

TITAN Geotechnical System

National Technical Approval / Construction
Technique Permit Z-34.14-209

Technical data

		Nominal outside diameter d_{no}	Nominal inside diameter d_{ni}	Effective cross section A_{eff}	Characteristic load-carrying capacity R_k (5% fractile)	Ultimate load F_u	Strain stiffness $E \times A^{1)}$	Bending stiffness $E \times I^{1)}$	Weight	Length	Left-/right-hand thread
		mm	mm	mm ²	kN	kN	10 ³ kN	10 ⁶ kNm ²	kg/m	m	
TITAN	30/16	30	16	336	190	236	62	3,7	2,7	3	left
	30/11	30	11	415	255	326	83	4,6	3,3	2/3/4	left
	40/27	40	27	560	325	420	95	12	4,6	3	left
	40/20	40	20	730	430	523	135	15	6,1	3/4	left
	40/16	40	16	900	530	673	167	17	7,2	2/3/4	left
	52/29	52	29	1050	635	813	195	37	8,6	3/4	left
	52/26	52	26	1250	710	899	231	42	10,7	3/4	left
	73/56	73	56	1460	865	1056	272	138	11,2	3/4	right
	73/53	73	53	1615	975	1258	299	143	13,9	3/4	right
	73/45	73	45	2239	1220	1574	414	178	17,8	3/4	right
	73/35	73	35	2714	1390	1864	502	195	21,2	3/4	right
	103/78	103	78	3140	1770	2244	580	564	25,3	3/4	right
	103/72	103	72	3780	2125	2700	690	628	29,2	3/4	right
	103/51	103	51	5680	2540	3665	1022	794	44,3	3/4	right
	103/43	103	43	6025	3132	4155	1083	838	47,2	3	right
	127/103	127	103	3744	2015	2320	691	1114	28,4	3	right
	196/130	196	130	16077	6465	9601	3215	10906	127,3	3	right

¹⁾ In the case of deformation calculations, the specified values shall be used. The values are determined from testing. It is not possible to calculate the modulus of elasticity, cross section or moment of inertia from these values.

Drill bit types

drill bits Ø mm	hardened clay bit	cross cut drill bit	button drill bit	carbide cross-cut/ tri-wing drill bit	carbide-Y- cross drill bit	carbide cross cut 3-step drill bit	carbide button drill bit
description	 for clay, soft soil and sand/gravel	 for mixed soil with obstacles	 for weathered soft rock and gravel	 30/.. 40/.. 40/.. 52/.. 73/.. 73/.. 103/.. 196/.. for hard rock granite, dolomite, sandstone	 for hard rock granite, dolomite, sandstone	 for hard rock granite, dolomite, sandstone	 30/.. 40/.. 40/.. 52/.. 73/.. 103/.. for very hard or high quartzite rock
TITAN 30/..	75 95	76 90	42 46 51 70	—	75	75	51 70
TITAN 40/..	110 150	90 115	70	70	90 115	90	70 90
TITAN 52/..	130 175	115 130 175	—	—	115 130 175	—	115 130
TITAN 73/..	200	130 175	—	130	130 175	130	130
TITAN 103/..	220 280	175 220	—	175	175	—	175
TITAN 127/..	220	200	—	—	—	—	200
TITAN 196/..	—	—	—	340	—	—	—

If required, drill bits of a larger type can be used with an adapter.

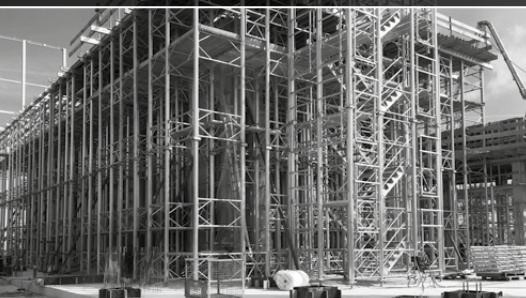
Illustrations may differ.



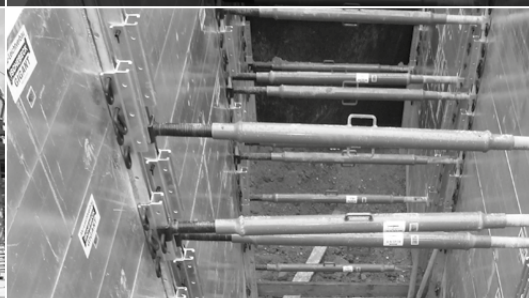
Slope stabilisation alongside
Nuremberg-Regensburg railway line

Some 8000 lin. m of hot-dip
galvanised TITAN 30/11 were used
on this project.

Falsework and Formwork systems



Trench lining systems



Geotechnical solutions



Certified Management-System to DIN EN ISO 9001:2015



FRIEDR. ISCHEBECK GMBH

Managing Directors: Dipl.-Wi.-Ing. Björn Ischebeck, Dr. jur. Lars Ischebeck
Loher Str. 31-79 | 58256 Ennepetal | Germany | Phone +49 2333 8305-0 | Fax +49 2333 8305-55
E-mail: export@ischebeck.de | www.ischebeck.de