



Wenn nicht anders angegeben, sind metrische Einheiten entsprechend den HERRENKNECHT-Anweisungen nach folgender Tabelle anzunehmen.

Schrauben-Anzugsmomente in Nm  
nach A-MB0002, A-GW002, A-FS003 und A-MT005  
Nennabstand:  $\mu m = 0,02$

If not defined otherwise, metric screws have to be tightened in accordance with the pressure type HERRENKNECHT in the following size.

Screw tightening torques in Nm  
following A-MB0002, A-GW002, A-FS003 and A-MT005  
coefficient of friction:  $\mu = 0,02$

	5,6	6,8	10,9	12,9	40
M8	10,5	24	34	44	75
M10	21	44	64	84	130
M12	35	75	110	140	210
M16	65	140	200	260	400
M20	105	220	320	420	600
M24	165	340	500	660	1000
M30	285	600	880	1160	1700
M36	420	880	1300	1740	2600
M42	600	1250	1800	2400	3600

Revision		Change		Date	Drawn	Date	Released
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Edges of undefined shape				ISO 13715:2000		Drawing type	
Geometrical product specification				(GPS) EN ISO 1101:2013		assembly	
Surface specifications according to				EN ISO 1302:1992		Project	
				M-722M		Machine type	
						EPB200T-01	
							
<b>TUNNELLING MACHINE</b> <b>VORTRIEBSMASCHINE</b> <b>DA2480</b>							
Drawing number				1187-01-002-00		Sheet	
Date				24.04.2002		Revision	
Name				Maluk, Dimitri		1/1 A	
Scale				1:20		Formal	
Material no.				30027594		A1	
Material						Weight/kg	
Released				03.05.2002		43113	
Project				Ficht Alexander		Projection	
							



# Baukastenstückliste modular BOM



Projekt  
Material 30027594  
Bezeichnung 1 VORTRIEBSMASCHINE  
  
Zchnng.Nr/ver 1187-01-002-00 / A  
Gewicht 43.113 KG  
Werk 1000

project  
material 30027594  
description 1 TUNNELLING MACHINE  
  
draw.No/ver 1187-01-002-00 / A  
weight 43.113 KG  
plant

Pos.	Typ type	Material	Menge qty	Bezeichnung 1 / Bezeichnung 2	description 1 / description 2	Zchnng.Nr/ver/Bpf draw.No/ver	Gewicht weight
1	L	30027375	1,000 ST	BOHRKOPFANTRIEB	CUTTERHEAD DRIVE	809-04-503-00/B	9.800,00 KG
2	L	30027645	1,000 ST	SCHNECKENFÖRDERER	SCREW CONVEYOR	1187-02-000-00/-	6.565,00 KG
3	L	30027652	1,000 ST	SCHILD	SHIELD	1187-01-002-01/B	3.500,00 KG
4	L	30027842	1,000 ST	FLANSCHRING	FLANGE RING		5.950,00 KG
5	L	30027727	1,000 ST	ANLENKUNG	LINKAGE		62,00 KG
6	L	30027591	1,000 ST	MASCHINENROHR 1	MACHINE PIPE 1		12.575,00 KG
7	L	30027656	1,000 ST	SCHILDSCHWANZ STAHLBAU	TAILSKIN STEEL STRUCTURE	1187-01-005-04/-	580,00 KG
8	L	25631751	16,000 ST	SICHERUNGSBLECH	LOCKING PLATE	208-07-032-63/A	0,86 KG
9	L	25653431	8,000 ST	BOLZEN	BOLT		12,52 KG
10	L	30020905	1,000 ST	ABBAURAUMTÜR	EXCAVATION CHAMBER DOOR	809-12-006-00/A	286,00 KG
11	L	30001614	1,000 ST	ANSCHLUSSKASTEN	CONNECTION BOX	742-01-002-20/A	43,00 KG
12	L	30020828	1,000 ST	DREHMOMENTSTÜTZE	TORQUE SUPPORT		3,00 KG
13	L	30001597	1,000 ST	ANSCHLUSSKASTEN	CONNECTION BOX		19,00 KG
14	L	30012984	1,000 ST	ERDDRUCKMESSDOSE	EARTH PRESSURE SENSOR	809-01-050-00/D	10,40 KG
15	L	30010193	1,000 ST	DICHTUNGSKLEMMRING	SEAL CLAMPING RING		7,00 KG
16	L	25601104	2,000 ST	KAMMERUNGSRING	PRESSURE PACKING RING	248-01-002-05/A	1,00 KG
17	L	30017098	1,000 ST	ZIELTAFELHALTER	LASER TARGET HOLDER	208-07-023-87/-	8,00 KG
18	L	25103377	1,000 ST	ZIELTAFELHALTER	LASER TARGET HOLDER	208-07-023-80/H	7,00 KG
19	L	30028557	1,000 ST	MOTORKONSOLE STAHLBAU	MOTOR CONSOLE STEEL STRUCTURE	1187-01-006-04/B	138,00 KG
20	L	30028845	3,000 ST	HALTER	RETAINER	809-21-048-01/A	3,00 KG
21	L	40620360	1,000 ST	MOTORPUMPENEINHEIT	MOTOR PUMP UNIT	809-32-200-97/-	1.302,00 KG
22	L	25102954	8,000 ST	BENTONITDÜSE	BENTONITE NOZZLE	809-01-040-00/F	1,60 KG
23	L	25606116	16,000 ST	DISTANZRING	SPACER RING	118-00-060-14/B	0,10 KG
24	L	25607572	3,000 ST	BOLZEN	BOLT		1,94 KG
25	L	27900037	2,000 ST	REINIGUNGSDECKEL	CLEANING COVER		3,20 KG

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Material 30027594  
Bezeichnung 1 VORTRIEBSMASCHINE  
description 1 TUNNELLING MACHINE

Pos.	Typ type	Material	Menge qty	Bezeichnung 1 / Bezeichnung 2	description 1 / description 2	Zchnng.Nr/ver/Bpf draw.No/ver	Gewicht weight
26	L	25605830	2,000 ST	BLINDDECKEL	BLIND COVER	208-07-025-00/C	9,00 KG
27	L	40620373	1,000 ST	MOTORPUMPENEINHEIT	MOTOR PUMP UNIT	809-32-103-20/-	555,00 KG
28	L	30029100	1,000 ST	SCHIENE	RAIL	1187-01-006-12/-	119,00 KG
29	L	30012920	1,000 ST	SCHNECKENABWURFSCHIEBER	SCREW CONVEYOR DISCHARGE GATE	936-02-010-00/E	480,00 KG
100	L	20001112	4,000 ST	STEUERZYLINDER	CONTROL CYLINDER		170,00 KG
101	L	28300037	3,000 ST	BAGGERDICHTUNG	EXCAVATOR SEAL		0,13 KG
102	L	24500117	1,000 ST	GLEITLAGERBUCHSE	SLIDING BEARING BUSH		0,78 KG
103	Z	28200606	2,000 ST	RUNDSCHNUR ENDLOS	ROUND CORD ENDLESS		0,00 KG
104	L	28000030	4,000 ST	O-RING	O-RING		0,00 KG
105	Z	23500569	1,000 ST	MEHRLEITUNGSPUMPE	MULTILINE PUMP		27,00 KG
106	L	27900411	9,000 ST	VOLLSTRAHLDÜSE	FULL JET NOZZLE		0,02 KG
107	Z	26401664	1,000 ST	ZIELTAFEL	LASER TARGET		7,66 KG
108	Z	27500590	1,000 ST	FÜLLSTANDSSCHALTER	LEVEL SWITCH		0,32 KG
109	L	40547734	2,000 ST	SCHWENKVERSCHRAUBUNG	SWIVEL SCREW CONNECTION		0,26 KG
110	L	27301173	1,000 ST	KLARSICHTSCHLAUCH	TRANSPARENT HOSE		0,62 KG
111	Z	40235160	1,000 ST	WIDERSTANDSTHERMOMETER	RESISTANCE THERMOMETER		0,34 KG
112	Z	28201706	1,000 ST	RUNDSCHNUR ENDLOS	ROUND CORD ENDLESS		0,10 KG
113	L	28201562	1,000 ST	RUNDSCHNUR ENDLOS	ROUND CORD ENDLESS		0,43 KG
114	L	28100842	1,000 ST	DICHTUNGSPROFILRING	SEALING PROFILE RING		18,50 KG
115	L	28900123	2,000 ST	PROFILDICHTUNG	PROFILE SEAL		0,33 KG
116	Z	40519136	1,000 ST	SCHALTSCHRANK	SWITCH CABINET		63,50 KG
117	Z	40519027	1,000 ST	SCHALTSCHRANK	SWITCH CABINET		15,40 KG
118	L	29501076	2,000 ST	ANSCHLAGPUNKT TRANSPORTRING	LIFTING POINT TRANSPORT RING		19,30 KG
119	Z	28200805	2,000 ST	RUNDSCHNUR ENDLOS	ROUND CORD ENDLESS		0,05 KG
120	L	29500684	2,000 ST	ANSCHLAGPUNKT TRANSPORTRING	LIFTING POINT TRANSPORT RING		11,40 KG
200	L	24005515	32,000 ST	VIERKANTSCHRAUBE GVZ M16X50-8.8-DIN479	SQUARE HEAD BOLT ZP M16X50-8.8-DIN479		0,10 KG
201	L	24007692	6,000 ST	SENKSCHRAUBE GVZ M16X60-8.8-DIN7991	COUNTERSUNK HEAD SCREW ZP M16X60-8.8-DIN7991		0,09 KG
202	L	24900059	6,000 ST	SICHERUNGSRING	CIRCLIP		8,00 G
203	L	24007169	4,000 ST	VERSCHLUSSSCHRAUBE M42X4,5-5.8-DIN906	PLUG SCREW M42X4,5-5.8-DIN906		0,12 KG

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Projekt  
Material [30027594](#)  
Bezeichnung 1 VORTRIEBSMASCHINE  
description 1 TUNNELLING MACHINE

Pos.	Typ type	Material	Menge qty	Bezeichnung 1 / Bezeichnung 2	description 1 / description 2	Zchnng.Nr/ver/Bpf draw.No/ver	Gewicht weight
204	L	24004183	24,000 ST	ZYLINDERSCHRAUBE M24X50-8.8-DIN7984	HEX.SOCKET HEAD CAP SCREW M24X50-8.8-DIN7984		0,22 KG
205	L	24007235	8,000 ST	VERSCHLUSSSCHRAUBE M36X4-5.8-DIN906	PLUG SCREW M36X4-5.8-DIN906		0,07 KG
206	L	24001794	12,000 ST	SECHSKANTSCHRAUBE GVZ M10X40-8.8-DIN933	HEX.HEAD SCREW ZP M10X40-8.8-DIN933		19,00 G
207	L	24001931	2,000 ST	SECHSKANTSCHRAUBE GVZ M12X30-8.8-DIN933	HEX.HEAD SCREW ZP M12X30-8.8-DIN933		38,00 G
208	L	24000505	2,000 ST	SCHEIBE GVZ B13-140HV-DIN125	WASHER ZP B13-140HV-DIN125		6,27 G
209	L	24007734	8,000 ST	ZYLINDERSCHRAUBE GVZ M20X30-8.8-DIN912	HEX.SOCKET HEAD CAP SCREW ZP M20X30-8.8-DIN912		0,13 KG
210	L	24000210	12,000 ST	SCHEIBE GVZ A10,5-140HV-DIN125	WASHER ZP A10,5-140HV-DIN125		3,57 G
211	L	24003952	8,000 ST	SECHSKANTSCHRAUBE GVZ M8X35-8.8-DIN933	HEX.HEAD SCREW ZP M8X35-8.8-DIN933		0,02 KG
212	L	24001930	2,000 ST	SECHSKANTSCHRAUBE GVZ M12X25-8.8-DIN933	HEX.HEAD SCREW ZP M12X25-8.8-DIN933		0,03 KG
213	L	24007855	32,000 ST	SECHSKANTSCHRAUBE GVZ M16X35-8.8-DIN933	HEX.HEAD SCREW ZP M16X35-8.8-DIN933		0,08 KG
214	L	24001372	32,000 ST	SCHEIBE GVZ A17-140HV-DIN125	WASHER ZP A17-140HV-DIN125		11,30 G
215	L	24003512	54,000 ST	SECHSKANTSCHRAUBE GVZ M30X80-8.8-DIN933	HEX.HEAD SCREW ZP M30X80-8.8-DIN933		0,64 KG
216	L	24001981	54,000 ST	SCHEIBE GVZ B31-140HV-DIN125	WASHER ZP B31-140HV-DIN125		53,60 G
217	L	24000211	2,000 ST	SCHEIBE GVZ A13-140HV-DIN125	WASHER ZP A13-140HV-DIN125		6,00 G
218	L	24005339	12,000 ST	ZYLINDERSCHRAUBE GVZ M12X20-8.8-DIN6912	HEX.SOCKET HEAD CAP SCREW ZP M12X20-8.8-DIN6912		0,03 KG
219	L	24000209	8,000 ST	SCHEIBE GVZ A8,4-140HV-DIN125	WASHER ZP A8,4-140HV-DIN125		1,83 G