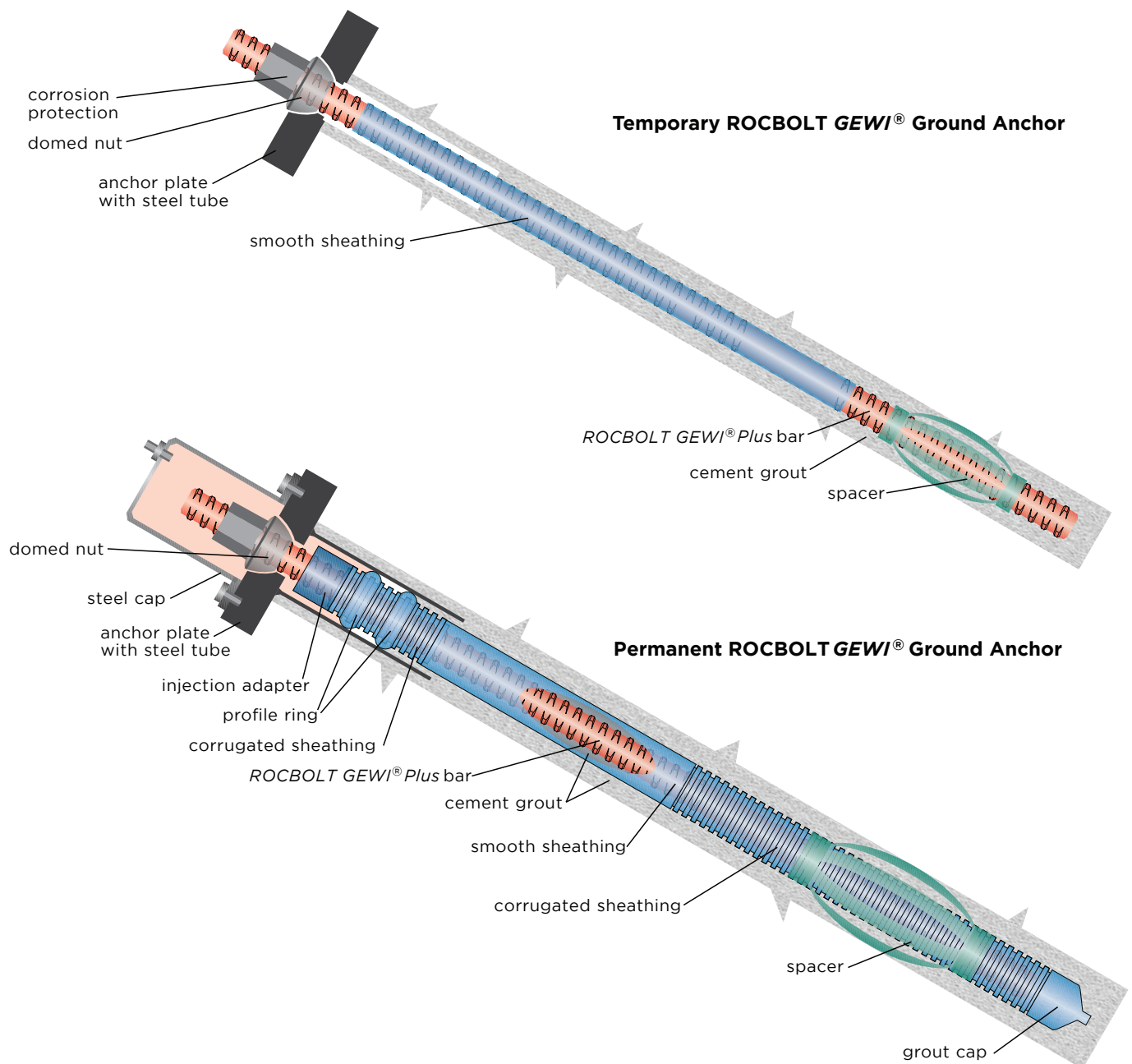
GROUND SUPPORT **SOLUTIONS**

[www.rocbolt.com](http://www.rocbolt.com)

# ROCBOLT Gewi® Ground Anchors

## Advantages and Characteristics

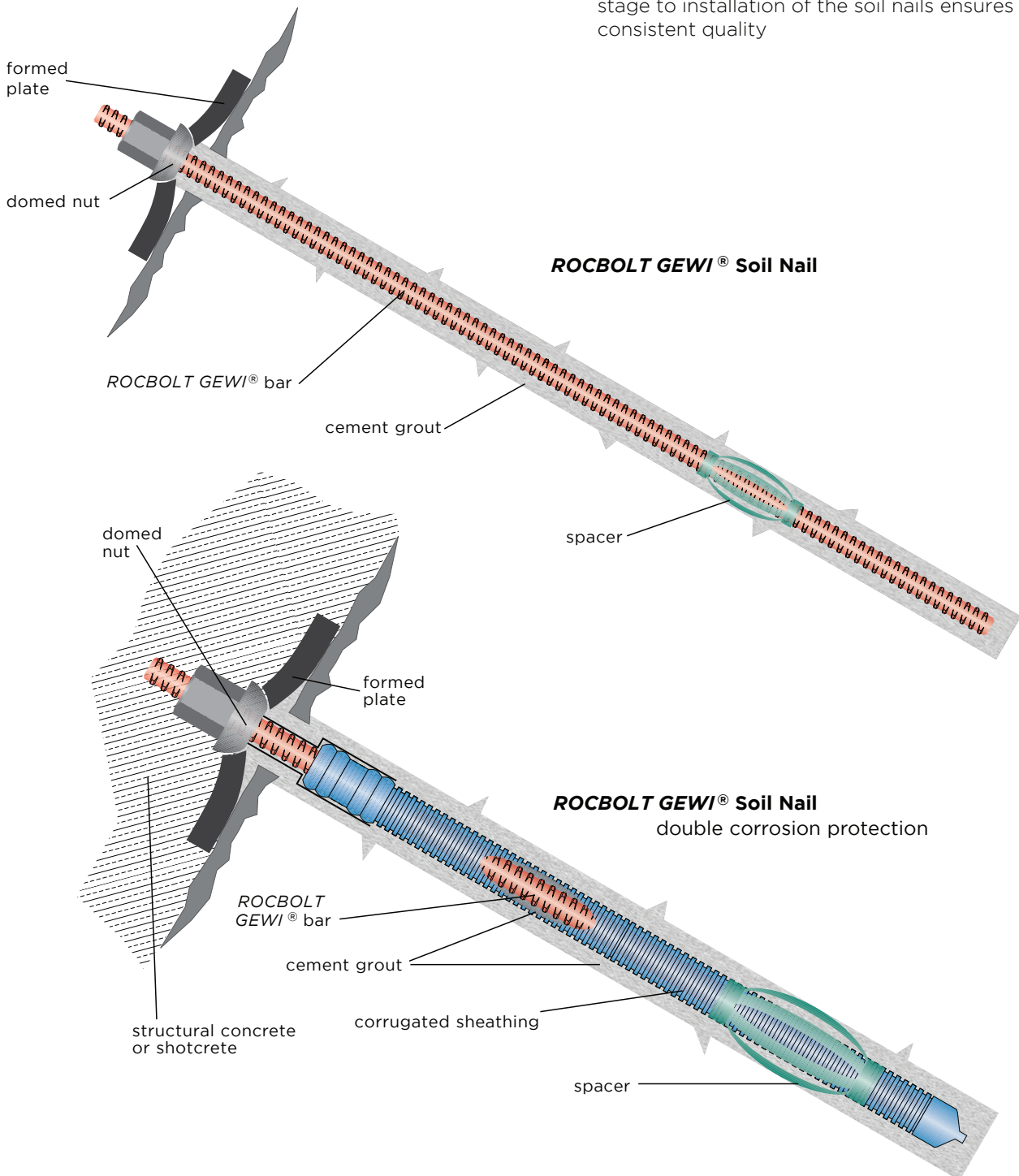
- Easy system handling
- Simple restressing and destressing through anchorage with nut
- Permanent corrosion protection possible
- Easy removal of temporary anchors through threaded sleeves
- Flexibility in transport lengths by using couplers
- High bond strength between ROCBOLT GEWI® threadbar and cement grout
- Angle compensation using wedge washers
- Quality assurance through internal and external supervision of production



# ROCBOLT Gewi® Soil Nails

## Advantages and Characteristics

- High durability through double corrosion protection possible
- Low susceptibility to corrosion
- Angle compensation up to 20° through formed plate
- Flexibility in length by using couplers
- Extension bars may be attached by using couplers
- Spacers ensure proper grout cover
- High standard of quality control from production stage to installation of the soil nails ensures consistent quality



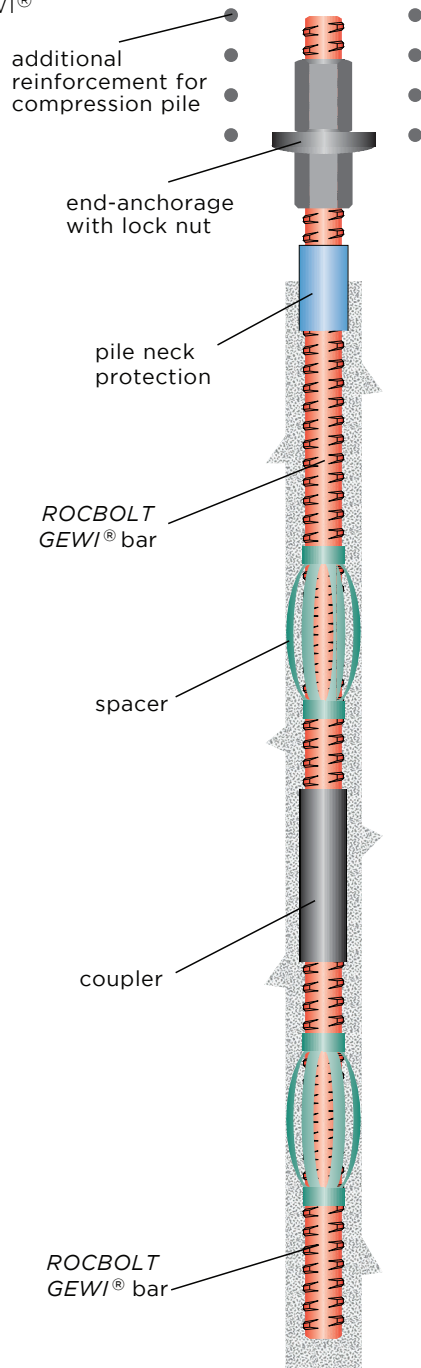
# ROCBOLT Gewi® Piles

## Advantages and Characteristics

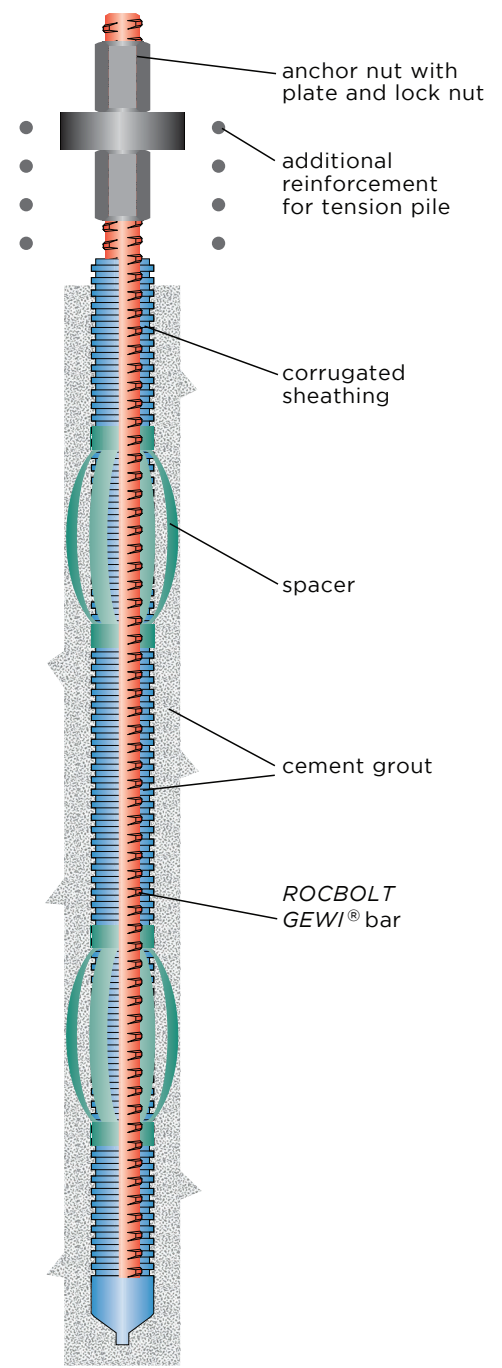
The ROCBOLT GEWI® pile is a drilled micropile with a central steel element based on the ROCBOLT GEWI® Threadbar with hot-rolled, continuous thread deformations on both sides. The ROCBOLT GEWI® Threadbar is encapsulated in cement grout which acts both as corrosion protection and as load transfer into the soil or rock.

- Excellent load transfer into concrete structures by means of anchoring elements
- Tensile, compressive and alternating loads can be efficiently transferred to the structure
- The coarse ROCBOLT GEWI® thread guarantees maximum bond between steel and cement grout
- The stress-strain curve of the ROCBOLT GEWI® bar shows high ductility
- Settlement can be prevented by using preloaded ROCBOLT GEWI® piles
- Load transfer into soil is optimised by post-grouting
- Double corrosion protected piles can be used for high corrosion impact as in aggressive media such as seawater or contaminated ground
- Can be cut off or coupled at any given point
- A small drill hole diameter permits economic drilling equipment
- Robust, coarse thread remains threadable even when dirty or damaged.

**ROCBOLT GEWI® Pile**



**ROCBOLT GEWI® Pile**  
double corrosion protection



# ROCBOLT Gewi® Threadbar Systems

## ROCBOLT GEWI® Threadbar System Applications

- Tie rods
- Marine ties
- Mining roof support
- Heavy lifting
- Reinforcing
- Tunnelling
- Formwork and scaffolding anchors
- High strength reinforcing

## Technical Specifications

### ROCBOLT GEWI® 500B THREADBAR

Technical Data								
Nominal Diameter mm	16	20	25	28	32	40	50	64
Min. Yield Strength, MPa	500	500	500	500	500	500	500	555
Min. Tensile Strength,	550	550	550	550	550	550	550	700
Min. Yield Load, kN	101	157	245	308	402	628	982	1758
Min. Ultimate Load, kN	111	173	270	339	442	691	1080	2217
Cross Sectional Area, mm <sup>2</sup>	201	314	491	616	804	1257	1963	3167
Weight, kg/m	1.58	2.47	3.85	4.83	6.31	9.86	15.41	24.86

### ROCBOLT GEWI® 670 THREADBAR

Technical Data										
Nominal Diameter, mm	18	22	25	28	30	35	43	57.5	63.5	75
Min. Yield Strength, MPa	670	670	670	670	670	670	670	670	670	670
Min. Tensile Strength, MPa	800	800	800	800	800	800	800	800	800	800
Min. Yield Load, kN	170	250	330	410	475	640	980	1740	2120	2960
Min. Ultimate Load, kN	200	300	390	490	565	770	1170	2080	2540	3535
Cross Sectional Area, mm <sup>2</sup>	250	375	491	616	707	962	1466	2597	3167	4418
Weight, kg/m	1.96	2.94	3.85	4.83	5.55	7.55	11.51	20.38	24.86	34.68

# ROCBOLT Gewi® Threadbar Systems

## ROCBOLT GEWI® 950 THREADBAR

Technical Data						
Nominal Diameter, mm	18	26.5	32	36	40	47
Min. Yield Strength, MPa	950	950	950	950	950	950
Min. Tensile Strength, MPa	1050	1050	1050	1050	1050	1050
Min. Yield Load, kN	230	525	760	960	1190	1650
Min. Ultimate Load, kN	255	580	845	1070	1320	1820
Cross Sectional Area, mm <sup>2</sup>	241	551	804	1020	1257	1735
Weight, kg/m	1.96	4.48	6.53	8.27	10.21	14.10

### Notes

- Minimum order quantities may apply to this product
- Extended lead times may apply to certain items. Please enquire
- Only ROCBOLT South Africa components should be used to enable the full performance of the bolt system to be obtained.

**ROCBOLT**<sup>TM</sup>  
TECHNOLOGIES



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