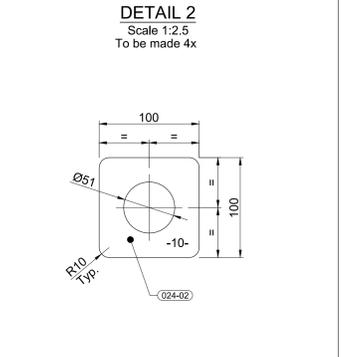
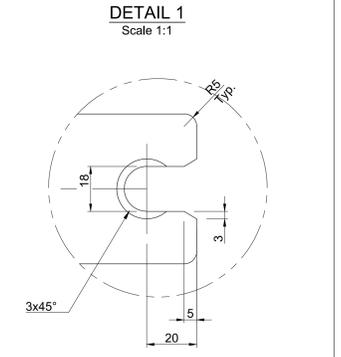
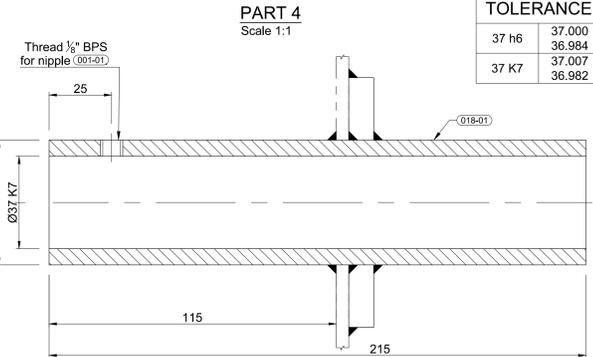
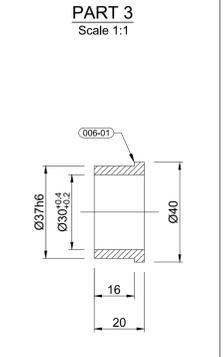
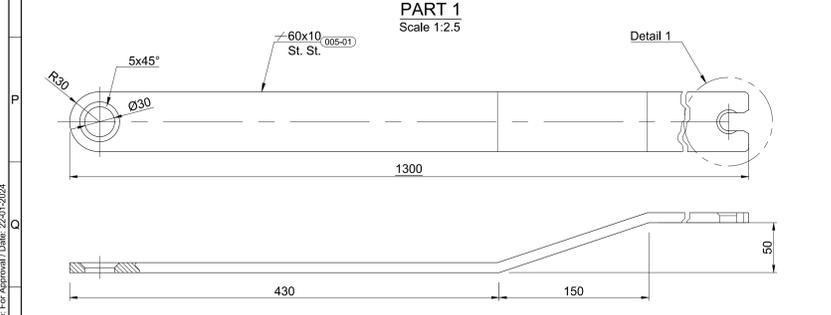
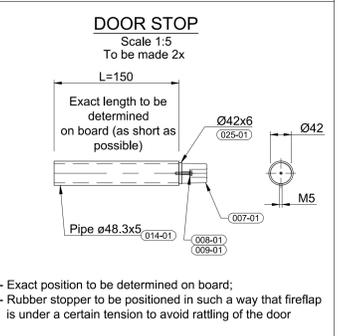
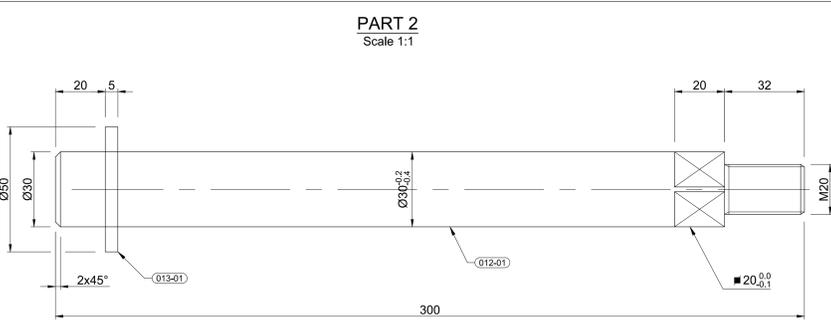
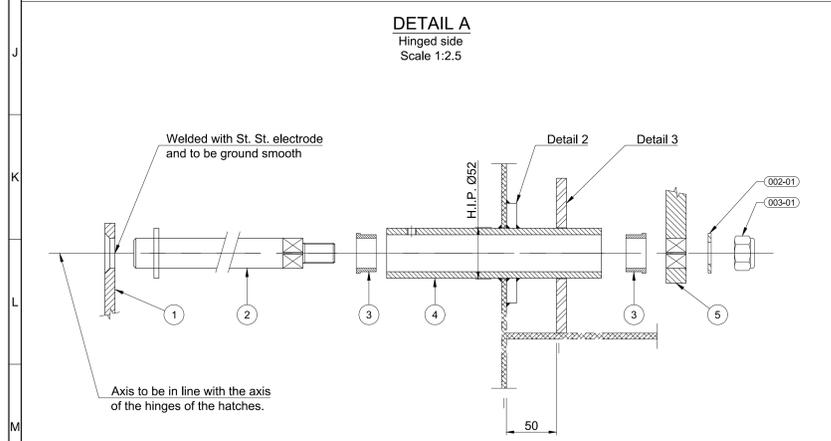
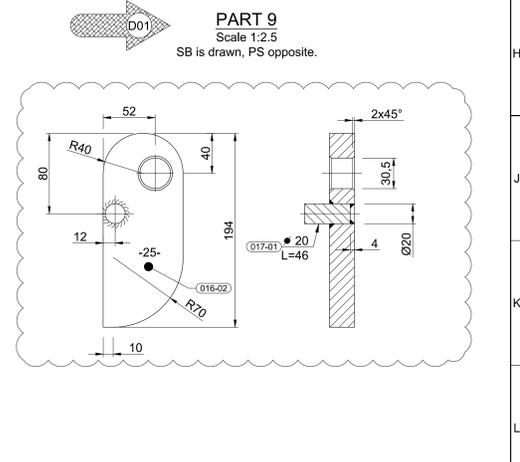
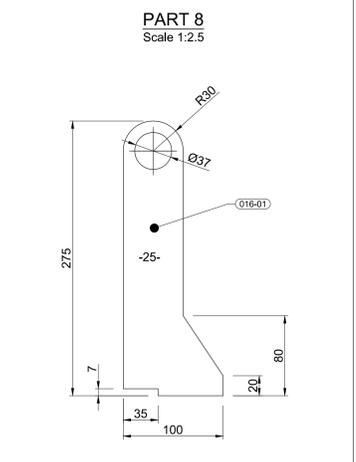
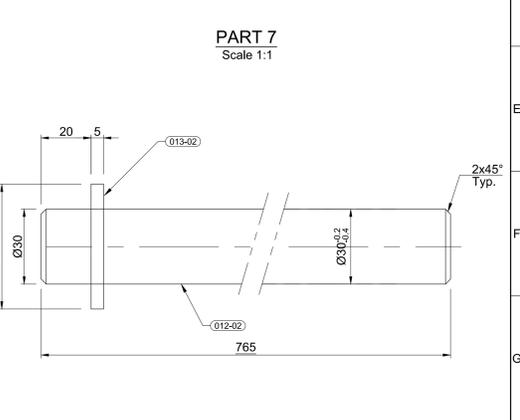
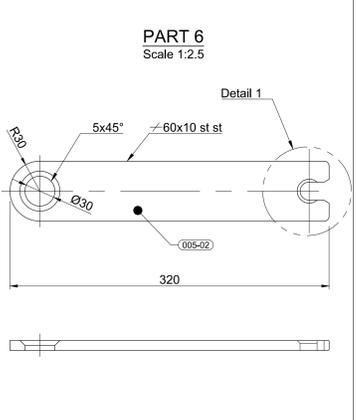
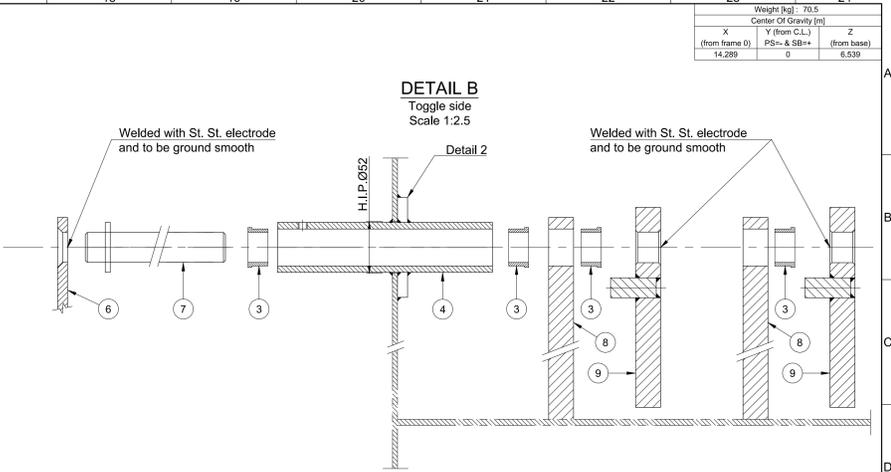


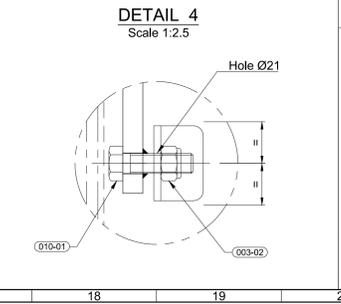
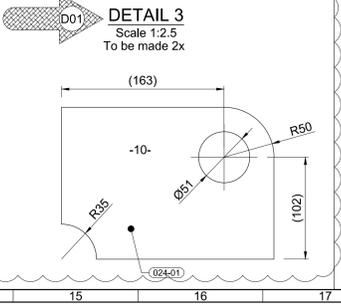
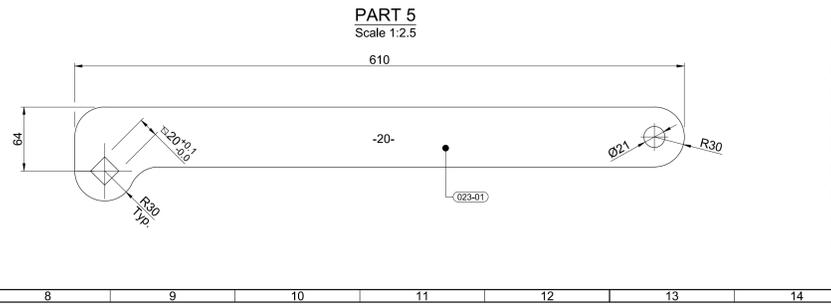
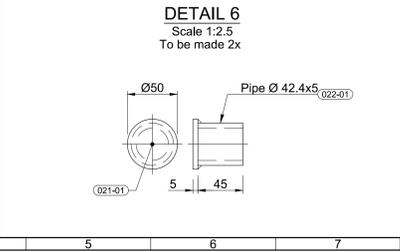
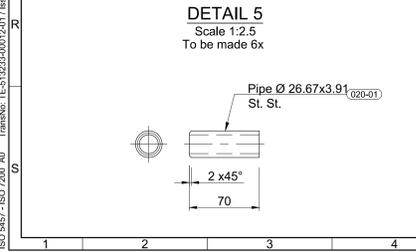
Part	Description	Material	Quant.
1	Handle	St. St.	2
2	Shaft	St. St.	2
3	Bearing bush	Bronze	12
4	Outside bush	Steel	4
5	Bracket	Steel	2
6	Handle	St. St.	2
7	Shaft	St. St.	2
8	Bracket	Steel	4
9	Safety lock	Steel	4

Weight [kg]			70.5
Center Of Gravity [m]			
X	Y (from C.L.)	Z	
(from frame 0)	Plin- & SB=+	(from base)	
14.289	0	6.539	



t	a
t ≤ 8	3.5
8 < t ≤ 10	4.5
10 < t ≤ 12	5
12 < t ≤ 14	6
14 < t ≤ 15	6.5
15 < t ≤ 18	7
18 < t ≤ 20	8

t = Smallest plate thickness
a = Weld throat size



TOLERANCE	
37 h6	37.000
37 k7	36.984
37 h6	37.007
37 k7	36.982

- NOTE**
- All welding \blacktriangle or \blacktriangleright according welding table unless stated otherwise;
 - Sharp edges to be removed;
 - Compression rubber of hatch cover to be 5mm maximum;
 - Make sure items of Detail A are completely in line with each other, same counts for Detail B;
 - Rotation indication at handle: 'O' = Open, 'C' = Close;
 - Dimensions between bracket (...) are for reference only;
 - Dimensions marked with \square not to scale.

REFERENCE DOCUMENTS

Function	Doc.nr	Class	Title
120	753	DRAW-3D	Construction section 503
130	001	DRAW-2D	Arrangement hatches and doors

DAMEN SHIPYARDS GORINCHEM

Doc class DRAW-2D | Drawn NCO | Derived from
 Project No: 513233 | Function 131 | Sequence 107 | Checked LBL | Date 08-11-2023
 Yield No. | Section/Compartment | Document number | Sheet
 HB | COPYRIGHT DAMEN SHIPYARDS GROUP | 5498001 | 1 | A01



Hatch fire flaps engine room					Top Part	M131				
Project No.	513233	Function	131	Drawn	NCO	Check	LBL	Date	08-11-2023	
Yard No.	Section/Compartment				Document number	5498001	Sheet	1	Revision	A01
COPYRIGHT DAMEN SHIPYARDS GROUP										

POS	PART		DESCRIPTION	DOC NO
	QT.	UNITS		
001	1006882		Grease nipple, Connection: 1/8" BSP, 100 P, head D=16 mm, DIN 3404, Brass	
	4	pcs		
002	1001018		Flat washer, M20, di=22mm, OD=60mm, t=4mm, EN ISO 7093-1, St st A4	
	2	pcs		
003	1001994		Lock nut, M20, DIN 985, St st A4, PA ring	1799237
	4	pcs		1
004	1006173		Toggle, M16, L=120mm, Complete, incl. st st bracket	1731758
	6	pcs		1
005-01	1120395		[W], Plate, t=10mm, St st AISI 316L (1.4404)	
	0.17	m2		
005-02	1120395		[W], Plate, t=10mm, St st AISI 316L (1.4404)	
	0.04	m2		
006-01	1008756		[W], Round bar, OD=40mm, Bronze RG7	
	0.3	m		
007	1009463		Door stop, L=50mm, D=35mm, Rubber, White	
	2	pcs		
008	1001466		Hexagon head bolt, M5, L=30mm, Full thread, EN ISO 4017, St st A4-70	
	2	pcs		
009	1000934		Flat washer, M5, di=5.5mm, OD=15mm, t=1mm, EN ISO 7093-1, St st A4	1839265
	2	pcs		1
010	1001371		Hexagon head bolt, M20, L=70mm, Partial thread, EN ISO 4014, St st A4-70	
	2	pcs		
012-01	1206978		[W], Round bar, OD=30mm, St st AISI 316L (1.4404), EN 10088-3	
	0.65	m		
012-02	1206978		[W], Round bar, OD=30mm, St st AISI 316L (1.4404), EN 10088-3	
	1.6	m		
013-01	1151739		[W], Plate, t=5mm, St st AISI 316L (1.4404), Hot rolled	
	0.01	m2		
013-02	1151739		[W], Plate, t=5mm, St st AISI 316L (1.4404), Hot rolled	
	0.01	m2		
014-01	1006828		[W], Pipe, DN40, OD=48.3mm, s=5mm, Seamless, EN 10220, Steel P235GH (1.0345)	1591742
	0.3	m		1
016-01	1170209		[W], Plate, t=25mm, Steel Grade A, Blasted SA 2.5, Paint Interplate 937 20 mu	
	0.12	m2		
016-02	1170209		[W], Plate, t=25mm, Steel Grade A, Blasted SA 2.5, Paint Interplate 937 20 mu	
	0.04	m2		
017-01	1005332		[W], Round bar, OD=20mm, Steel S235JR (1.0038), EN 10060	
	0.2	m		
018-01	1005363		[W], Round bar, OD=50mm, Steel S235JR (1.0038), EN 10060	
	0.95	m		
020-01	1284606		[C], Pipe, DN20, OD=26.67mm, s=3.91mm, Sch.80S, St st AISI 316L (1.4404), ANSI B36.19	1621392
	0.42	m		1
021	1385218		[W], Pipe end plate, DN32, OD=50mm, t=5mm, Steel S235JR (1.0038)	1590481
	2	pcs		1
022-01	1006798		[W], Pipe, DN32, OD=42.4mm, s=5mm, Seamless, EN 10220, Steel P235GH (1.0345)	1591742
	0.09	m		1
023-01	1438493		[W], Plate, t=20mm, Steel Grade A, EN 10029/EN 10163	
	0.12	m2		
024-01	1438491		[W], Plate, t=10mm, Steel Grade A, EN 10029/EN 10163	
	0.06	m2		

BUREAU VERITAS
 Stamped document, refer to 1st page

TransNo: TE-513233-00012-01 / Issue: For Approval / Date: 22-01-2024



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BILL OF MATERIAL

Hatch fire flaps engine room

Top Part M131

Project No.	513233	Function	131	Drawn	NCO	Check	LBL	Date	08-11-2023	
Yard No.	Section/Compartment				Document number	5498001	Sheet	1	Revision	A01
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POS	PART		DESCRIPTION	DOC NO
	QT.	UNITS		
024-02	1438491		[W], Plate, t=10mm, Steel Grade A, EN 10029/EN 10163	
	0.05	m2		
025-01	1438488		[W], Plate, t=6mm, Steel Grade A, EN 10029/EN 10163	
	0.01	m2		

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 Stamped document, refer to 1st page

TransNo: TE-513233-00012-01 / Issue: For Approval / Date: 22-01-2024