

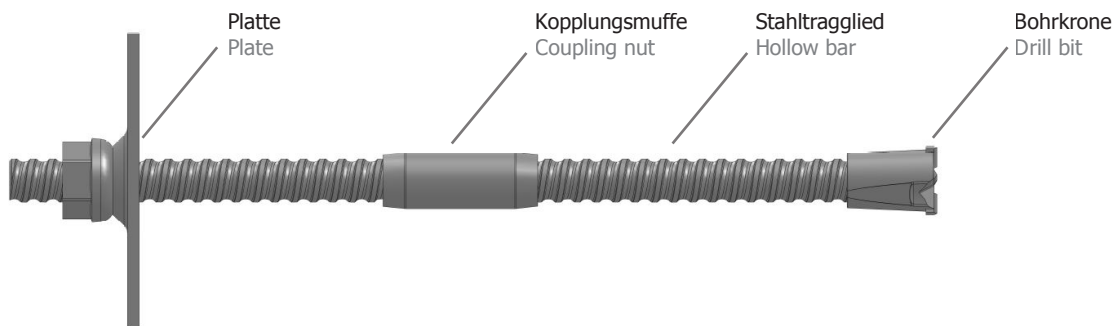
Ihr kompetenter Partner für Geotechnik  
Your competent partner for geotechnics



Anwendungsbereiche

Range of application

- Lawinverbau /Steinschlagbarrieren  
Avalanche barriers
- Fundamentgründung /-stabilisierung  
Foundations
- Böschungssicherung  
Embankment stabilisation
- Rückverankerung  
Anchoring
- Berg- und Tunnelbau  
Tunnel construction/Mining
- Drehschlagbohren (Außenlochhammer)  
Rotary percussive drilling



Bezeichnung Description	TITAN 30/16	TITAN 30/11	TITAN 40/20	TITAN 40/16	TITAN 52/26	TITAN 73/56	TITAN 73/53	TITAN 73/45	TITAN 73/35	TITAN 103/78	TITAN 103/51
Ø außen, mm Ø outside	30	30	40	40	52	<b>73</b>	<b>73</b>	73	73	103	103
Ø innen, mm Ø inside, mm	16	11	20	16	26	<b>56</b>	<b>53</b>	45	35	78	51
Charakteristische Tragfähigkeit $R_r$ , kN Ultimate load, kN	155	225	372	490	650	<b>695</b>	<b>900</b>	1218	1386	1626	2500
Kraft an der 0,2% Dehngrenze, kN Yield point, kN	190	260	425	525	730	<b>830</b>	<b>970</b>	1270	1430	1800	2670

# TITAN 73/53 + 73/56 + Zubehör


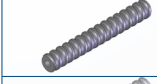
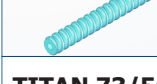
## TITAN 73/53 + 73/56 + Accessories


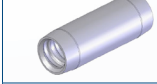
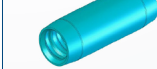
# MORATH®

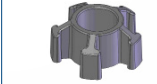
Stahl-Tragglied

Hollow bar

TITAN 73/53 mm// Hollow bar TITAN 73/53 mm	TITAN 73/56 mm// Hollow bar TITAN 73/56 mm
0,2 % Dehngrenze 970 kN (charakt. Tragfähigkeit 860 kN), gemäß Zulassung Z-34.14-209, Baustahl DIN EN 10210-1 S 460, mit durchlaufendem Rechtsgewinde, in Längen von 3 m., gebündelt zu 50 St., fremdüberwacht durch MPA NRW (Nr. 117143)	0,2 % Dehngrenze 830 kN (charakt. Tragfähigkeit 695 kN), Baustahl DIN EN 10210-1 S355, fremdüberwacht durch MPA NRW (Nr. 117143), verpackt zu 24 St. / Bund.
Ultimate load 1160 kN, yield point 970 kN, acc. to EN 10210-1 S460, continuously right hand threaded, packing unit 50 pcs.	Ultimate load 1035 kN, yield point 830 kN, acc. to EN 10210-1 S460, right hand threaded, packing unit 50 pcs.

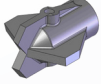
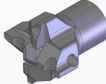
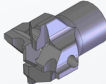
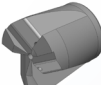
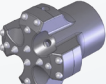
TITAN 73/53		Artikel Nr. Art.-No.	Länge Length	Gewicht Kg/St. Weight kg/pc	Bedarf Need
 Standard	roh black	5009111	3 m	41,62	
	roh black	*	4 m	55,10	
	feuerverzinkt hot-galvanized	5011108	3 m	42,00	
	duplex-beschichtet duplex-coated	5011109	3 m	42,42	
<b>TITAN 73/56</b>					
	roh black	5011110	6,25 m	67,20	

Kopplungsmuffe Coupling nut	Technische Daten Technical Data		Artikel Nr. Art.-No.	Gewicht, kg Weight, kg	Bedarf Need
	roh black	Ø 89 mm x 235 mm	5007527	3,73	
	feuerverzinkt hot-galvanized	Ø 89 mm x 235 mm	5011113	3,78	
	duplex-beschichtet duplex-coated	Ø 89 mm x 235 mm	*	4,01	

Abstandhalter Centralizer	Durchmesser Diameter	Artikel Nr. Art.-No.	Gewicht, kg Weight, kg	Bedarf Need
	Ø 130 mm roh, Stahl Ø 130 mm black, cast iron	5011522	1,39	



Bohrkronen

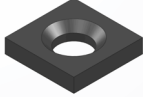
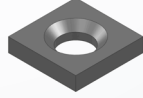
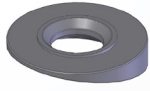
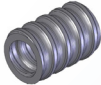
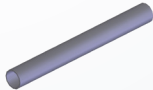
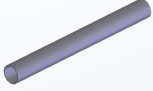
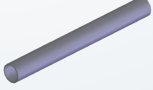

Drill bits

Bezeichnung Description	Durchmesser Diameter	Artikel Nr. Art.-No.	Gewicht, kg Weight, kg	Bedarf Need
<b>Lehmbohrkrone</b> Hardened clay bit				
	Ø 200 mm	5011120	6,10	
<b>Kreuzbohrkrone</b> Cross cut drill bit				
	Ø 130 mm	5009096	2,85	
	Ø 175 mm	5011119	4,30	
<b>HM-3-Schneidenbohrkrone</b> Button drill bit				
	Ø 130 mm	*	8,23	
<b>Hartmetall-Kreuzbohrkrone</b> Carbide cross cut drill bit				
	Ø 130 mm	5011121	7,40	
<b>Hartmetall-Stiftbohrkrone</b> Carbide cross drill bit				
	Ø 130 mm	5011122	5,80	

Ankerkopf

Anchor head

Bezeichnung Description	Technische Daten Technical Data	Artikel Nr. Art.-No.	Gewicht, kg Weight, kg	Bedarf Need
<b>Kugelbundmutter</b> Spherical collar nut				
	roh black	SW 95 x 70 mm	5002620	0,87
	feuerverzinkt hot-galvanized		5009072	0,89

Bezeichnung Description	Technische Daten Technical Data		Artikel Nr. Art.-No.	Gewicht, kg Weight, kg	Bedarf Need
<b>Kopfplatte</b> Washer plate for anchor piles					
	roh black	Bohrung Ø 80 mm, 175 x 175 x 35 mm Hole Ø 80 mm	5014302	6,90	
	feuerverzinkt hot-galvanized		*	6,90	
<b>Keilscheibe 12°</b> Wedge disc 12°					
	roh black	Ø 105 mm, 30 mm hoch, stufenloser Ausgleich max. 3x12° Ø 105 mm, 30 mm high, allows max. 3x12°	5003640	0,91	
<b>Adapterstück</b> Adaptor for hollow bar					
	Für Stahl-Tragglied 73/53 auf Bohrkronen 103/78 For hollow bar 73/53 to drill bit 103/78		5011521	3,08	
<b>Übergangrohr PE-HD</b> HD-PE tube					
	Ø 90 x 5,1 x 3000 mm		*	4,20	
	Ø 125 x 7,1 x 3000 mm		*	8,10	
	Ø 160 x 9,1 x 3000 mm		*	13,00	
	Ø 200 x 11,4 x 3000 mm		*	20,00	