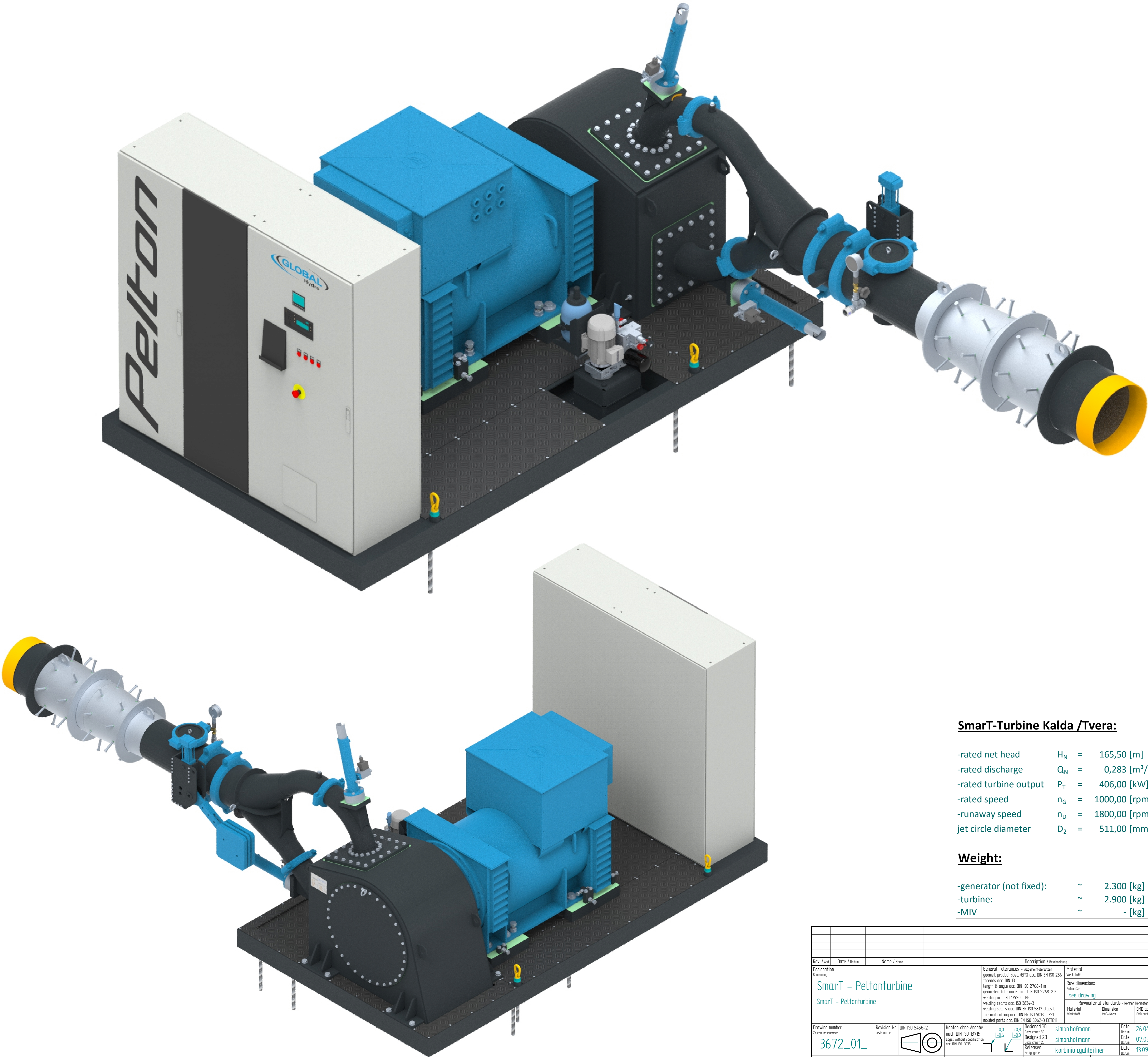


10

GHE PROFILE 2017										
Pos	Pcs	Part	Rev	Titel	Dimension	Material	Norm	EMD	Weight	Typ
1	1	51023931	2	turbine cover	Contour - 15,00 - 835,00x835,00-dxf	10577 S355J2	DIN EN 10025-2	D1	63,8 kg	101
2	23	51030543		washer w huge thickness&outside dia.	Ring - 12,00 - ø7700 ø28,00	10577 S355J2	DIN EN 10025-2	D1	8,8 kg	121
3	1	51035760		sheet metal ring with drawing	Ring - 40,00 - ø190,00 ø125,00	10577 S355J2	DIN EN 10025-2	D1	11 kg	121
4	1	51035761		protection sleeve sealing PTH	Ring - 100,00 - ø250,00 ø120,00	10577 S355J2	DIN EN 10025-2	F1	11,4 kg	121
5	2	51023302		adjustment block screwed from top	Flat - 80,00x30,00 H9-Lg45,00	10122 S235JRC	DIN EN 10025-2	B1	11 kg	200
6	2	51035797		adjustment block screwed from top	Flat - 80,00x30,00 H9-Lg65,00	10122 S235JRC	DIN EN 10025-2	B1	17 kg	200
7	2	51036639		adjustment block screwed from top	Flat - 80,00x80,00 H9-Lg105,00	10122 S235JRC	DIN EN 10025-2	B1	35 kg	200
8	1	51035762		pelton runner cap	Round - 140,00-Lg55,00	14021 X20Cr13	DIN EN 10088-3	A1	2,0 kg	224
9	1	51024028		drainage pipe f. turbine casing PTH	Pipe - ø48,30 x 5,00-Lg300,00	10576 S355J2H	DIN EN 10210-1	F1	16 kg	244
10	1	51033644	1	pelton runner	Ring - ø675,00 ø50,00-Lg180,00	14131 X5CrNiMo19-4	DIN EN 10250-4	H2	197,2 kg	284
11	1	51033936		turbine casing WLD PTH2	see drawing	-	-	-	616,3 kg	400
12	1	51033956		Y-branch pipe WLD PTH2	see drawing	-	-	-	74,0 kg	400
13	1	51033993	2	base frame turbine WLD PTH	see drawing	-	-	-	818,8 kg	400
14	1	51035711		intake pipe ASM	see drawing	-	-	-	241,6 kg	400
15	1	51033948		pipe elbow ASM PTH2	see drawing	-	-	-	128,1 kg	401
16	1	51033952		pipe elbow ASM PTH2	see drawing	-	-	-	129,9 kg	401
17	1	51035764		cover ASM	see drawing	-	-	-	15 kg	401
18	2	51036640		distance sheet set horizontal	see drawing	-	-	-	8,9 kg	401
19	2	51036648		distance sheet set horizontal	see drawing	-	-	-	7,1 kg	401
20	1	51035792		sheet metal contour	Contour - 5,00 - 180,00x180,00-dxf	14301 X5CrNi18-10	DIN EN 10088-3	E1	0,4 kg	512
21	1	51035837		sheet metal contour	Contour - DIN99220 - T-4,00 - 1463,00x777,00-dxf	10038 S235JR	DIN EN 10025-2	-	27,6 kg	512
22	1	51035838		sheet metal contour	Contour - DIN99220 - T-4,00 - 1325,00x485,50-dxf	10038 S235JR	DIN EN 10025-2	-	20,0 kg	512
23	1	51035839		sheet metal contour	Contour - DIN99220 - T-4,00 - 2067,00x368,50-dxf	10038 S235JR	DIN EN 10025-2	-	21,4 kg	512
24	1	51035390		sheet metal contour	Contour - DIN99220 - T-4,00 - 2067,00x350,00-dxf	10038 S235JR	DIN EN 10025-2	-	20,5 kg	512
25	1	51035391		sheet metal contour	Contour - DIN99220 - T-4,00 - 777,00x684,00-dxf	10038 S235JR	DIN EN 10025-2	-	16,7 kg	512
26	1	51035392		sheet metal contour	Contour - DIN99220 - T-4,00 - 485,50x2015,00-dxf	10038 S235JR	DIN EN 10025-2	-	2,9 kg	512
27	1	51035394		sheet metal contour	Contour - DIN99220 - T-4,00 - 915,00x168,50-dxf	10038 S235JR	DIN EN 10025-2	-	4,1 kg	512
28	1	51035395		sheet metal contour	Contour - DIN99220 - T-4,00 - 577,00x115,00-dxf	10038 S235JR	DIN EN 10025-2	-	2,1 kg	512
29	1	51035396		sheet metal contour	Contour - DIN99220 - T-4,00 - 958,00x654,00-dxf	10038 S235JR	DIN EN 10025-2	-	18,4 kg	512
30	2	51035793		V-Ring, quality NBR	see drawing	-	-	-	0,0 kg	801
31	1	51075106		O-Ring axial-sealing	ds ø04 x di ø0035 - Lg136	NBR70	-	-	0,0 kg	900
32	1	51029478		O-Ring axial-sealing	ds ø04 x di ø0085 - Lg293	NBR70	-	-	0,0 kg	900
33	2	51035555		O-Ring inside-sealing	ds ø06 x di ø0133 - Lg447	NBR70	-	-	0,0 kg	900
34	1	51022714		Pressure gauge valve witho. test con.	PN250 61/2"	---	-	-	0,9 kg	950
35	4	51047643		attachment point Thepa	M20 - 0°/05,01a - 90°/025,01a	St+A2ZC (yellow)	-	-	3,9 kg	950
36	1	51059561		Sealing rings	G18 - 10x14x15	Cu	DIN 7609	-	0,0 kg	950
37	1	51059564		Sealing rings	G12 - 21x26x15	Cu	DIN 7609	-	0,0 kg	950
38	1	51059628		Male stud standpipe	EVGE-R L28 R1 CF	St+A2K (blue)	-	-	0,3 kg	950
39	4	51059684		blind rivet aluminium-steel	3,2x12 (H=07,0-09,0)	---	-	-	0,0 kg	950
40	1	51077147		Female Stud Coupling	GAL-R L28 R1 CF	St+A2K (blue)	-	-	0,0 kg	950
41	1	51033839		hydraulic unit	---	---	-	-	0,0 kg	950
42	1	51033840	1	generator - B3	440kVA/400V/1000rpm	---	-	-	58,9 kg	950
43	1	51033841		butterfly valve	DN300/PN25	---	-	-	44,6 kg	950
44	2	51034733		coupling vitraulic	Typ77 - DN150 - ø168,3 - EPDM	EPDM	-	-	0,0 kg	950
45	1	51034740		coupling vitraulic	Typ77 - DN300 - ø323,9 - EPDM	EPDM	-	-	25,5 kg	950
46	1	51035710		coupling vitraulic	Typ07 - DN300 - ø323,9 - EPDM	EPDM	-	-	25,5 kg	950
47	1	51036191		Standpipe run tee	EVL 28 VA	VA	-	-	0,6 kg	950
48	1	51036194		straight adaptor reduced	GZR L 28/18 VA	VA	-	-	0,3 kg	950
49	1	51036195		Female stud coupling	GAL-R L18 R1/2 VA	VA	-	-	0,2 kg	950
50	4	51020255		Hexagon nut	M30	FKL8 VZ	DIN EN ISO 4032	-	10 kg	960
51	52	51020264		Plain washers - Normal series	16	200 HV - VZ	DIN EN ISO 7089	-	0,6 kg	960
52	4	51020265		Plain washers - Normal series	10	200 HV - VZ	DIN EN ISO 7089	-	0,0 kg	960
53	32	51020266		Plain washers - Normal series	12	200 HV - VZ	DIN EN ISO 7089	-	0,2 kg	960
54	16	51020267		Plain washers - Normal series	12	200 HV - A2	DIN EN ISO 7089	-	0,1 kg	960
55	12	51020268		Plain washers - Normal series	24	200 HV - VZ	DIN EN ISO 7089	-	0,4 kg	960
56	4	51020270		Plain washers - Normal series	30	200 HV - VZ	DIN EN ISO 7089	-	0,2 kg	960
57	32	51020297		Hexagon head screw	M12x30	8,8 VZ	DIN EN ISO 4017	-	14 kg	960
58	4	51020300		Hexagon head screw	M16x65	8,8 VZ	DIN EN ISO 4017	-	0,6 kg	960
59	10	51020303		Hexagon head screw	M30x80	8,8 VZ	DIN EN ISO 4017	-	7,1 kg	960
60	40	51020318		Hexagon head screw	M16x55	8,8 VZ	DIN EN ISO 4017	-	5,0 kg	960
61	8	51021368		Plain washers - Normal series	20	200 HV - VZ	DIN EN ISO 7089	-	0,1 kg	960
62	12	51021370		Plain washers - Normal series	08	200 HV - A2	DIN EN ISO 7089	-	0,0 kg	960
63	21	51021828		Hexagon nut	M24	FKL8 VZ	DIN EN ISO 4032	-	2,6 kg	960
64	4	51021831		Hexagon head screw	M24x80	8,8 VZ	DIN EN ISO 4017	-	1,7 kg	960
65	1	51021898		Hex. socket head cap scr.	M20x64S	A2-70	DIN EN ISO 4762	-	0,2 kg	960
66	8	51022108		Hexagon nut	M20	FKL8 VZ	DIN EN ISO 4032	-	0,6 kg	960
67	4	51022125		Parallel pins with internal thread	70x50	S1	DIN EN ISO 8735	-	0,1 kg	960
68	2	51022168		Hexagon head screw	M20x110	8,8 VZ	DIN EN ISO 4017	-	0,7 kg	960
69	8	51022443		Hexagon head screw	M12x120	A2-070	DIN EN ISO 4017	-	10 kg	960
70	4	51022456		Hexagon head screw	M10x20	8,8 VZ	DIN EN ISO 4017	-	0,1 kg	960
71	4	51022475		Hexagon head screw	M16x80	8,8 VZ	DIN EN ISO 4017	-	0,7 kg	960
72	4	51022478		Hexagon head screw	M16x120	8,8 VZ	DIN EN ISO 4017	-	0,9 kg	960
73	6	51022498		Hexagon head screw	M20x100	8,8 VZ	DIN EN ISO 4017	-	19 kg	960
74	8	51022627		Hexagon head screw	M24x55	8,8 VZ	DIN EN ISO 4017	-	2,6 kg	960
75	8	51023997		Hexagon nut	M12	A2-070	DIN EN ISO 4032	-	0,1 kg	960
76	1	51024777		screw plugs	G 1/8 A	A2	DIN 908	-	0,0 kg	960
77	17	51025765		stud bolt	M24 x 0460	8,8 VZ	DIN 976-1	-	27,7 kg	960
78	12	51026494		Hexagon head screw	M08x20	A2-070	DIN EN ISO 4017	-	0,2 kg	960
79	108	51049001		Hexagon socket countersunk head scr.	M06x012	A2-070	DIN EN ISO 10642	-	0,4 kg	960
80	3	51049151		Lifting eye bolts	M12 WLL 0,34x0,24x0,17 to	11H1 CSE-A2K (blue)	DIN 580	-	0,5 kg	960
81	1	51031923		screw plugs with collar and hexagon	G 1/2 A	A2	DIN 910	-	0,1 kg	960
82	2	51035552		parallel keys, deep pattern	28x16x90 - A	11991 L4SE	DIN 6885-1	-	0,6 kg	960
83	1	51026437		Electr. Press. sensor w analog disp.	G1/2B, 0100...10 to +25,0 bar	VA	-	-	22 kg	970
84	1	51038077		type plate		AW-5754 ALMg3	-	-	0,1 kg	990



SmarT-Turbine Kalda /Tvera:

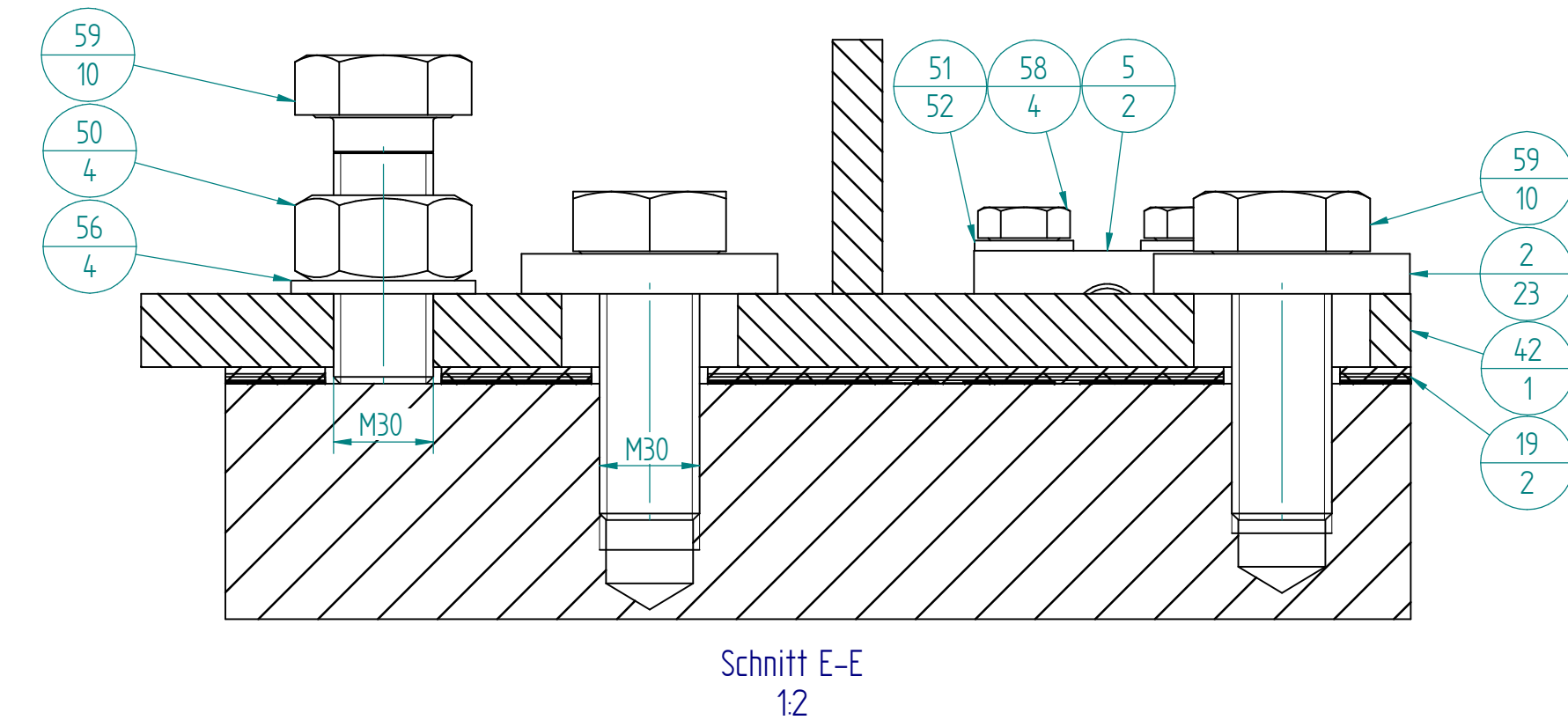
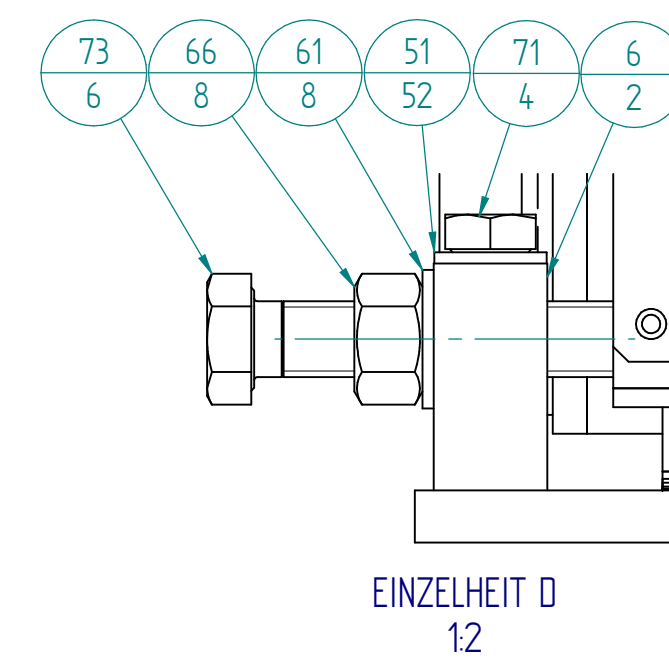
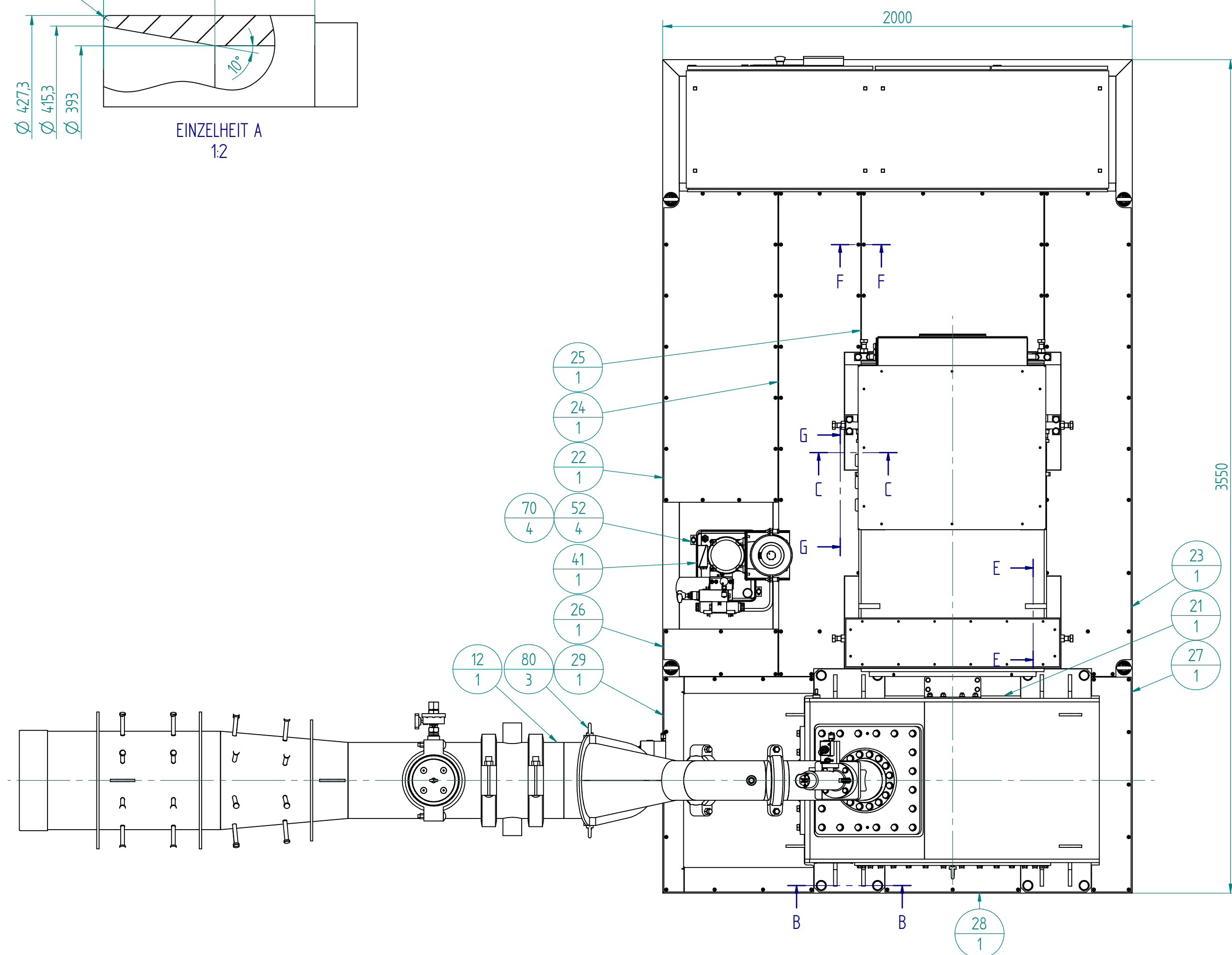
-rated net head	H_N	=	165,50 [m]
-rated discharge	Q_N	=	0,283 [m³/s]
-rated turbine output	P_T	=	406,00 [kW]
-rated speed	n_G	=	1000,00 [rpm]
-runaway speed	n_0	=	1800,00 [rpm]
jet circle diameter	D_2	=	511,00 [mm]

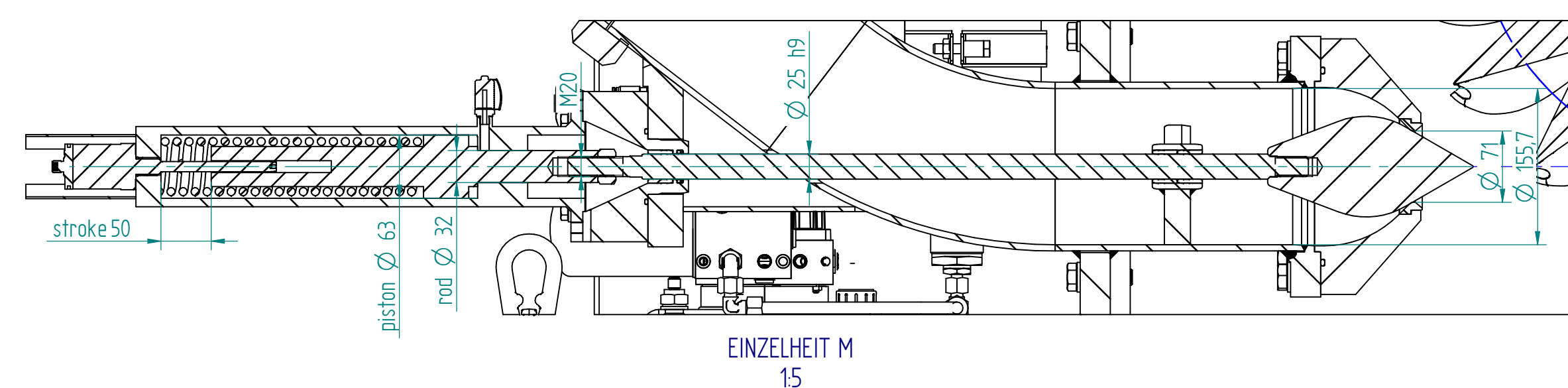
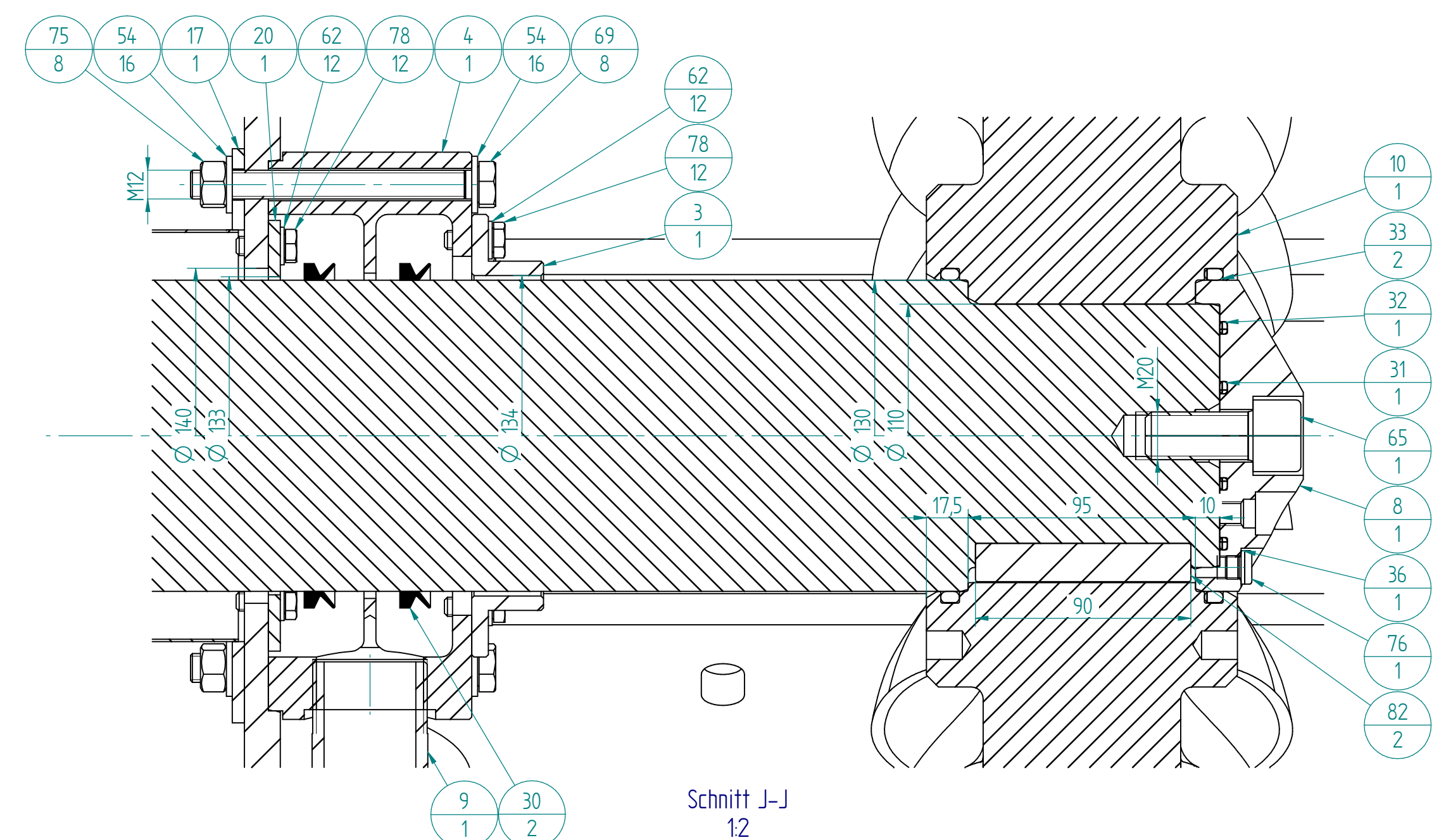
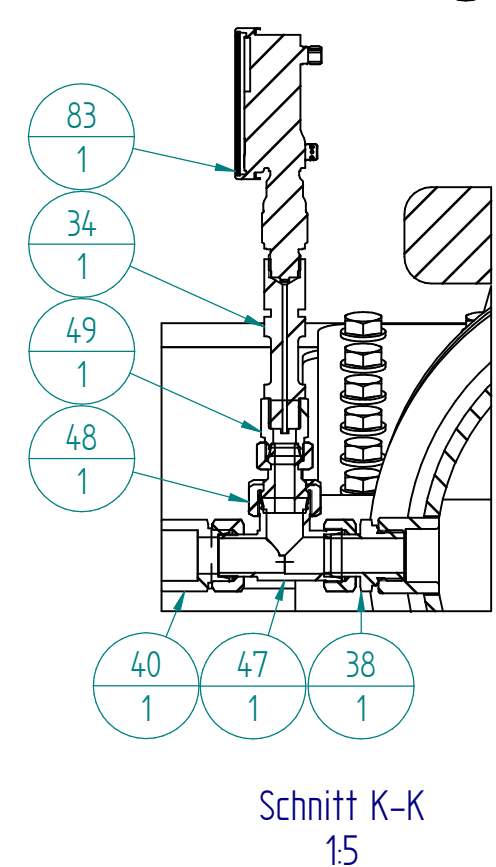
Weight:

-generator (not fixed):	~	2.300 [kg]
-turbine:	~	2.900 [kg]
-MIV	~	- [kg]

Rev / Aus	Date / Datum	Name / Name	Description / Beschreibung
1	26.04.2017	simonhofmann	General: Tolerances - alignment surfaces general: product spec. IGS acc. DIN EN ISO 286 length & angle acc. DIN ISO 2768-1 geometric tolerances acc. DIN ISO 2768-2 K welding acc. ISO 15607 - R welding seams acc. ISO 3034-3 thermal cutting acc. DIN EN ISO 5817 class C molded parts acc. DIN EN ISO 18462-3 GT1011
2	07.09.2017	simonhofmann	Revised: standards - Normen Material: Material Dimension: Dimension EMD: EMD acc. ME0036 DIN nach ME0036
3	13.09.2017	korbiniangahleitner	Revised: standards - Normen Material: Material Dimension: Dimension EMD: EMD acc. ME0036 DIN nach ME0036
Drawing number Zeichnungsnummer	Revision Nr. revision nr.	DIN ISO 5456-2	Kanten ohne Angabe nach DIN ISO 13715 Edges without specification acc. DIN ISO 13715
3672_01_			
EN ISO 5459	A B C		Weight [in kg] Gewicht [in kg]
Status Status	CAD - freigegeben		Weight [in kg] Gewicht [in kg]
Working Step Arbeitschritt	parts list		Scale Maßstab
			150
			Sheet Size Blattgröße
			A1

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