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A

A

SURFACE PROTECTION SEE GROUP 0344
 TOLERANCING PRINCIPLE ISO8015
 GENERAL TOLERANCES ACCORDING TO ISO2768-mK

Available executions

Execution No.	Material ID	Cylinder No.
001	PAAD365793	6
002	PTAA051990	7

B

B

C

C

NOTE

The above executions can be configured using the Engine Configurator. Detailed guidance for the executions is provided within the Marine Installation Manual (MIM). If a specific execution of interest is not shown in the above table, then it may still be under development or not available. For further information or in case of a project-specific request, WinGD must be contacted directly.

D

D

This publication is designed to provide accurate and authoritative information with regard to the subject-matter covered as it was available at the time of printing. However, the publication deals with complicated technical matters suited only for specialists in the area, and the design of the subject-products is subject to regular improvements, modifications and changes. Consequently, the publisher and copyright owner of this publication cannot accept any responsibility or liability for any eventual errors or omissions in this document or for discrepancies arising from the features of any actual item in the respective product being different from those shown in this publication. The publisher and copyright owner shall under no circumstances be held liable for any financial consequential damages or other loss, or any other damage or injury, suffered by any party making use of this publication or the information contained herein.

E

E

Prod.	X62-S2.0 X62DF-A-S1.0	X62DF-M-S1.0 X62DF-S1.0	X62DF-S2.0						
Change History									
	-	ssh102				new Design			
Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis			Activity Code	E C



ENGINE SEATING/FOUNDATION
 MIDS master drawing

F

F

separate BOM available		Dimension								
Scale	-		NX	Units [mm] [kg]	Basic Material			Net Weight	2478	
Copyright Winterthur Gas & Diesel Ltd. All rights reserved. By taking possession of the drawing the recipient recognizes and honours these rights. Neither the whole nor any part of this drawing may be used in any way for construction, fabrication, marketing or any other purpose nor copied in any way nor made accessible to third parties without the previous written consent of Winterthur Gas & Diesel Ltd.				Main Design	Design Group	9710	Q-Code	XXXXX	Standard	WDS
				Qty per	A4	Item ID	PTAA019091		Drawing Page/s	1/1

1

2

3

4

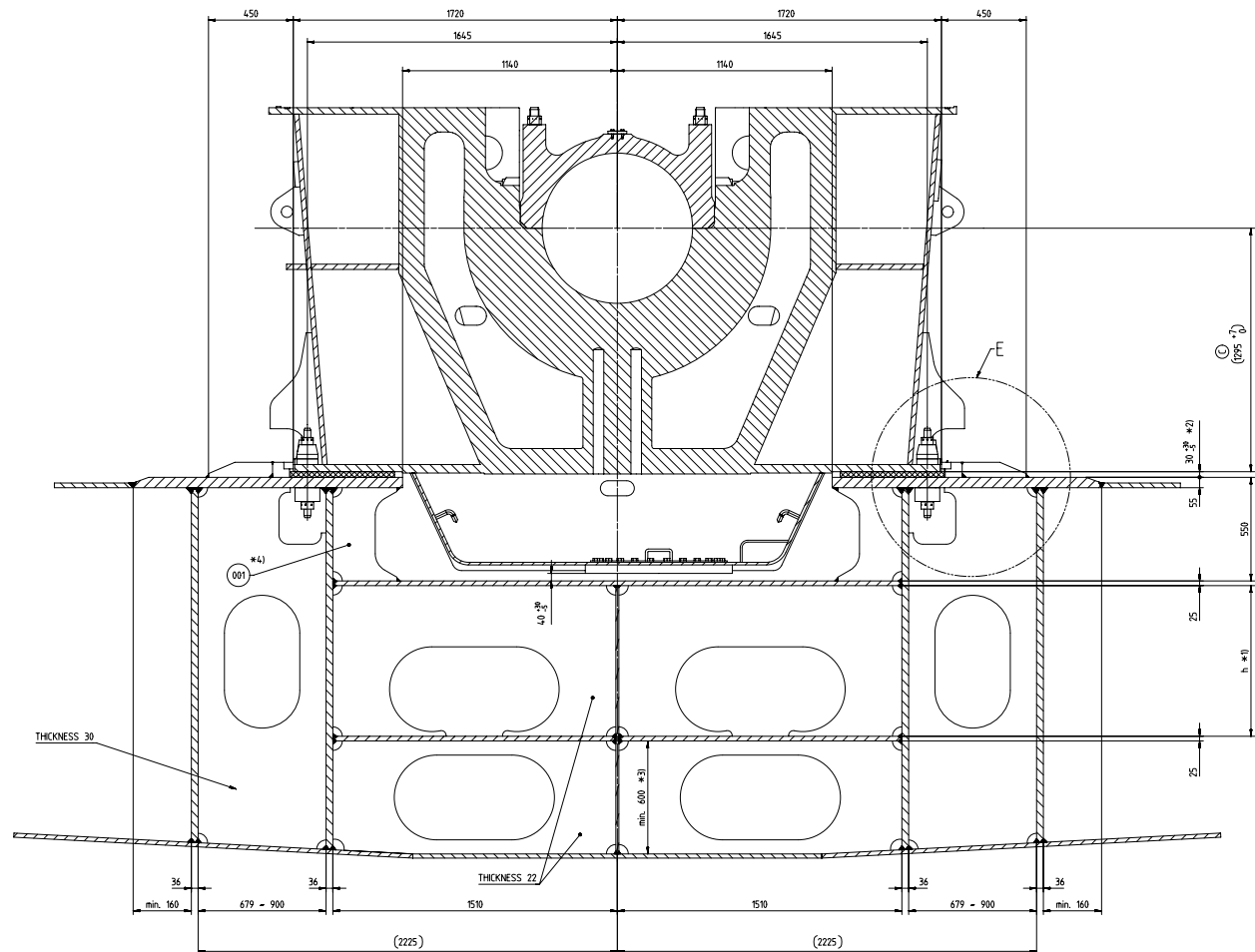
SEQ NO	QTY	Item ID	Item Name	Dimension	Standard-ID	Basic Material	Net Weight
001	1	PAAD367359	RIB			W-FU-355-J0	28.6
002	1	107.398.394.500	EPOXY RESIN				0.001
003	56	107.345.876.004	ROUND NUT	M36		W-FA-42CrMo-QT	0.63
004	8	PAAD371093	SLEEVE			W-FA-34CrMo-QT	7.28
005	8	PAAD371033	BUSH			W-FU-355-J0	4.4
006	56	PAAD371100	ELASTIC BOLT			W-FA-42CrMo-QT	3.1
007	8	PAAD371025	CONICAL SOCKET			W-FA-34CrMo-QT	5.7
008	48	PAAD371030	CONICAL SOCKET			W-FA-34CrMo-QT	2.3
009	48	PAAD371091	BUSH			W-FU-355-J0	7.9
010	1	107.367.119.001	SEALING PIECE				0.001
011	8	PAAD103756	JOINT DISC			W-FU-235-JR	0.001
012	56	107.410.789.001	SPHERICAL ROUND NUT	M36		34CrMo4 SCM 435	0.85
013	48	107.401.837.001	PLUG				0.2
016	3	PAAD139256	ENGINE SIDE STOPPER				36.6
017	3	PAAD139302	ENGINE SIDE STOPPER				35
018	6	PAAD140810	WEDGE			W-FU-235-JR	6.9
019	1	107.412.130	FITTING INSTRUCTIONS				

Proc.	6 X62-S2.0 6 X62DF-A-S1.0	6 X62DF-M-S1.0 6 X62DF-S1.0	6 X62DF-S2.0					
Change History	C	npa101	mhu019	21.08.2024	CNAA006231	Drawing updated	4	3
	B	sde101	mhu019	11.07.2022	CNAA002186	Drawing Updated	4	3
	A	ssh102	mhu019	19.01.2022	CNAA001119	Drawing Updated	4	3
	-	dkl021	mhu019	17.12.2020	EAAD786875	-	-	-
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Approved	Activity Code

WIN GD		ENGINE SEATING/FOUNDATION								
		FOUNDATION ARRANGEMENT: STANDARD								
Bill Of Material		Dimension								
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		Main Design	Yes	Design Group		9710	Q-Code	X X M	Standard	WDS
		Qty per	Engine	A4	Item ID	PAAD365793		BOM Page/s	01/01	

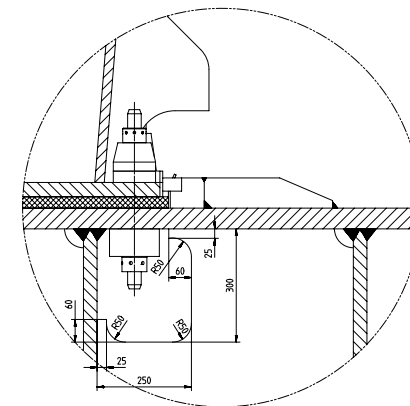
SECTION A-A

SCALE 1:10



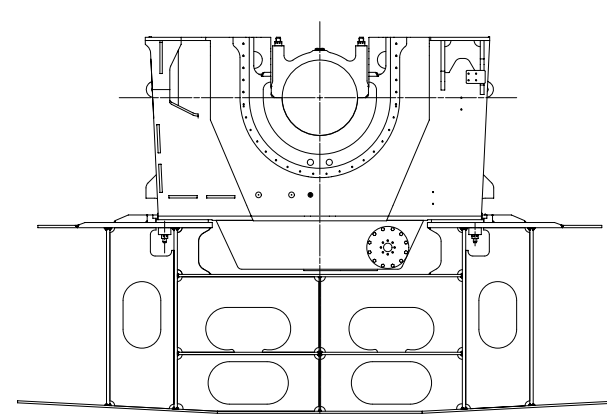
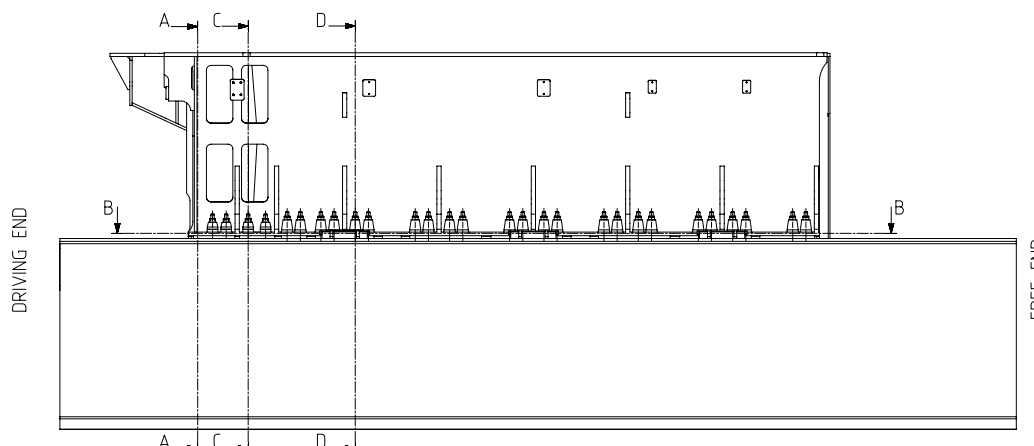
DETAIL E

SCALE 1:5



Remarks:

- *1) HEIGHT TO BE DETERMINED BY SHIPYARD. FOR DIMENSIONS AND LAYOUT OF LUB. OIL DRAIN TANK AND DRAINS REFER TO DESIGN GROUP 9722
- *2) CHOCK THICKNESS $30^{+0.30}$ mm
- FINAL CHOCK THICKNESS TO BE DETERMINED BY SHIPYARD
- *3) FINAL DISTANCES ACCORDING TO APPROPRIATE RULES
- *4) QUANTITY DEPENDING ON SHIPYARD DESIGN



Rev	Description	Date	By	Checked	Scale	Material	Weight
1	Initial design	11/20/2022	PAAD365793	WDS	1:10	Stainless Steel	1180
2	Design updated	11/20/2022	PAAD365793	WDS	1:10	Stainless Steel	1180
3	Design updated	11/20/2022	PAAD365793	WDS	1:10	Stainless Steel	1180
4	Design updated	11/20/2022	PAAD365793	WDS	1:10	Stainless Steel	1180

Material	Stainless Steel	Weight	1180
Scale	1:10	Material	Stainless Steel
Weight	1180	Scale	1:10
Material	Stainless Steel	Weight	1180
Scale	1:10	Material	Stainless Steel
Weight	1180	Scale	1:10
Material	Stainless Steel	Weight	1180
Scale	1:10	Material	Stainless Steel
Weight	1180	Scale	1:10

B-B
CHOCKING AND DRILLING PLAN FOR FOUNDATION BOLTS

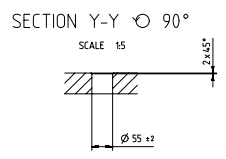
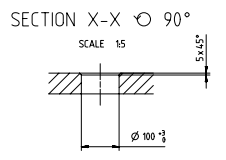
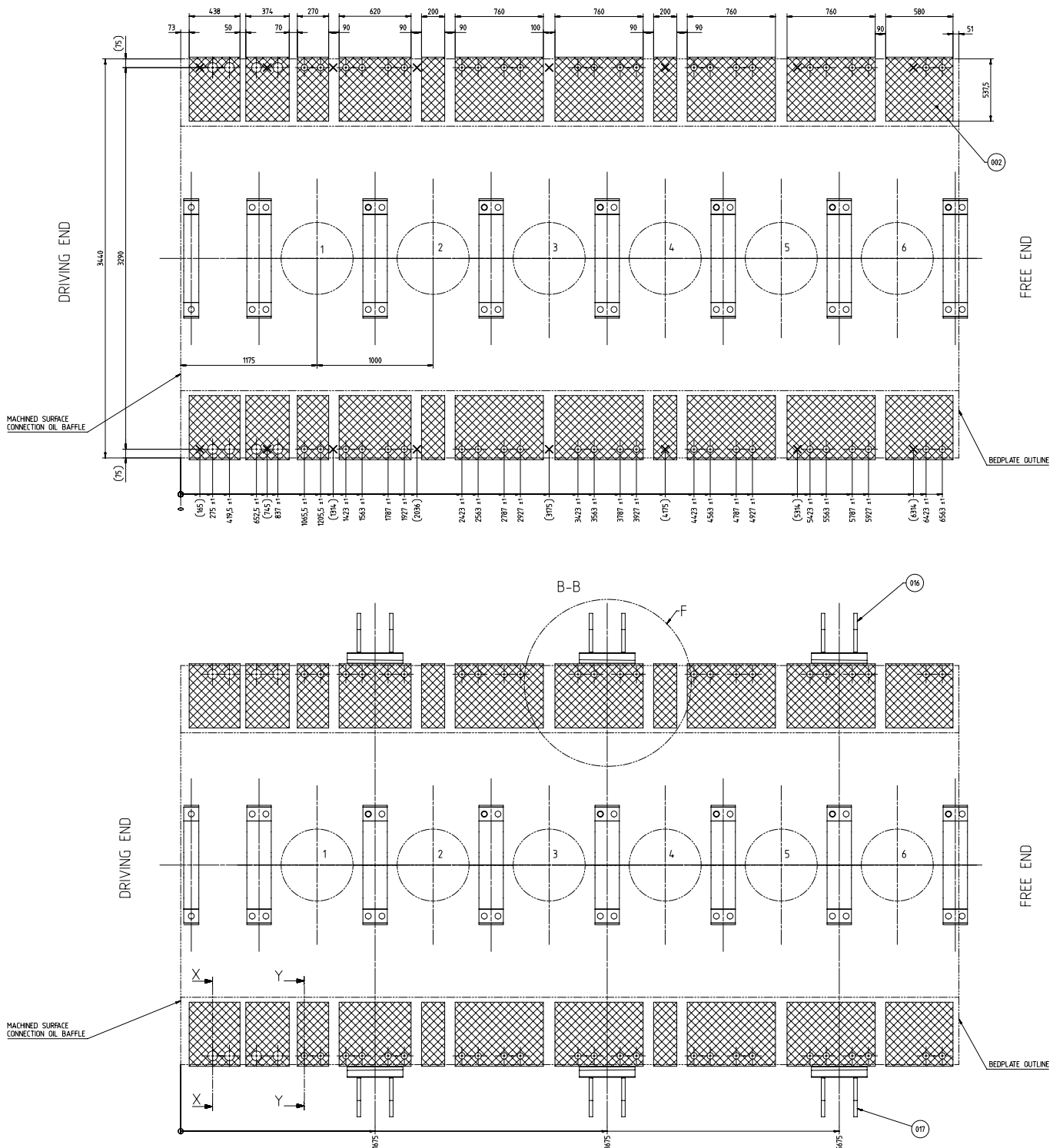
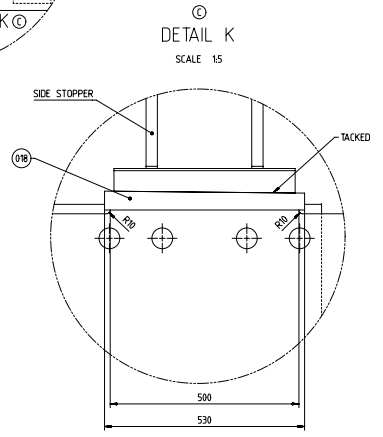
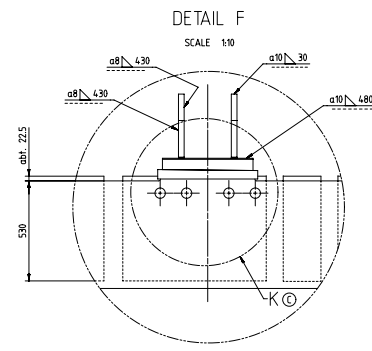


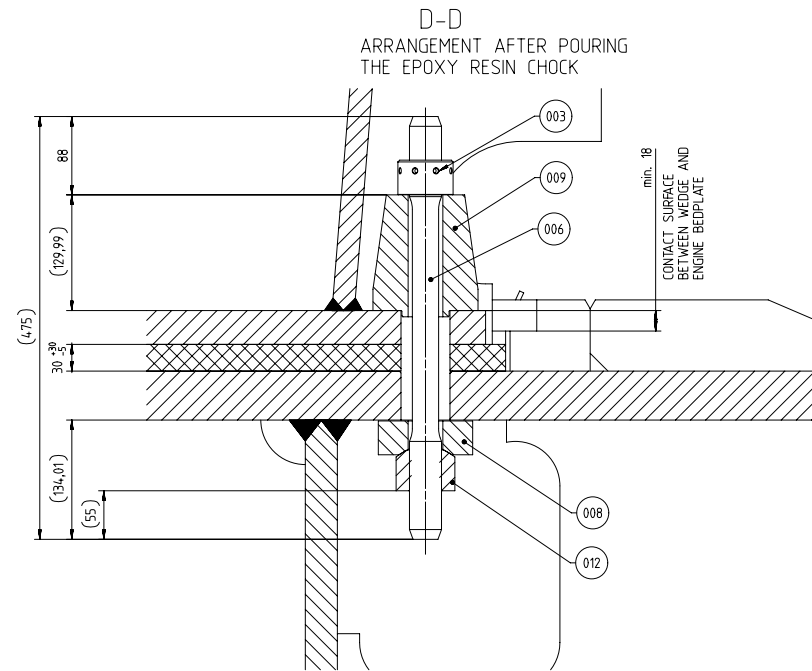
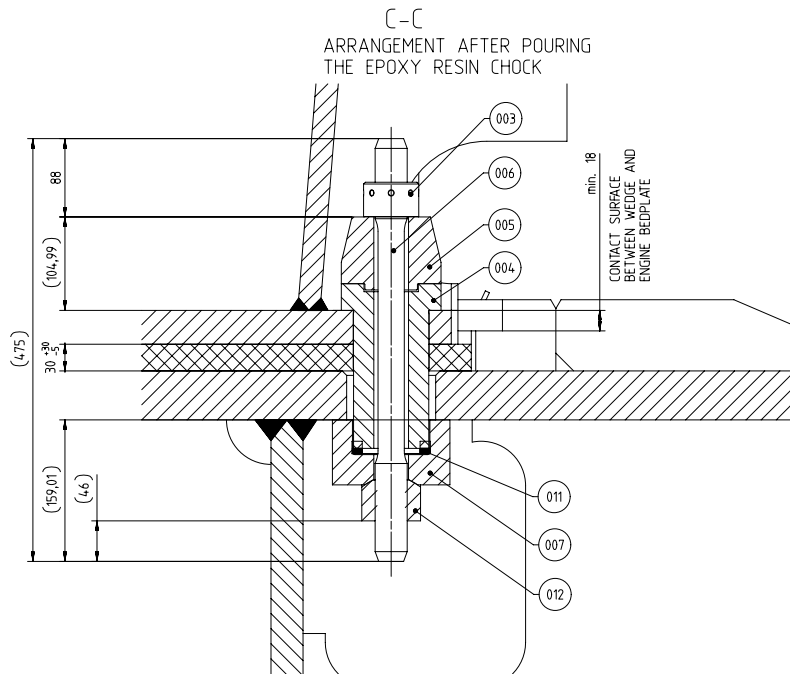
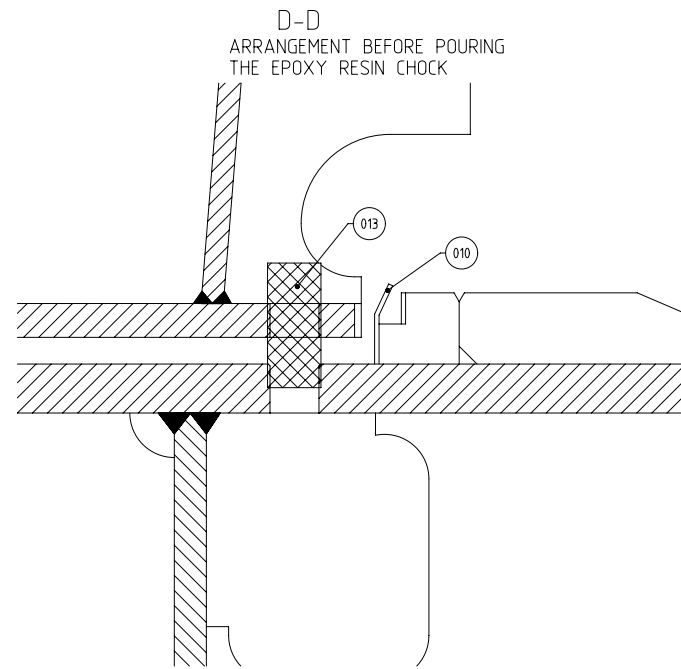
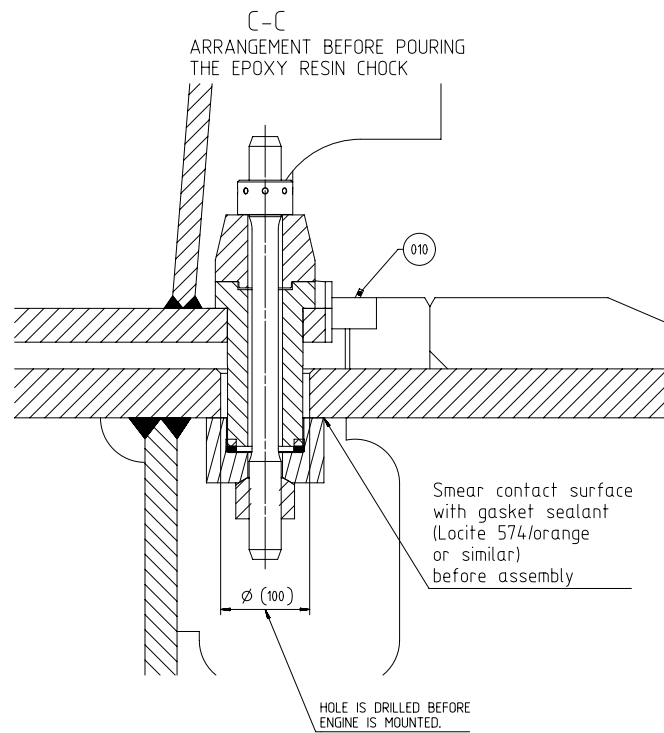
Table : Dimensions of epoxy resin chocks *1)

No. of Cyl.	Max. perm. mean surface pressure of chock *2)	Total chock length per side (mm)	Total net chocking area (cm²)	Required quantity of epoxy resin material *3)	
				min. (cm³)	max. (cm³)
6	5.0	5722	59620	149	358
No. of Cyl.	Total No. of holes	No. of Thrust sleeves			
6	56	8			

*SHOWN ON DRAWING

- Remarks:
- *1) For the layout is taken into consideration:
 - A max. permissible static load of 0.8 N/mm²
 - Engine holding down studs fully tightened according to fitting instructions
 - Engine mass (incl. net engine mass, vibration damper, flywheel, water and oil)
 - *2) The max. permissible mean surface pressure of the epoxy resin chocks is to be determined by the shipyard in accordance with the relevant classification society / rules.
 - *3) Referring to a standardized chock thickness of 25 up to 60 mm.
 - *4) With X marked positions present jacking screws.





SURFACE PROTECTION SEE GROUP 0344		Change	C	ppa011	rnld09	21032324	04A003231	Drawing updated	4	3
TOLERANCING PRINCIPLE ISO8015		Drawn		Created	Approved	Approval Date	Change System			
GENERAL TOLERANCES ACCORDING TO ISO2768-MK		mm	kg	1.3	mm	A1	NX		PAAD365793	3/3

SEQ NO	QTY	Item ID	Item Name	Dimension	Standard-ID	Basic Material	Net Weight
001	1	PAAD367359	RIB			W-FU-355-J0	28.6
002	1	107.398.394.500	EPOXY RESIN				0.001
003	64	107.345.876.004	ROUND NUT	M36		W-FA-42CrMo-QT	0.63
004	10	PAAD371093	SLEEVE			W-FA-34CrMo-QT	7.28
005	10	PAAD371033	BUSH			W-FU-355-J0	4.4
006	64	PAAD371100	ELASTIC BOLT			W-FA-42CrMo-QT	3.1
007	10	PAAD371025	CONICAL SOCKET			W-FA-34CrMo-QT	5.7
008	54	PAAD371030	CONICAL SOCKET			W-FA-34CrMo-QT	2.3
009	54	PAAD371091	BUSH			W-FU-355-J0	7.9
010	1	107.367.119.001	SEALING PIECE				0.001
011	10	PAAD103756	JOINT DISC			W-FU-235-JR	0.001
012	64	107.410.789.001	SPHERICAL ROUND NUT	M36		34CrMo4 SCM 435	0.85
013	54	107.401.837.001	PLUG				0.2
014	3	PAAD139256	ENGINE SIDE STOPPER				36.6
015	3	PAAD139302	ENGINE SIDE STOPPER				35
016	6	PAAD140810	WEDGE			W-FU-235-JR	6.9
017	1	107.412.130	FITTING INSTRUCTIONS				

Prod.	7 X62-S2.0 7 X62DF-A-S1.0	7 X62DF-S1.0 7 X62DF-S2.0	
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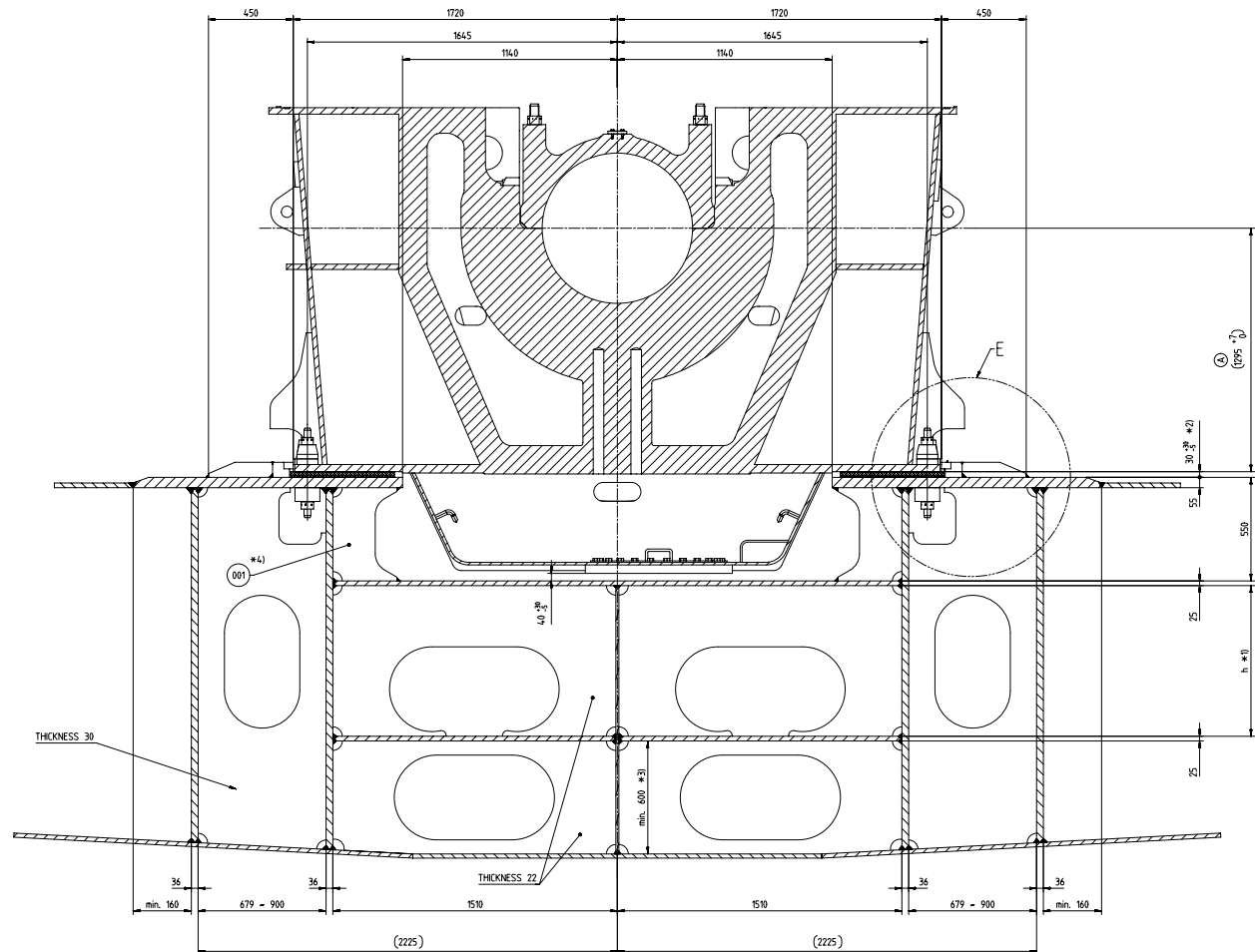
Change History	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Approved	Activity Code	E	C
	A	npa101	mhu019	21.08.2024	CNAA006231	Drawing updated			4	3
-	npa101	mhu019	20.01.2023	CNAA003121	Main Design/Drawing Introduced			-	-	

	<h2>ENGINE SEATING/FOUNDATION</h2> <h3>FOUNDATION ARRANGEMENT: STANDARD</h3>
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Bill Of Material				Dimension					
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Main Design		Yes	Design Group		9710	Q-Code	X X M	Standard	WDS
Qty per		Engine	A4	Item ID	PTAA051990		BOM Page/s	01/01	

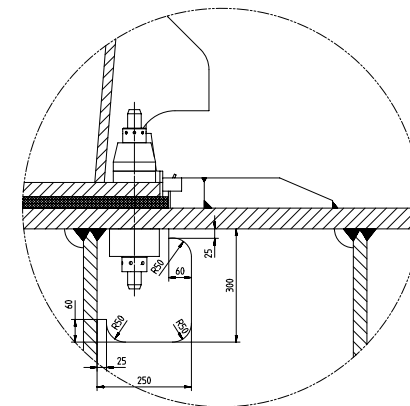
SECTION A-A

SCALE 1:10



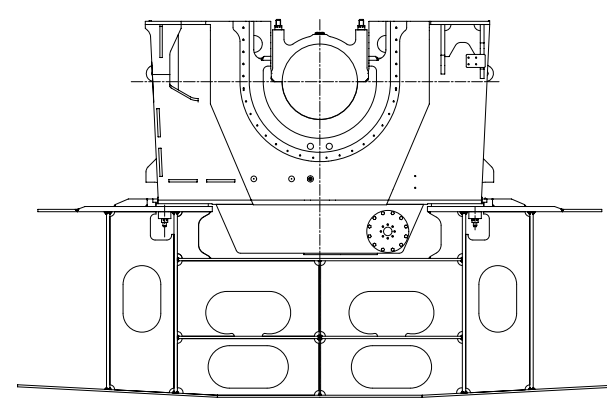
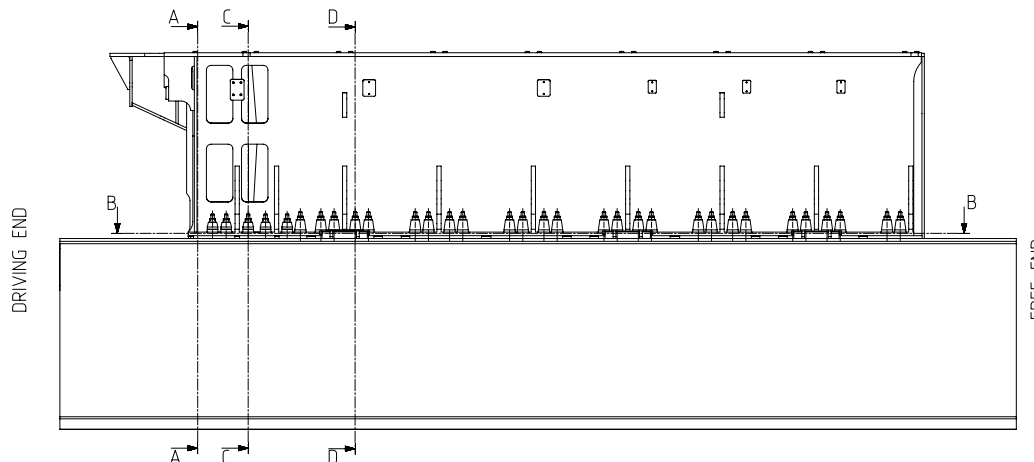
DETAIL E

SCALE 1:5



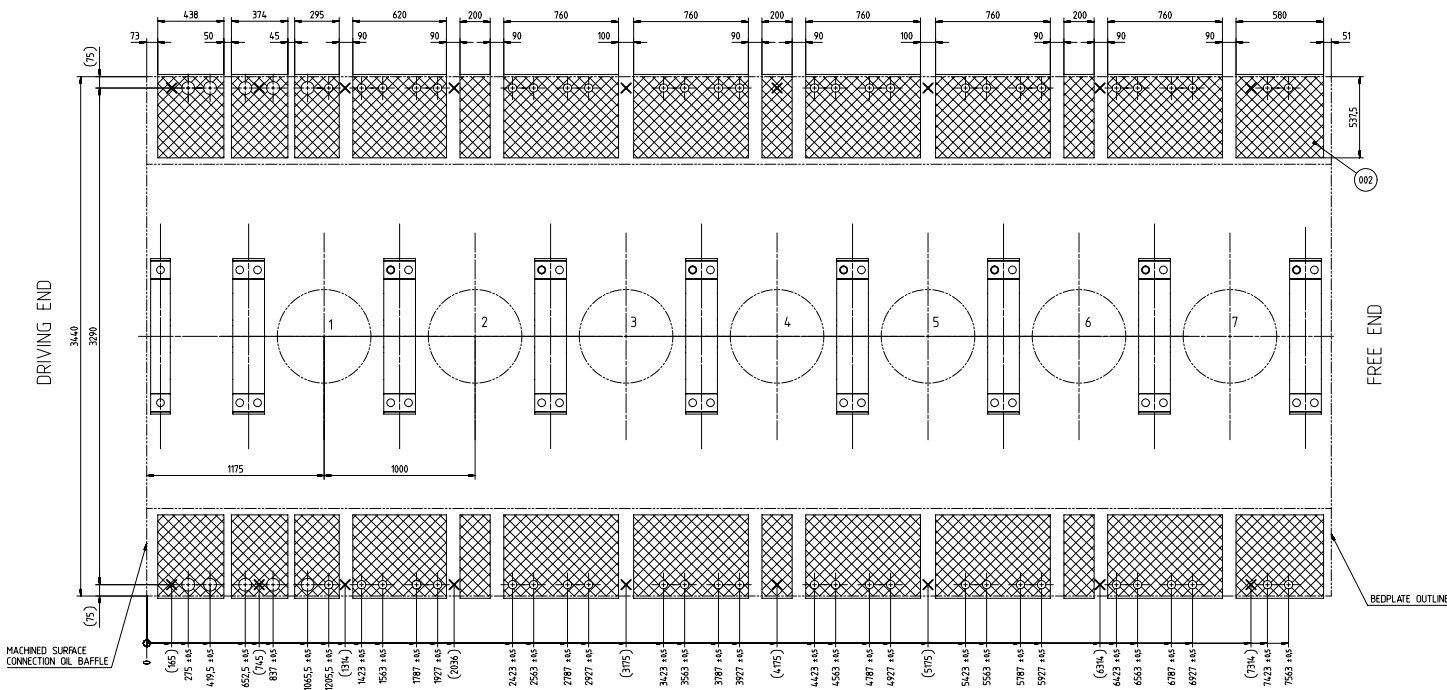
Remarks:

- *1) HEIGHT TO BE DETERMINED BY SHIPYARD, FOR DIMENSIONS AND LAYOUT OF LUB. OIL DRAIN TANK AND DRAINS REFER TO DESIGN GROUP 9722
- *2) CHOCK THICKNESS 30 ± 0.30 mm
- FINAL CHOCK THICKNESS TO BE DETERMINED BY SHIPYARD
- *3) FINAL DISTANCES ACCORDING TO APPROPRIATE RULES
- *4) QUANTITY DEPENDING ON SHIPYARD DESIGN

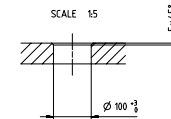


PTA051990		PTA051990			
A		A			
Rev	Drawn	Checked	Design	Scale	Sheet
001	01/20	21/02/24	04/03/25	Drawing updated	4 / 3
001	01/09	20/01/23	04/03/21	Main Design/Drawing Introduced	1 / 3
Project	Engine	Support	Support of the Engine	Engine Seating	Approved
WINGD		ENGINE SEATING/FOUNDATION FOUNDATION ARRANGEMENT, STANDARD			
separate BOM available		Dimension	Unit	Basic Material	Part Weight
Scale	1:20	Form	1:10		1313
SEPARATE PROTECTION SEE GROUP 044		Material	Yes	Design	9710
TOLERANCING PRINCIPLE ISO9001		Color	Yes	Standard	X X M
GENERAL TOLERANCES ACCORDING TO ISO2001		Engn	AD	by	PTA051990
19	20	21	22	23	24

SECTION B-B
CHOCKING AND DRILLING PLAN FOR FOUNDATION BOLTS



SECTION X-X $\ominus 90^\circ$



SECTION Y-Y $\ominus 90^\circ$

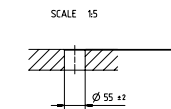


Table : Dimensions of epoxy resin chocks *1)

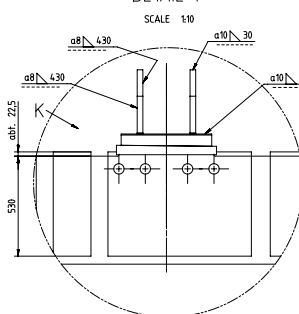
No. of Cyl.	Max. perm. mean surface pressure of chock *2)	Total chock length per side	Total net chocking area	Required quantity of epoxy resin material *3)	
				min.	max.
(N/mm ²)	(mm)	(cm ²)	(dm ³)		
7	5.0	6707	72262	14.9	358
No. of Cyl.	Total No. of holes	No. of Thrust sleeves			
7	54	10			

*SHOWN ON DRAWING

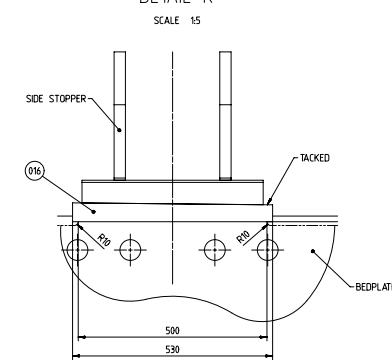
Remarks:

- *1) For the layout is taken into consideration:
 - A max. permissible static load of 0.8 N/mm²
 - Engine holding down studs fully tightened according to fitting instructions
 - Engine mass (incl. net engine mass, vibration damper, flywheel, water and oil)
- *2) The max. permissible mean surface pressure of the epoxy resin chocks is to be determined by the shipyard in accordance with the relevant classification society / rules.
- *3) Referring to a standardized chock thickness of 25 up to 60 mm.
- *4) With X marked positions present jacking screws.

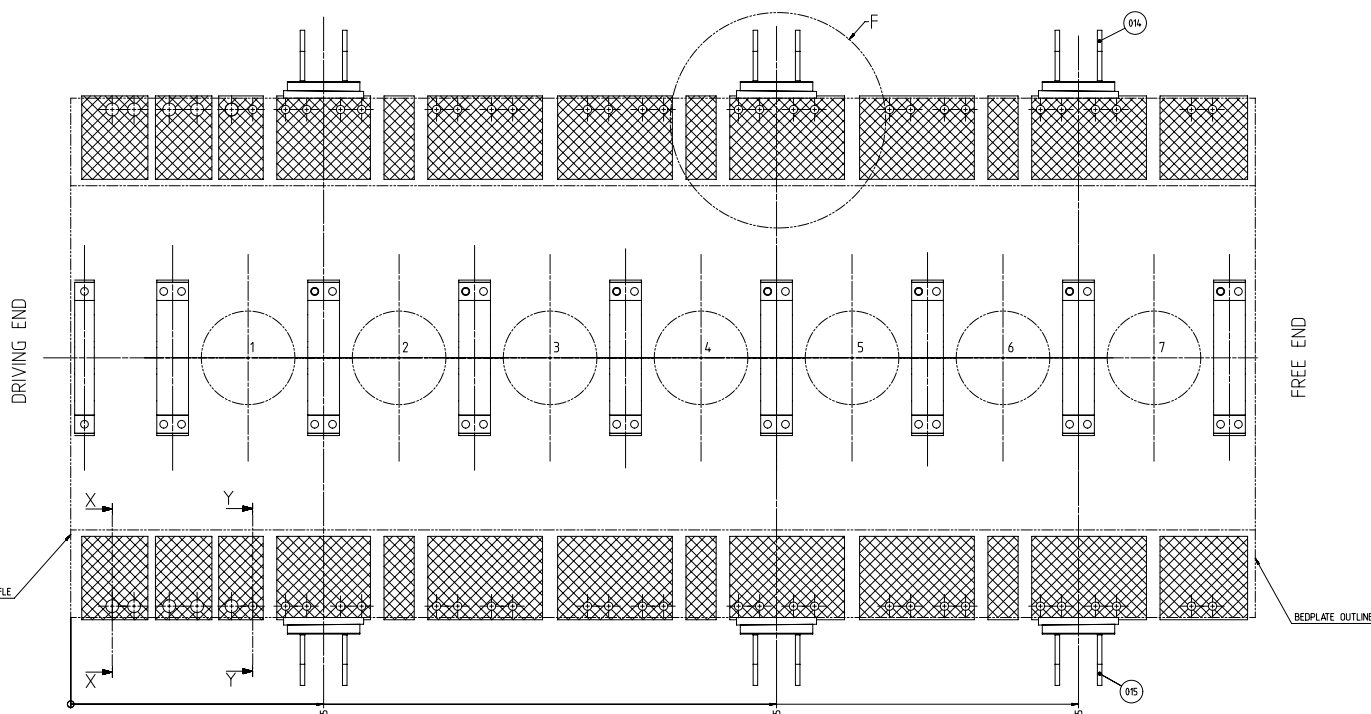
DETAIL F



DETAIL K

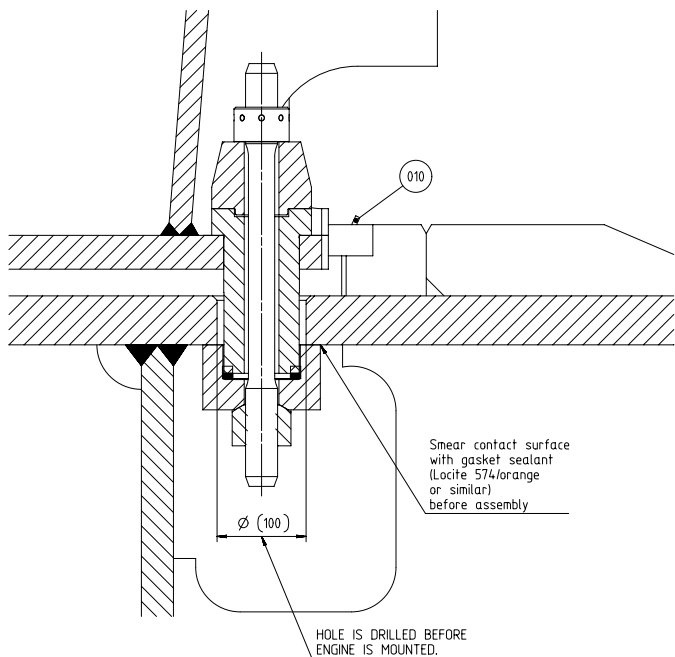


SECTION B-B



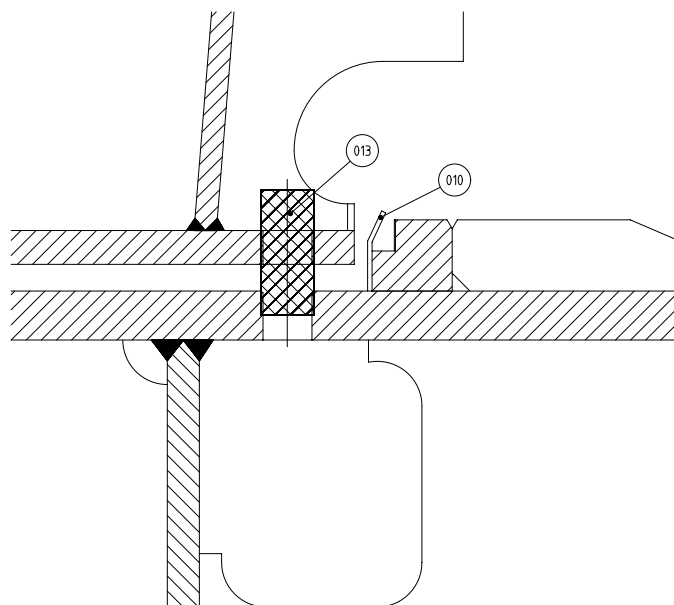
SECTION C-C

ARRANGEMENT BEFORE POURING
THE EPOXY RESIN CHOCK



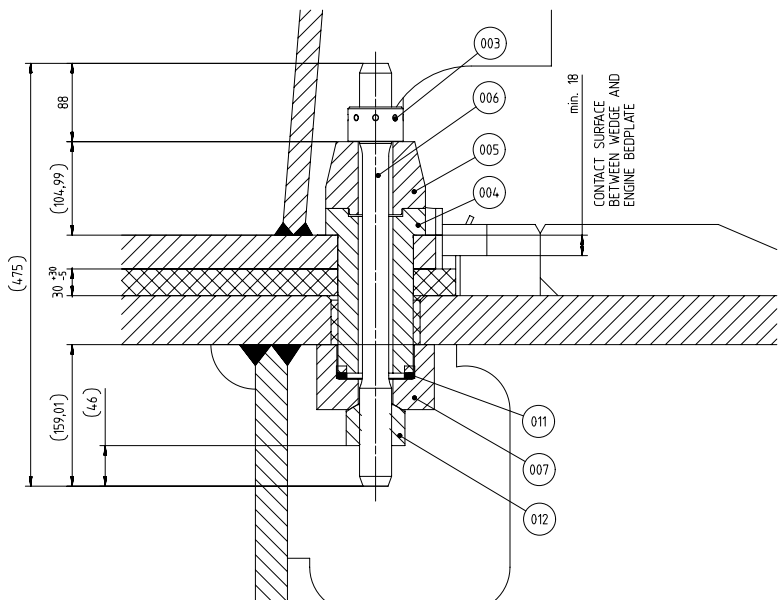
SECTION D-D

ARRANGEMENT BEFORE POURING
THE EPOXY RESIN CHOCK



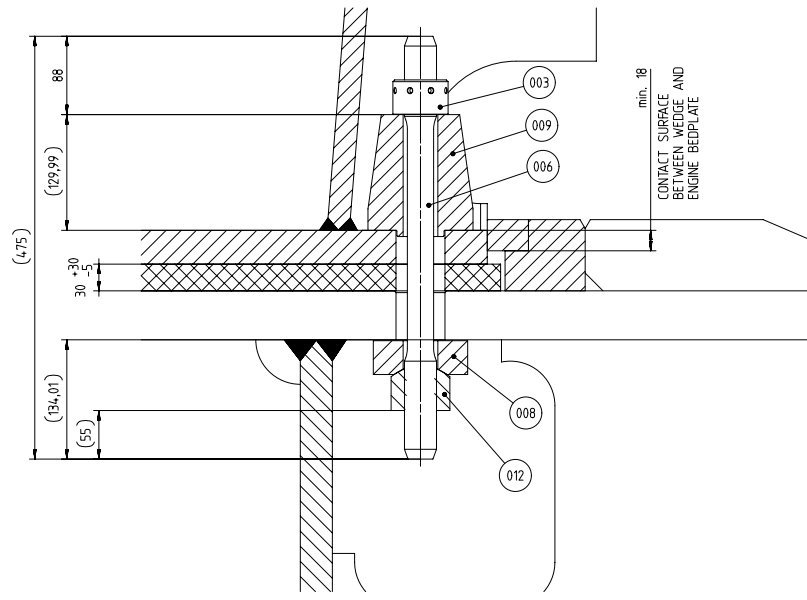
SECTION C-C

ARRANGEMENT AFTER POURING
THE EPOXY RESIN CHOCK



SECTION D-D

ARRANGEMENT AFTER POURING
THE EPOXY RESIN CHOCK

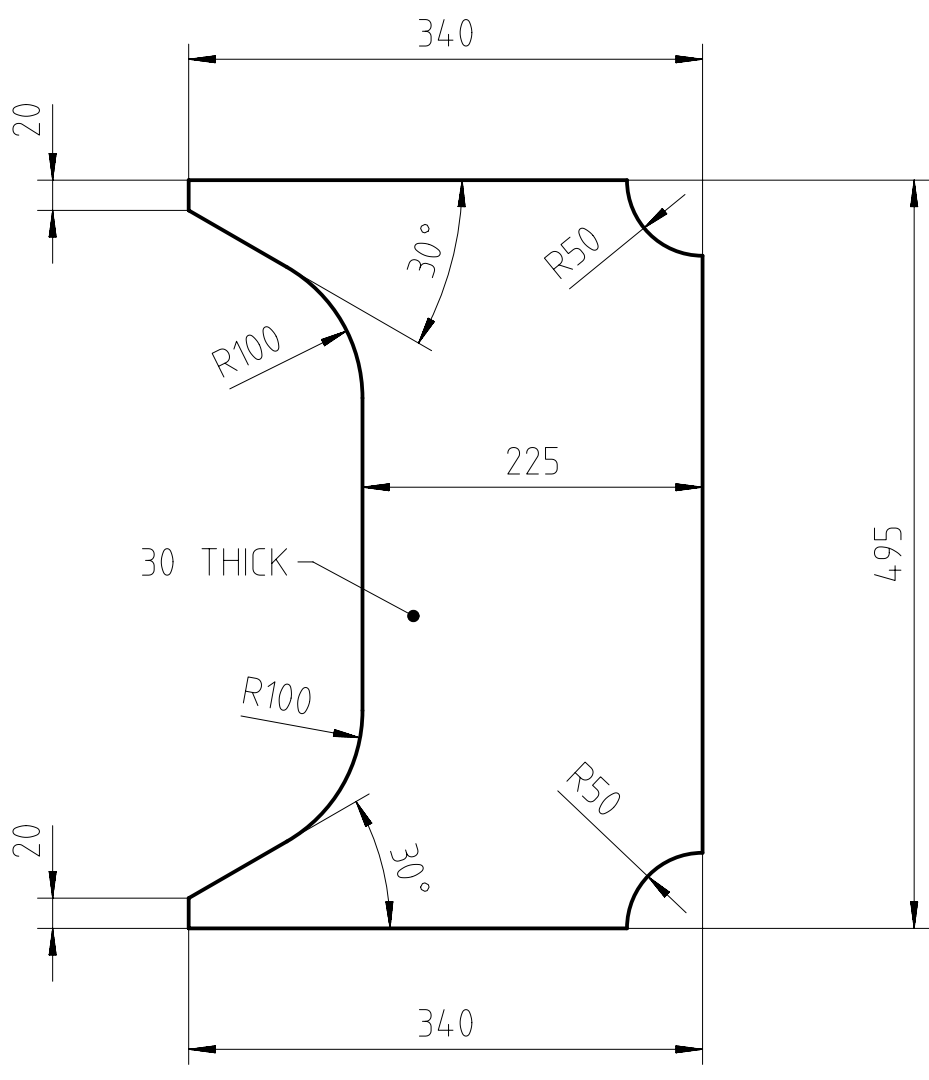


SURFACE PROTECTION SEE GROUP 0344		Change	A	ppa011	rnlob	21082024	04A003231	Drawing updated	4	3
TOLERANCING PRINCIPLE ISO8015		Rev.	Creator	Approval	Approval Date	Change ID	Change System		Activity Code	E C
GENERAL TOLERANCES ACCORDING TO ISO2768-MK		mm	kg	1:3	mm	NX	A1	hem	PTAA051990	3/3

1 2 3 4

A B C D E F

SURFACE PROTECTION SEE GROUP 0344
 TOLERANCING PRINCIPLE ISO8015
 GENERAL TOLERANCES ACCORDING TO ISO2768-mK



Approved

Free space for lic.		Q-Code XXXXXX				Main Drw.			
Standard ISO; JIS									
Modif.	<input type="checkbox"/>	Number	Drawn date	<input type="checkbox"/>	Number	Drawn date	<input type="checkbox"/>	Number	Drawn date
WIN GD Winterthur Gas & Diesel		Product W-2S			RIB Rippe				
Units	mm kg	NX		Basic Material W-FU-355-J0			Net Weight 28,6		
Made	16.12.2020 dki021 DH.Kim		Scale 1:5		Size A4	Page 1/1	Material ID PAAD367359		
Chkd	17.12.2020 ksc101 Schenk		Design Group 9710		Drawing ID DAAD138170			Rev. -	
Appd	17.12.2020 mhu019 Hug								

1 2 3 4

DID - DIMENSIONAL DRAWING - Confidential


A
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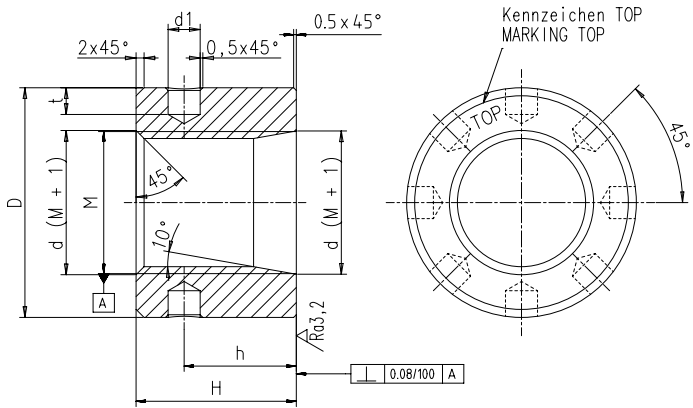
SURFACE PROTECTION SEE GROUP 0344
TOLERANCING PRINCIPLE ISO8015
GENERAL TOLERANCES ACCORDING TO ISO2768-mK

Properties	Standart	Values
Ultimate compression strength	ASTM D-695	min. 130 MPa
Compression yield point	ASTM D-695	min. 100 MPa
Compressive modulus of elasticity	ASTM D-695	min. 3100 MPa
Deformation under load Load550 N / 70°C Load1100 N / 70°C	ASTM D-621	max. 0.10% max. 0.15%
Curing shrinkage	ASTM D-2566	max. 0.15%
Coefficient of thermal expansion (0-60 K)	ASTM D-696	max. 50x10 ⁻⁶ 1/K
Coefficient of friction	normal	min. 0.3

Required properties of epoxy resin material

A
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C
D
E
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Approved
D
F
DIMENSIONAL DRAWING - Confidential

Free space for lic.	Q-Code						Main	
	XQXXX						Drw.	
Standard						ISO; JIS		
Modif.	EAAD091567	04.12.2019						
	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date
			Product W-2S		EPOXY RESIN			
					Epoxydharz			
Units	mm kg	NX	Basic Material			Net Weight 0		
Made	02.04.2008 M.PRSTEC		Scale	-	Size	A4	Page	1/1
Chkd			Design Group	9710		Material ID	107.398.394.500	
Appd	07.04.2008 MPR002 Prstec		Drawing ID	107.398.394			Rev.	A



POS.	M	D	d	H	h	d1	t
001	M27	47	28	29	20	6 ^{+0.2} ₀	7
002	M30	52	31	33	23	6 ^{+0.2} ₀	7
003	M33	57	34	36	25	6 ^{+0.2} ₀	7
004	M36	62	37	39	27	6 ^{+0.2} ₀	7
005	M39	67	40	42	29	6 ^{+0.2} ₀	7
006	M42	73	43	46	32	6 ^{+0.2} ₀	7
007	M45	78	46	49	34	6 ^{+0.2} ₀	7
008	M48	83	49	52	36	6 ^{+0.2} ₀	7
009	M52	90	53	56	39	6 ^{+0.2} ₀	7
010	M56	97	57	61	43	9,5 ^{+0.2} ₀	10
011	M60	104	61	65	46	9,5 ^{+0.2} ₀	10
012	M64	110	65	70	49	9,5 ^{+0.2} ₀	10
013	M68	117	69	74	52	9,5 ^{+0.2} ₀	10
014	M72	124	73	78	55	9,5 ^{+0.2} ₀	10
015	M76	131	77	82	57	9,5 ^{+0.2} ₀	10
016	M80	138	81	87	61	14 ^{+0.2} ₀	15
017	M85	146	86	92	64	14 ^{+0.2} ₀	15
018	M90	155	91	98	69	14 ^{+0.2} ₀	15
019	M95	164	96	103	72	14 ^{+0.2} ₀	15
020	M100	172	101	108	76	14 ^{+0.2} ₀	15

$Ra6,3$ / $(Ra3,2)$

MATERIAL :	42CrMo4 (ISO)	SCM440 (JIS)
D > 40 - ≤ 100	verguetet Rm = 900-1100 N/mm ² HEAT TREATED	
D > 100 - ≤ 160	verguetet Rm = 800-950 N/mm ² HEAT TREATED	
D > 160 - ≤ 250	verguetet Rm = 750-900 N/mm ² HEAT TREATED	

1	020	107.345.876.020	ROUND NUT	M100	107.345.876	W-FA-42CrMo-07	13,2
1	019	107.345.876.019	ROUND NUT	M95	107.345.876	W-FA-42CrMo-07	11,4
1	018	107.345.876.018	ROUND NUT	M90	107.345.876	W-FA-42CrMo-07	9,7
1	017	107.345.876.017	ROUND NUT	M85	107.345.876	W-FA-42CrMo-07	8,1
1	016	107.345.876.016	ROUND NUT	M80	107.345.876	W-FA-42CrMo-07	6,8
1	015	107.345.876.015	ROUND NUT	M76	107.345.876	W-FA-42CrMo-07	5,9
1	014	107.345.876.014	ROUND NUT	M72	107.345.876	W-FA-42CrMo-07	5,0
1	013	107.345.876.013	ROUND NUT	M68	107.345.876	W-FA-42CrMo-07	4,2
1	012	107.345.876.012	ROUND NUT	M64	107.345.876	W-FA-42CrMo-07	3,5
1	011	107.345.876.011	ROUND NUT	M60	107.345.876	W-FA-42CrMo-07	2,9
1	010	107.345.876.010	ROUND NUT	M56	107.345.876	W-FA-42CrMo-07	2,36
1	009	107.345.876.009	ROUND NUT	M52	107.345.876	W-FA-42CrMo-07	1,86
1	008	107.345.876.008	ROUND NUT	M48	107.345.876	W-FA-42CrMo-07	1,42
1	007	107.345.876.007	ROUND NUT	M45	107.345.876	W-FA-42CrMo-07	1,2
1	006	107.345.876.006	ROUND NUT	M42	107.345.876	W-FA-42CrMo-07	0,96
1	005	107.345.876.005	ROUND NUT	M39	107.345.876	W-FA-42CrMo-07	0,79
1	004	107.345.876.004	ROUND NUT	M36	107.345.876	W-FA-42CrMo-07	0,63
1	003	107.345.876.003	ROUND NUT	M33	107.345.876	W-FA-42CrMo-07	0,49
1	002	107.345.876.002	ROUND NUT	M30	107.345.876	W-FA-42CrMo-07	0,37
1	001	107.345.876.001	ROUND NUT	M27	107.345.876	W-FA-42CrMo-07	0,25

Qty	Seq. No.	Material ID	Material Name	Standard or Drawing	Basic Material	Material Standard	Weight GR/NET

Mod. 1: EAAD70007 | 13.01.2011 | 2: EAAD084319 | 06.02.2013 | 3: EAAD087822 | 12.07.2017

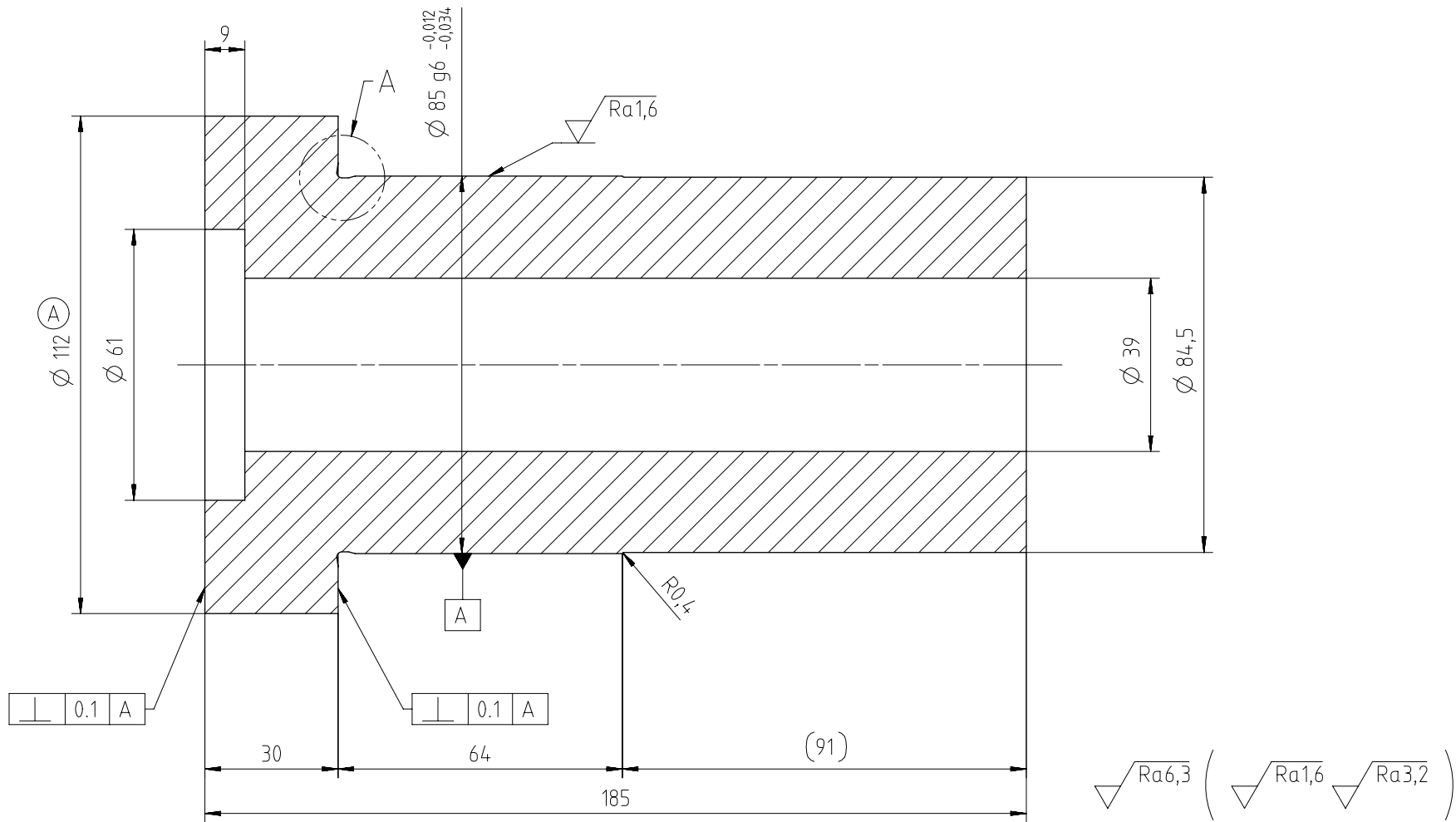
WIN GO
 Winkler Gas & Diesel

Product: W-2S
 ROUND NUT
 ROUND NUT

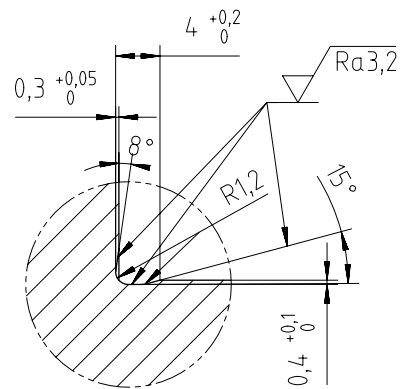
Units	mm	kg	NX	Basic Material	Scale	1:1	Page	AT	Material	Net Weight
Made	19.08.2004	pne001	P.Neracher							
Chd										
Design Group										
Drawing										
Appd	20.08.2004	PNE001	Neracher							

SURFACE PROTECTION SEE GROUP 0344
 TOLERANCING PRINCIPLE ISO8015
 GENERAL TOLERANCES ACCORDING TO ISO2768-mK

107.345.876



DETAIL A
SCALE 2:1

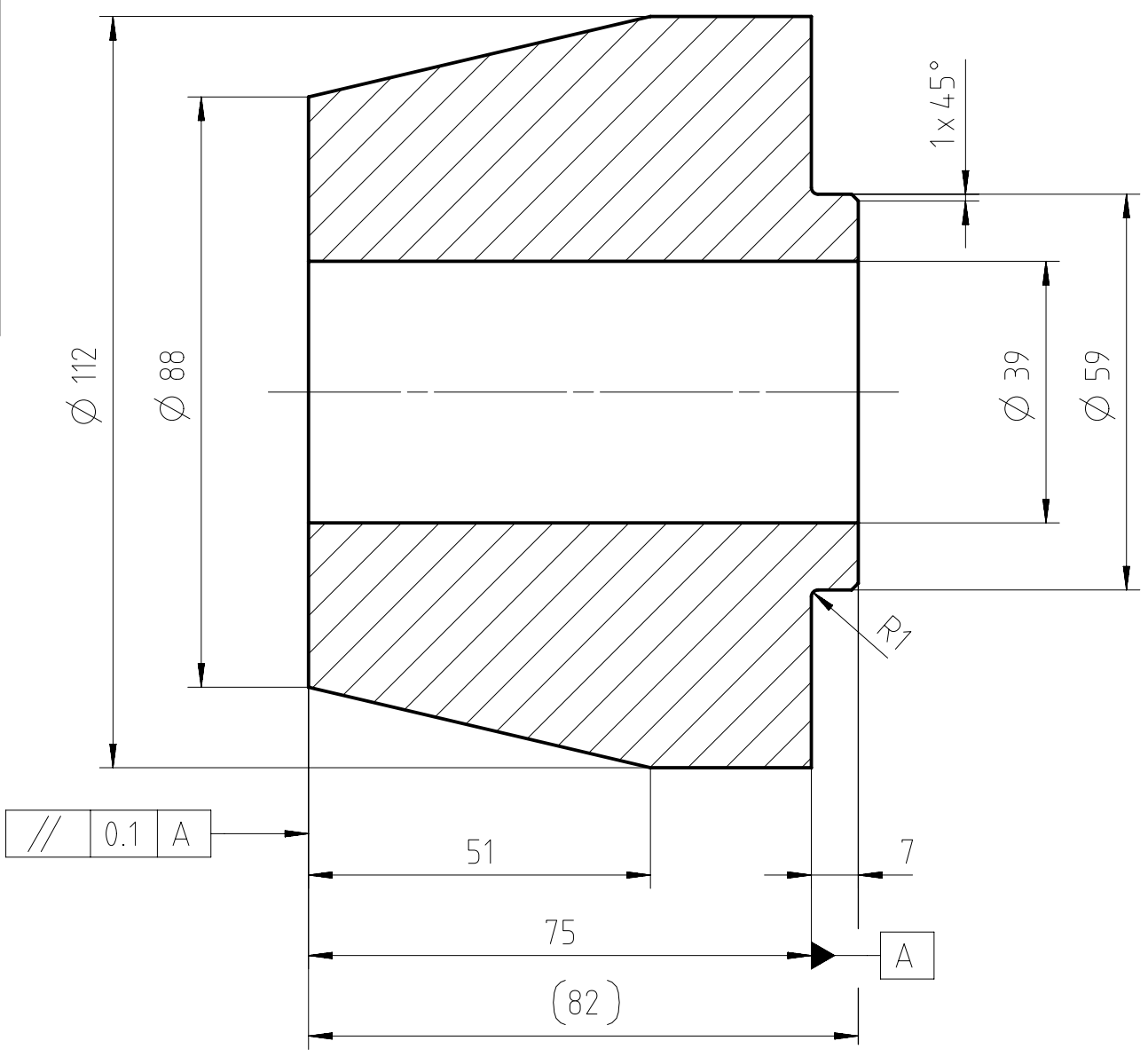


Prod.	X62-S2.0 X62DF-1.1	X62DF-2.1 X62DF-S1.0									
Change History	A	ssh102	mhu019	19.01.2022	CNAA001119	Drawing Updated			4	3	
	-	dk1021	mhu019	17.12.2020		-			-	-	
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis			Approved	Activity Code	
		SLEEVE									
Scale 1:1				Dimension							
Units [mm] [kg]		Basic Material		W-FA-34CrMo-QT		Net Weight		7.280			
Main Design		Design Group		9710		Q-Code		XXXXXX		Standard	WDS
Qty per		A3		Item ID		PAAD371093		Drawing Page/s		1/1	
SURFACE PROTECTION SEE GROUP 0344		Copyright Winterthur Gas & Diesel Ltd. All rights reserved. By taking possession of the drawing the recipient recognizes and honours these rights. Neither the whole nor any part of this drawing may be used in any way for construction, fabrication, marketing or any other purpose not copied in any way nor made accessible to third parties without the previous written consent of Winterthur Gas & Diesel Ltd.									
TOLERANCING PRINCIPLE ISO8015											
GENERAL TOLERANCES ACCORDING TO ISO2768-mK											

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SURFACE PROTECTION SEE GROUP 0344
TOLERANCING PRINCIPLE ISO8015
GENERAL TOLERANCES ACCORDING TO ISO2768-mK



SHARP EDGES REMOVED $0.2 \times 45^\circ$ $\sqrt{Ra_{6,3}}$

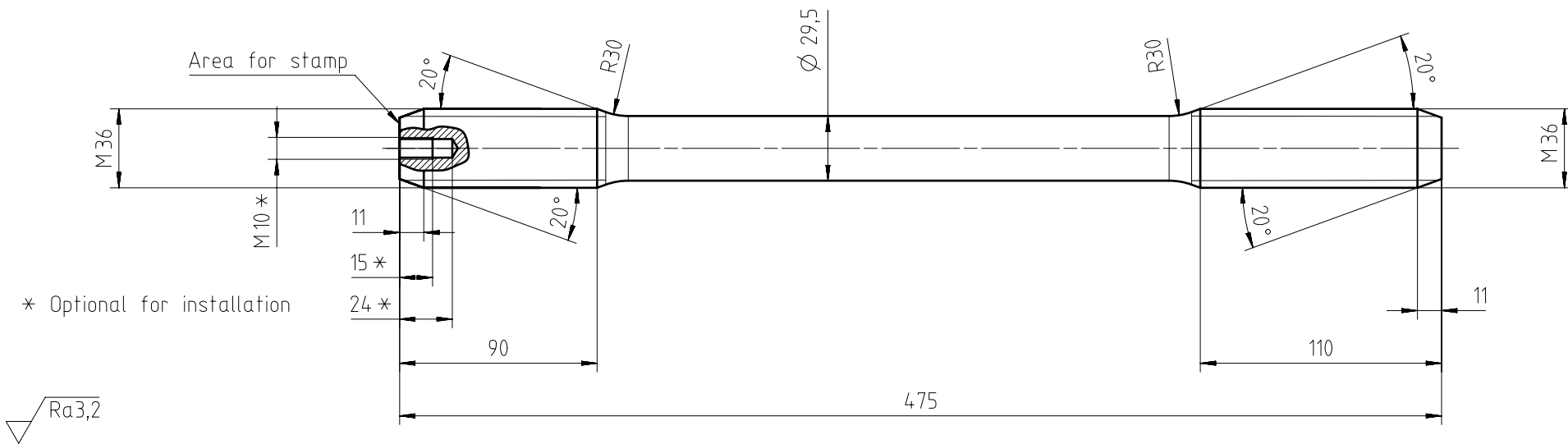
Approved

Free space for lic.	Q-Code XXXXXX						Main Drw.
	Standard ISO; JIS						
Modif.	A	EAAD096030	02.02.2021				
	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number
		Product W-2S		BUSH Buechse			
Units	mm kg	NX	Basic Material W-FU-355-J0			Net Weight 4,4	
Made	12.12.2020	dki021 DH.Kim	Scale 1:1	Size A4	Page 1/1	Material ID PAAD371033	
Chkd	17.12.2020	ksc101 Schenk	Design Group 9710	Drawing ID DAAD138184		Rev. A	
Appd	17.12.2020	mhu019 Hug					

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BOTH THREADS AFTER HEAT TREATMENT 100% ROLLED. PRECUTTING NOT ALLOWED.
TOLERANCE CLASS 6g (SFS-ISO 965/1)



* Optional for installation

QUENCH HARDENED AND TEMPERED

$$R_m = 1000 \begin{matrix} +200 \\ 0 \end{matrix} \text{ N/mm}^2$$

MACHINED BEFORE THREAD ROLLING

$$\text{YIELD STRENGTH } R_e = \text{min. } 790 \text{ N/mm}^2$$

ELONGATION AFTER FRACTURE

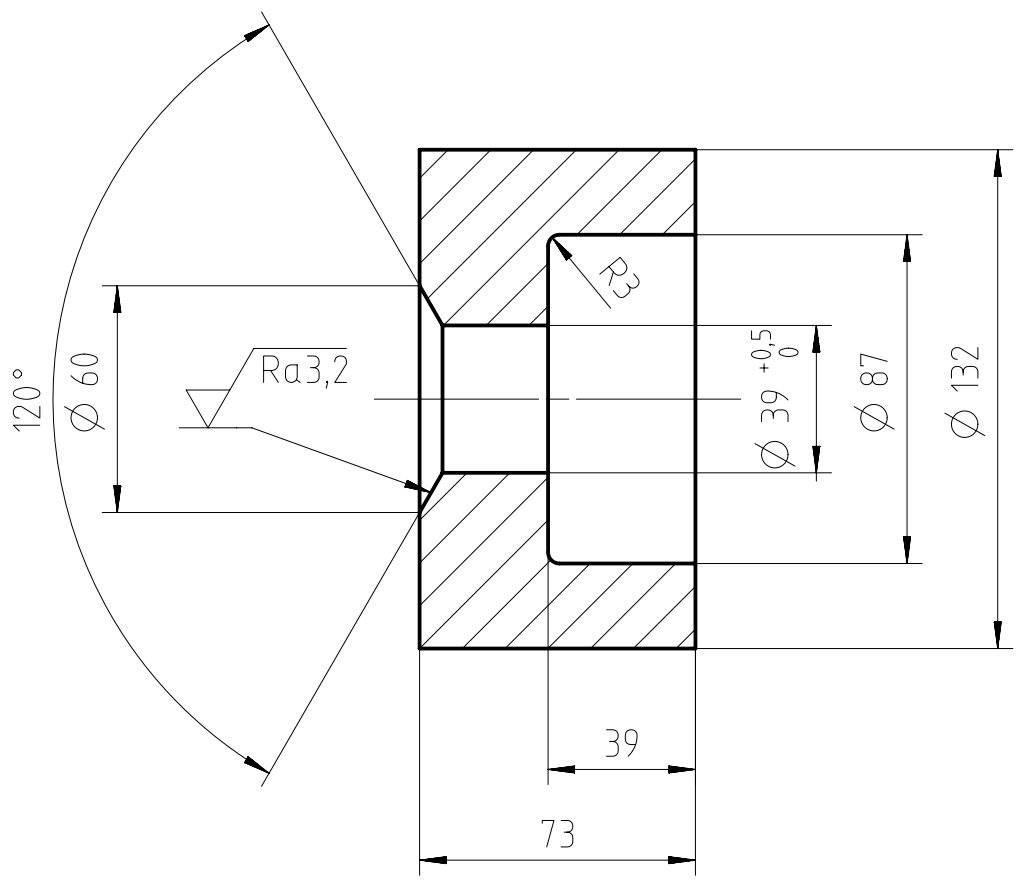
$$A(L_0 = 5d_0) = \text{min. } 11\%$$

This table specifies documents in accordance with "UR M72 - Certification of Engine Components" (or DIN EN 10204-(2004) 'TYPES OF INSPECTION DOCUMENTS')		
Additional class rules may apply. Please contact the relevant class society to determine actual requirements.		
TEST TYPE:	CERTIFICATE TYPE:	TESTING FREQUENCY:
MATERIAL	MATERIAL IDENTIFICATION	-
CHEMICAL ANALYSIS	INSPECTION CERTIFICATE 3.1 (INDEPENDENT AUTHORITY)	TEST PER ORDER LOT OR PER CHARGE IF SEVERAL CHARGES
TENSILE TEST	INSPECTION CERTIFICATE 3.1 (INDEPENDENT AUTHORITY)	TEST PER ORDER LOT OR PER CHARGE IF SEVERAL CHARGES
IMPACT TEST	INSPECTION CERTIFICATE 3.1 (INDEPENDENT AUTHORITY)	TEST PER ORDER LOT OR PER CHARGE IF SEVERAL CHARGES
HARDNESS TEST	INSPECTION CERTIFICATE 3.1 (INDEPENDENT AUTHORITY)	EXAMINATION OF EACH PART
SURFACE CRACK DES. TEST	INSPECTION CERTIFICATE 3.1 (INDEPENDENT AUTHORITY)	EXAMINATION OF EACH PART
ULTRASONIC TEST	INSPECTION CERTIFICATE 3.1 (INDEPENDENT AUTHORITY)	EXAMINATION OF EACH PART

SURFACE PROTECTION SEE GROUP 0344
TOLERANCING PRINCIPLE ISO8015
GENERAL TOLERANCES ACCORDING TO ISO2768-mK

1	001	107.427.450.200	MATERIAL AND TEST SPECIFICATION ELASTIC BOLT	107.427.450		0,006
QTY	SEQ NO	Material ID	Material Name Dimension, Occ	Standard or Drawing	Basic Material Standard	Weight GR./NET
Free space for lic.					Q-Code 1QXP1 Standard ISO; JIS	Main Drw.
Modif.	Number	Drawn date	Number	Drawn date	Number	Drawn date
			Product W-2S	ELASTIC BOLT Dehnbolzen		
Units	mm kg	NX		Basic Material	W-FA-42CrMo-QT	Net Weight 3,1
Made	16.12.2020	dki021 DH.Kim	Scale	1:2	Size	A3
Chkd	17.12.2020	ksc101 Schenk	Page	1/1	Material ID	PAAD371100
Appd	17.12.2020	mhu019 Hug	Design Group	9710	Drawing ID	DAAD138211
					Rev.	-

Approved
1D - DIMENSIONAL DRAWING - Confidential



$\sqrt{Ra6,3}$ ($\sqrt{Ra3,2}$)

SURFACE PROTECTION SEE GROUP 0344
 TOLERANCING PRINCIPLE ISO8015
 GENERAL TOLERANCES ACCORDING TO ISO2768-mK

Free space for lic.		Q-Code XXXXXX		Main Drw.								
Standard ISO; JIS												
Modif.	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date				
 Winterthur Gas & Diesel		Product W-2S		CONICAL SOCKET								
Units	mm kg	NX			Basic Material W-FA-34CrMo-QT		Net Weight 5,7					
Made	11.12.2020	dki021	DH.Kim		Scale	1:2	Size	A4	Page	1/1	Material ID	PAAD371025
Chkd	17.12.2020	ksc101	Schenk		Design Group		Drawing ID	DAAD138177		Rev.	-	
Appd	17.12.2020	mhu019	Hug		9710							

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Approved
 DIMENSIONAL DRAWING - Confidential

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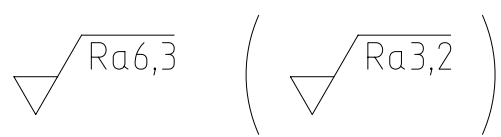
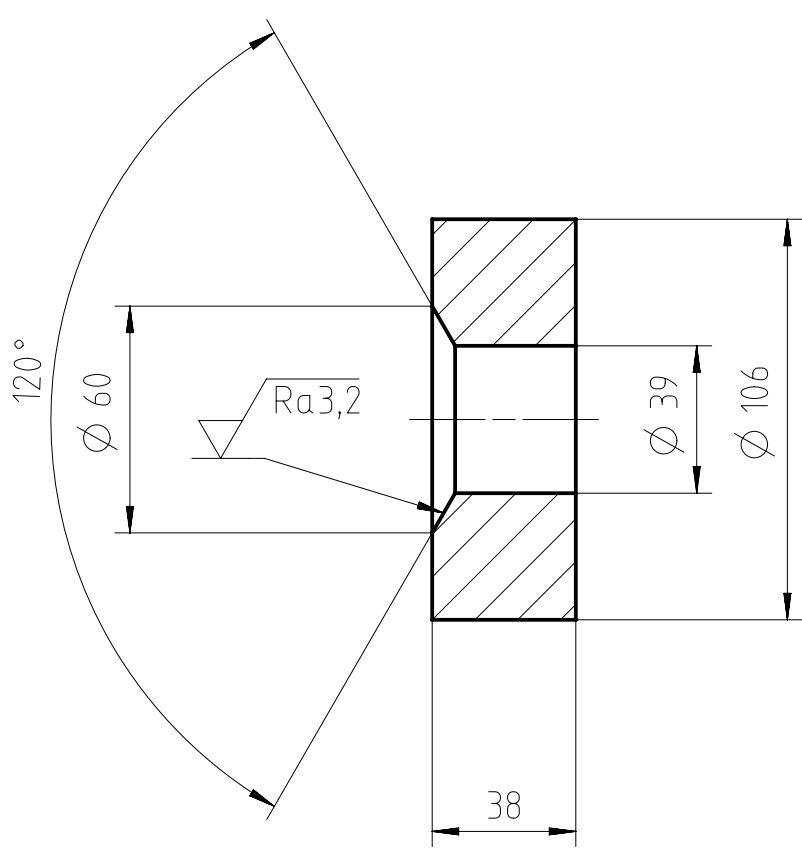
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SURFACE PROTECTION SEE GROUP 0344
 TOLERANCING PRINCIPLE ISO8015
 GENERAL TOLERANCES ACCORDING TO ISO2768-mK



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										Standard ISO; JIS					
Modif.	○	Number	Drawn date	○	Number	Drawn date	○	Number	Drawn date						
			Product W-2S			CONICAL SOCKET Konische Buechse									
Units	mm kg	NX				Basic Material W-FA-34CrMo-QT		Net Weight 2,3							
Made	11.12.2020	dki021 DH.Kim		Scale 1:2		Size A4	Page 1/1	Material ID PAAD371030							
Chkd	17.12.2020	ksc101 Schenk		Design Group 9710		Drawing ID DAAD138180		Rev. -							
Appd	17.12.2020	mhu019 Hug													

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DID - DIMENSIONAL DRAWING - Confidential

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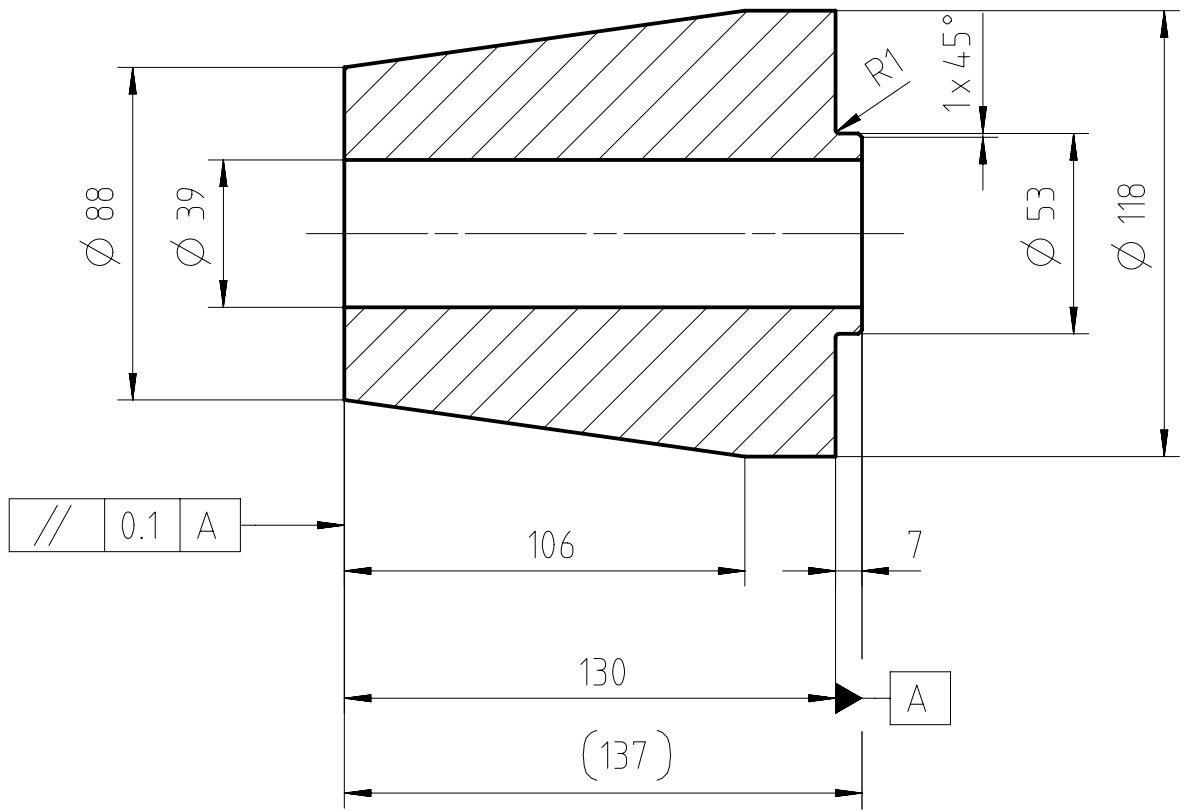
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SURFACE PROTECTION SEE GROUP 0344
TOLERANCING PRINCIPLE ISO8015
GENERAL TOLERANCES ACCORDING TO ISO2768-mK



SHARP EDGES REMOVED 0.2x45°

Ra6,3

Approved

Free space for lic.		Q-Code XXXXXX				Main Drw.				
Standard ISO; JIS										
Modif.	EAAD096030	02.02.2021								
Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date			
WIN GD Winterthur Gas & Diesel		Product W-2S		BUSH Buechse						
Units	mm kg	NX	Basic Material W-FU-355-J0			Net Weight 7,9				
Made	12.12.2020	dki021 DH.Kim	Scale	1:2	Size	A4	Page	1/1	Material ID	PAAD371091
Chkd	17.12.2020	ksc101 Schenk	Design Group		Drawing ID	DAAD138204		Rev. A		
Appd	17.12.2020	mhu019 Hug	9710							

DID - DIMENSIONAL DRAWING - Confidential

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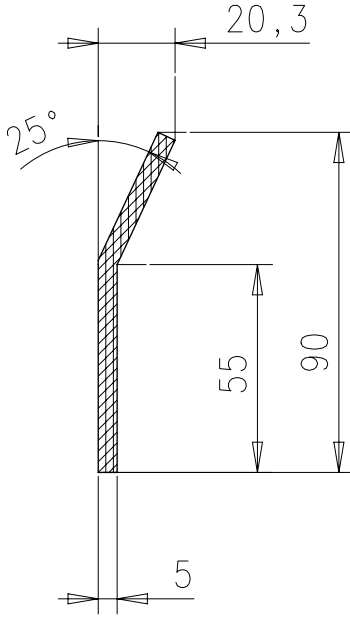
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SURFACE PROTECTION SEE GROUP 0344
 TOLERANCING PRINCIPLE ISO8015
 GENERAL TOLERANCES ACCORDING TO ISO2768-mK



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Free space for lic.	Q-Code XXXXXX						Main Drw.									
	Standard ISO; JIS															
Modif.	(A)	EAAD082947	03.08.2011	(B)	EAAD091567	03.03.2020	(C)			(D)						
	Number	Drawn date		Number	Drawn date		Number	Drawn date		Number	Drawn date					
			Product W-2S			SEALING PIECE Dichtleiste										
Units	mm kg	NX		Basic Material				Net Weight 0,001								
Made	13.02.2006 R. ZUCCHI			Scale	1:1		Size	A4		Page	1/1		Material ID	107.367.119.001		
Chkd				Design Group		9710		Drawing ID				107.367.119		Rev.	B	
Appd	03.04.2006 SNA001															

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PD - PRODUCTION DRAWING - Confidential

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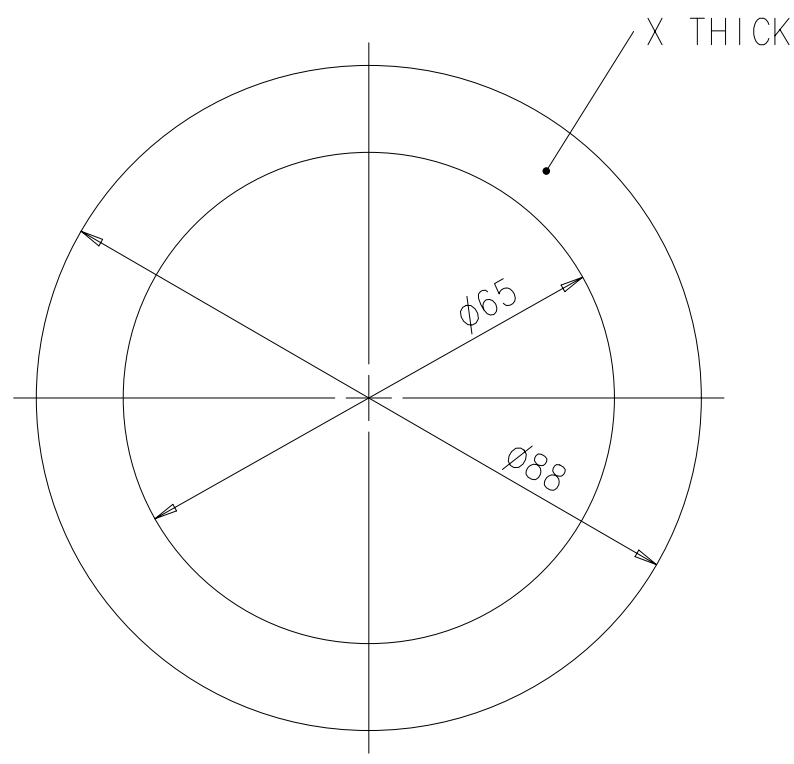
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SURFACE PROTECTION SEE GROUP 0344
 TOLERANCING PRINCIPLE ISO8015
 GENERAL TOLERANCES ACCORDING TO ISO2768-mK



X = determined during assembly
 * material according to shipyard experience

Free space for lic.	Q-Code						Main Drw.				
	XXXXXX										
Standard						ISO; JIS					
Modif.	(A)	EAAD085169	04.07.2014	(B)	EAAD091567	25.11.2019	(C)				
	Number		Drawn date	Number		Drawn date	Number	Drawn date			
WIN GD Winterthur Gas & Diesel		Product W-2S			JOINT DISC Dichtscheibe						
Units	mm kg	NX		Basic Material *			Net Weight 0,001				
Made	30.10.2012	asex06 A.Sekulic		Scale	1:1	Size	A4	Page	1/1	Material ID	PAAD103756
Chkd	15.11.2012	mhu019 Hug		Design Group		Drawing ID	DAAD032768		Rev.	B	
Appd	29.11.2012	wwr001 Wroblewski		9710							

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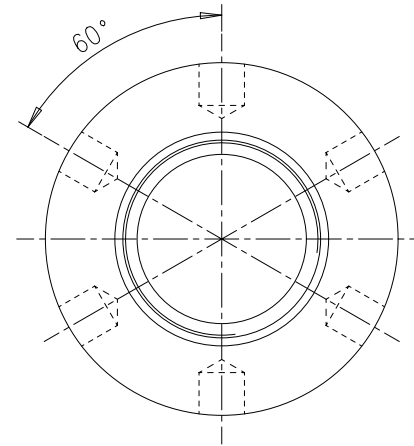
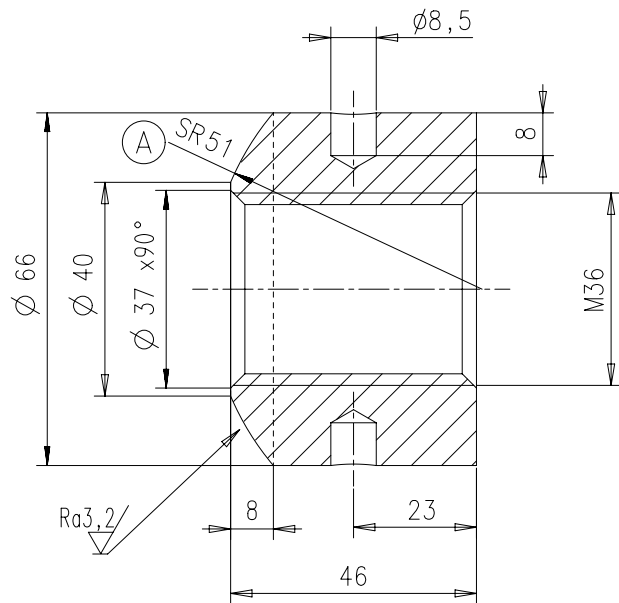
Approved
 PD - PRODUCTION DRAWING - Confidential

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Ra6,3/ (Ra3,2/) Kanten gebrochen 0,2x45°
SHARP EDGES REMOVED

Free space for lic.								Q-Code XXXXX	Main Drw.				
								Standard ISO; JIS					
Modif.	A	EAAD087849	12.06.2017	○		○		○					
		Number	Drawn date		Number	Drawn date		Number	Drawn date				
		Product W-2S		SPHERICAL ROUND NUT Kugelige Rundmutter									
Units	mm kg	NX			Basic Material	34CrMo4;SCM 435		Net Weight 0.85					
SURFACE PROTECTION SEE GROUP 0344		Made	20.09.2010	jba029	Baumann	Scale	1:1	Size	A3	Page	1/1	Material ID	107.410.789.001
TOLERANCING PRINCIPLE ISO8015		Chkd	23.12.2010	wwr001	Wrblewski	Design Group	9710	Drawing ID	107.410.789		Rev.	A	
GENERAL TOLERANCES ACCORDING TO ISO2768-mK		Appd	23.12.2010	dst009	Strödecke								

ILD - INSTALLATION DRAWING - Internal

Approved

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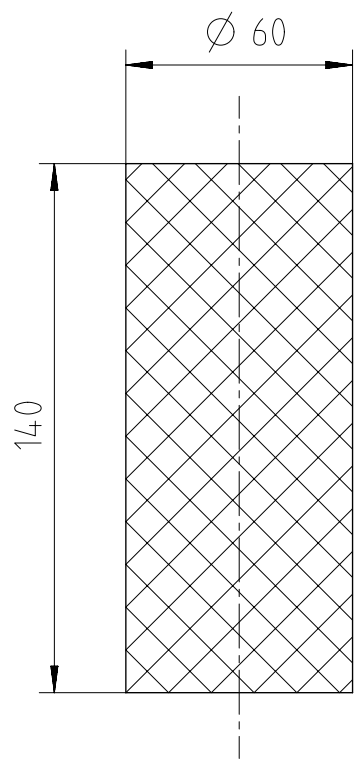
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SURFACE PROTECTION SEE GROUP 0344
 TOLERANCING PRINCIPLE ISO8015
 GENERAL TOLERANCES ACCORDING TO ISO2768-mK



(A) Remarks:
 Just applied during pouring of the chock
 * Material according to shipyard experience

Free space for lic.	Q-Code XXXXXX						Main Drw.			
	Standard ISO; JIS									
Modif.	(A)	EAAD088473	10.10.2017							
	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number			
 Winterthur Gas & Diesel		Product W-2S		PLUG Stopfen						
Units	mm kg	NX	Basic Material *			Net Weight 0,2				
Made	30.06.2008 M. PRSTEC		Scale	1:2	Size	A4	Page	1/1	Material ID	107.401.837.001
Chkd			Design Group	9710	Drawing ID	107.401.837		Rev.	A	
Appd	03.07.2008 MPR002 Prstec									

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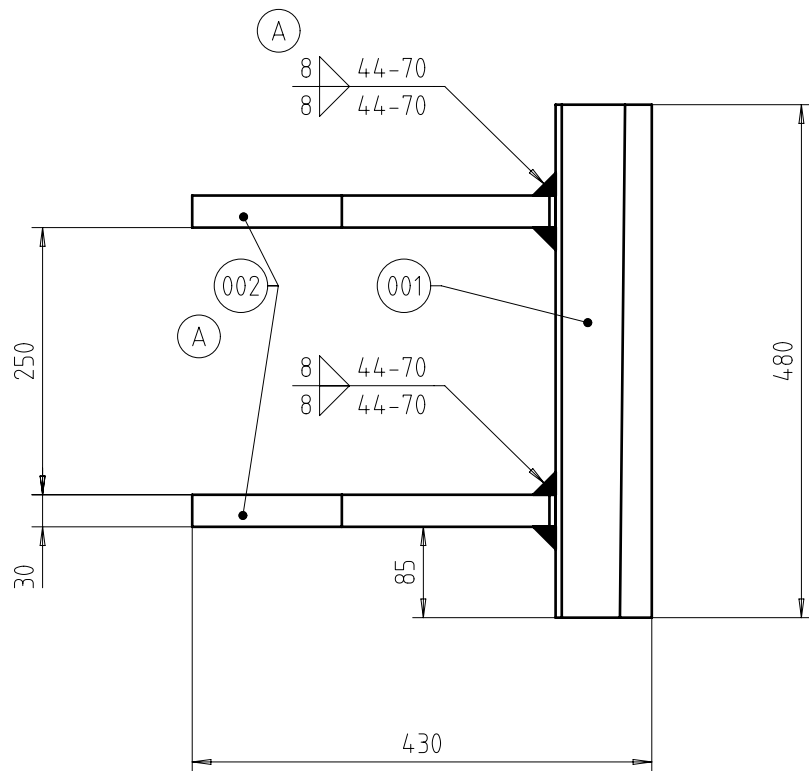
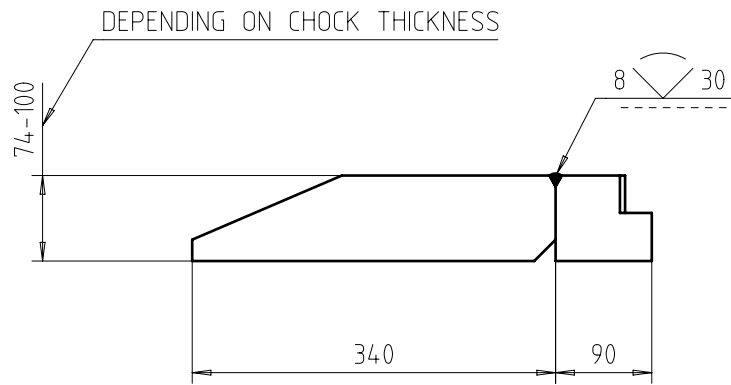
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WELD QUALITY LEVEL D (SEE 4-107.345.444)

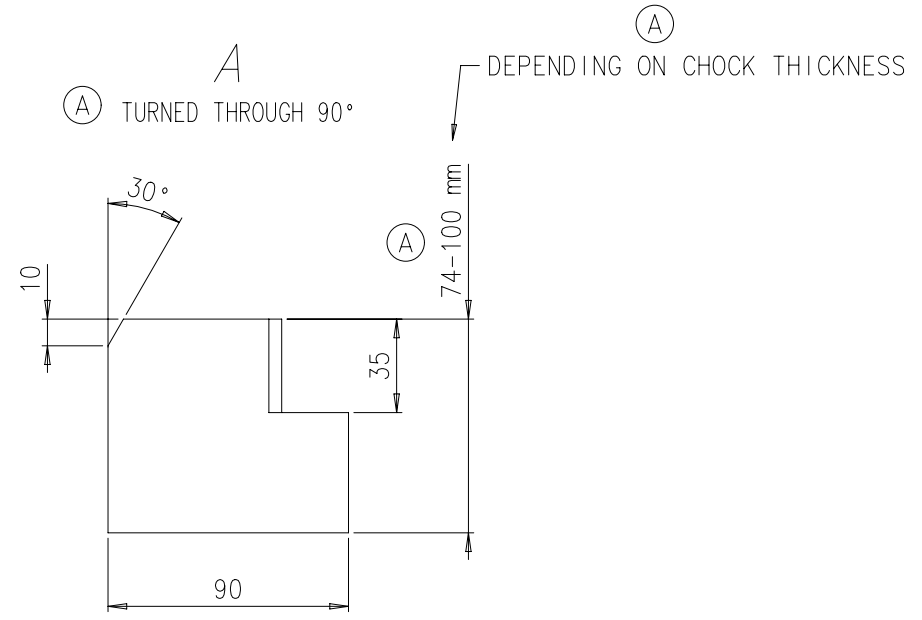
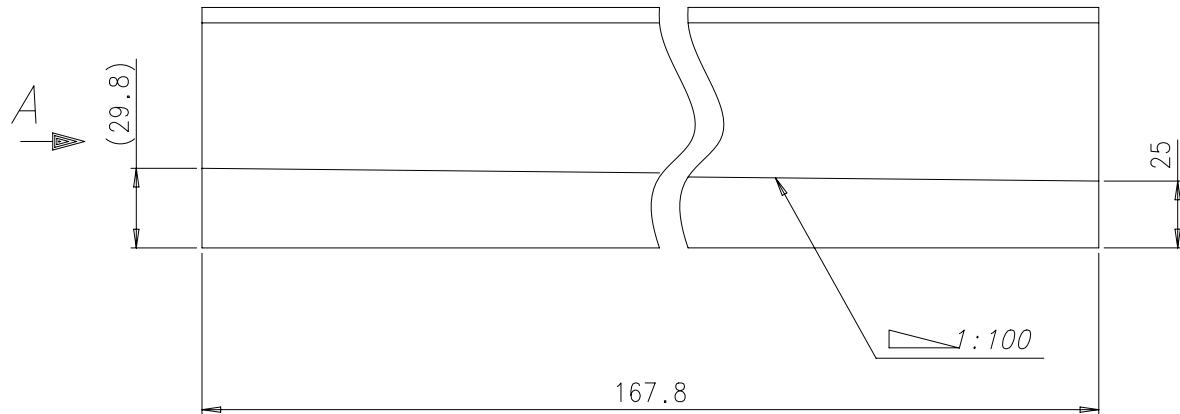
2	002	PAAD139254	FLAT BAR	DAAD043334	W-FU-235-JR	5,4	
1	001	PAAD139255	FLAT BAR	DAAD043328	W-FU-235-JR	25,8	
QTY	SEQ NO	Material ID	Material Name	Dimension, Occ	Standard or Drawing	Basic Material Material Standard	Weight GR./NET
Free space for lic.						Q-Code XXXXXX	Main Drw.
						Standard ISO; JIS	
Modif.	A	EAAD089996	23.10.2018				
	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number
			Product W-2S	ENGINE SIDE STOPPER WELDED TYPE, FUEL SIDE Motor-Seitenstopper			
Units	mm kg	NX	Basic Material			Net Weight 36.6	
Made	29.08.2013	rrex05 Reichmuth	Scale	1:5	Size	A3	Page
Chkd	07.11.2013	afu005 Furrer	Design Group	9710		1/1	Material ID
Appd	07.11.2013	bfr005 Frei	Drawing ID		DAAD043357		Rev.
							A

SURFACE PROTECTION SEE GROUP 0344

TOLERANCING PRINCIPLE ISO8015

GENERAL TOLERANCES ACCORDING TO ISO2768-mK

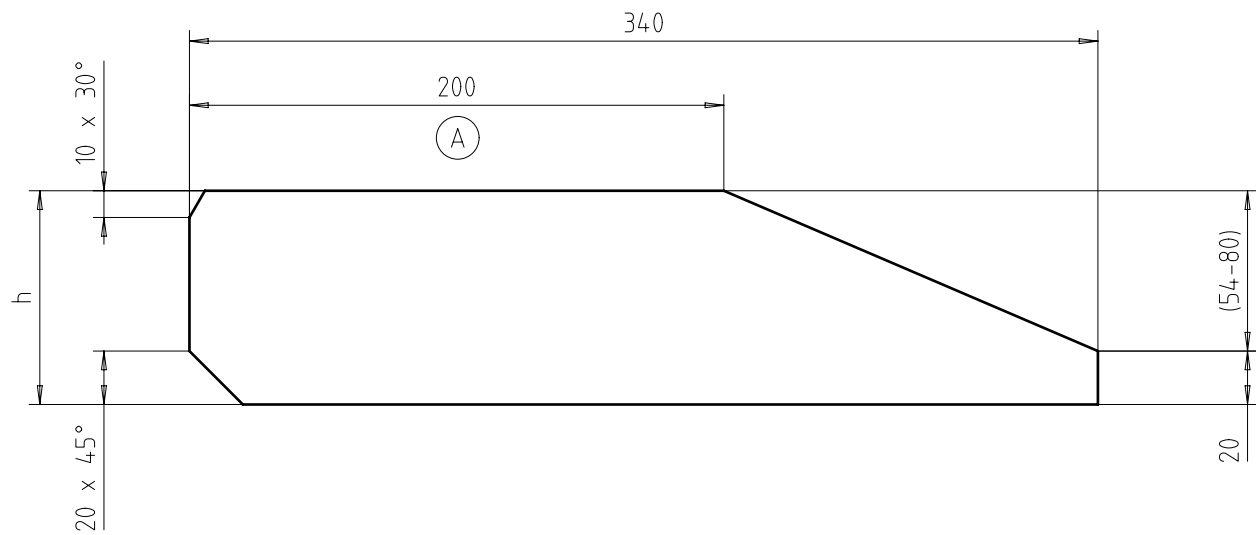
UID - DIMENSIONAL DRAWING - Confidential



(A) $\sqrt{Ra6,3}$


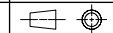
Free space for lic.	Q-Code XXXXXX								Main Drw.				
	Standard ISO; JIS												
Modif.	(A)	EAAD091567	24.11.2019	○		○		○					
	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number				
 Winterthur Gas & Diesel		Product W-2S		FLAT BAR TO ENGINE SIDE STOPPER Flachstahl									
Units	mm kg	NX		Basic Material	W-FU-235-JR				Net Weight	25,8			
SURFACE PROTECTION SEE GROUP 0344		Made	28.08.2013 shex07 Sylvant		Scale	1:2		Size	A3	Page	1/1	Material ID	PAAD139255
TOLERANCING PRINCIPLE ISO8015		Chkd	07.11.2013 afu005 Furrer		Design Group		9710		Drawing ID	DAAD043328		Rev.	A
GENERAL TOLERANCES ACCORDING TO ISO2768-mK		Appd	07.11.2013 bfr005 Frei										

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DIM - DIMENSIONAL DRAWING - Confidential



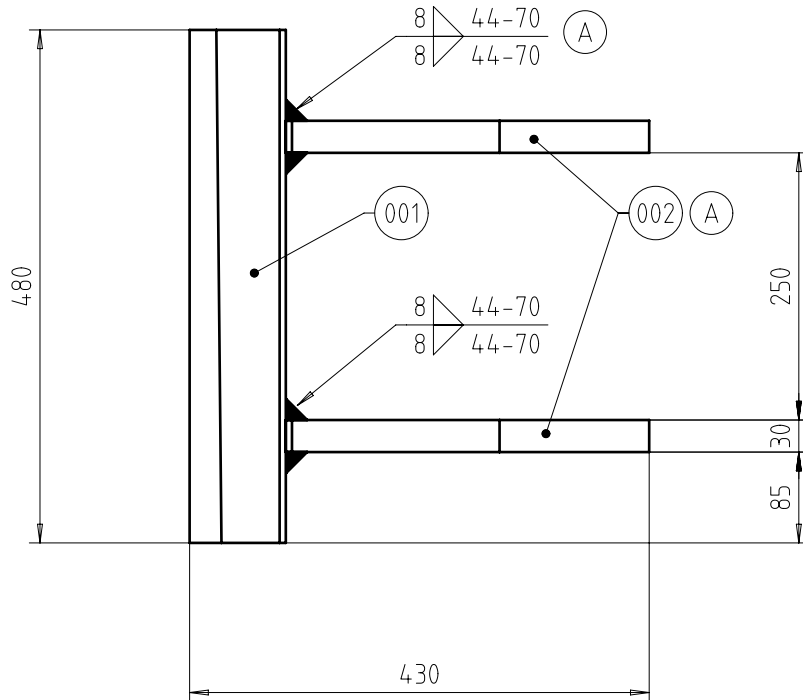
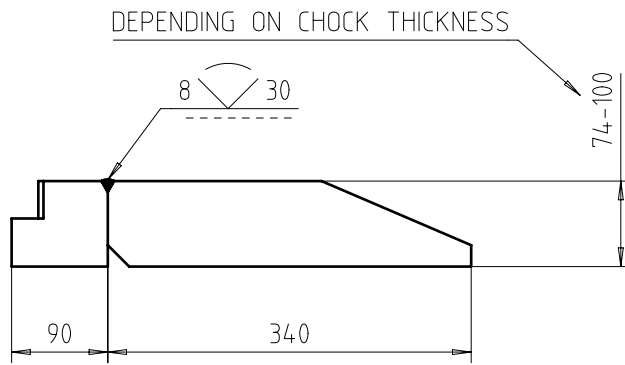
Ra50
 SHARP EDGES REMOVED

h = (74 - 100 mm)
 DEPENDING ON CHOCK THICKNESS,
 TO BE DETERMINED BY SHIPYARD

Free space for lic.								Q-Code XXXXX	Main Drw.	
								Standard ISO; JIS		
Modif.	A	EAAD089996	23.10.2018							
		Number	Drawn date		Number	Drawn date		Number	Drawn date	
 WIN GD <i>Winterthur Gas & Diesel</i>		Product W-2S		FLAT BAR TO ENGINE SIDE STOPPER Flachstahl						
Units	mm kg	NX		Basic Material	W-FU-235-JR			Net Weight	5.4	
SURFACE PROTECTION SEE GROUP 0344		Made	28.08.2013 shex07 Sylvant		Scale	1:2		Size	A3	
TOLERANCING PRINCIPLE ISO8015		Chkd	07.11.2013 afu005 Furrer		Design Group	1/1		Material ID	PAAD139254	
GENERAL TOLERANCES ACCORDING TO ISO2768-mK		Appd	07.11.2013 bfr005 Frei			9710	Drawing ID	DAAD043334		Rev.

UID - DIMENSIONAL DRAWING - Confidential

Approved



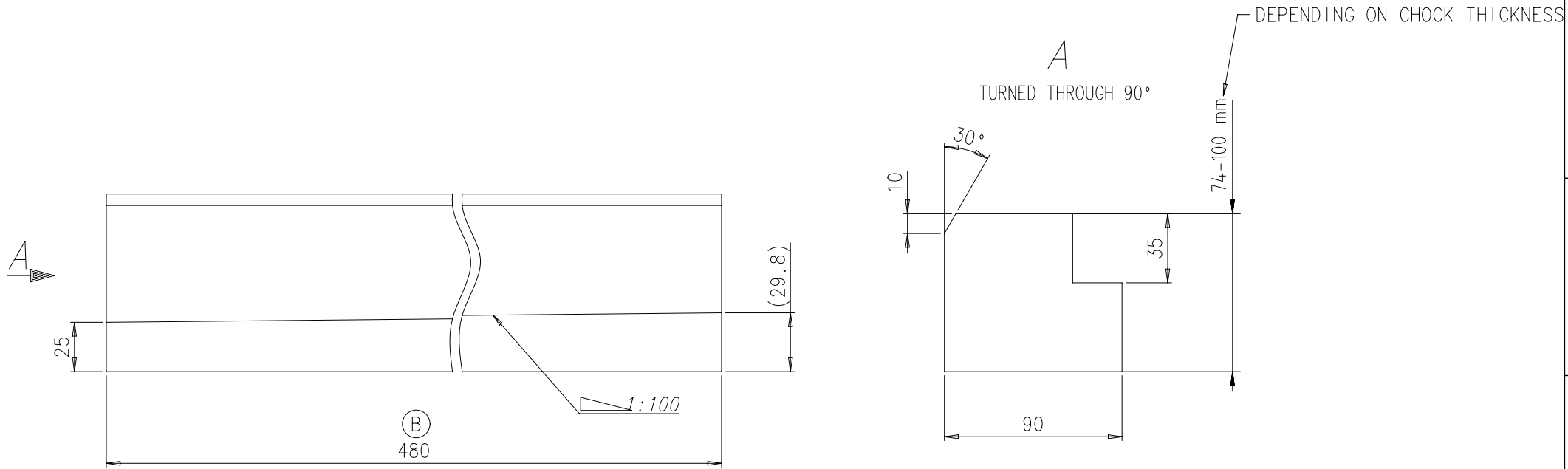
(A) WELD QUALITY LEVEL D (SEE 4-107.345.444)

QTY	SEQ NO	Material ID	Material Name	Dimension, Occ	Standard or Drawing	Basic Material Material Standard	Weight GR./NET
2	002	PAAD139254	FLAT BAR		DAAD043334	W-FU-235-JR	5,4
1	001	PAAD139300	FLAT BAR		DAAD043333	W-FU-235-JR	26,0
Free space for lic.						Q-Code XXXXXX	Main Drw.
						Standard ISO; JIS	

Modif.	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date
(A)	EAAD089996	23.10.2018						

	Product W-2S	ENGINE SIDE STOPPER WELDED TYPE, EXHAUST SIDE Motor-Seitenstopper
	Units mm kg NX	Basic Material
Scale 1:5	Size A3	Page 1/1
Made 29.08.2013 rrex05 Reichmuth	Design Group 9710	Material ID PAAD139302
Chkd 07.11.2013 afu005 Furrer	Appd 07.11.2013 bfr005 Frei	Drawing ID DAAD043346
SURFACE PROTECTION SEE GROUP 0344		Rev. A
TOLERANCING PRINCIPLE ISO8015		
GENERAL TOLERANCES ACCORDING TO ISO2768-mK		

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Prod.	X62 X62-B	X62-S2.0 X62DF	X62DF-1.1 X62DF-2.1	X62DF-A-1.0 X62DF-A-S1.0	X62DF-M-1.0 X62DF-M-S1.0	X62DF-S1.0 X62DF-S2.0	X72 X72-B	X72DF [...]				
Change History	B	npa101	mhu019	23.08.2023	CNA004289	Drawing updated		4	3			
	A	sde101	mhu019	31.07.2020	EAAD091567	Legacy information. See corresponding ChangeNotice		4	3			
	-	rrex05	bfr005	07.11.2013	EAAD776065	-		-	-			
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis		Approved	Activity Code	E	C	
			FLAT BAR									
Scale 1:2					Dimension							
SURFACE PROTECTION SEE GROUP 0344			Copyright Winterthur Gas & Diesel Ltd. All rights reserved. By taking possession of the drawing the recipient recognizes and honours these rights. Neither the whole nor any part of this drawing may be used in any way for construction, fabrication, marketing or any other purpose not copied in any way nor made accessible to third parties without the previous written consent of Winterthur Gas & Diesel Ltd.		Units [mm] [kg]		Basic Material		W-FU-235-JR		Net Weight	23.50
TOLERANCING PRINCIPLE ISO8015			Main Design		Design Group		9710		Q-Code X X M		Standard WDS	
GENERAL TOLERANCES ACCORDING TO ISO2768-mK			Qty per		A3		Item ID		PAAD139300		Drawing Page/s 1/2	

1

2

3

4

A

A

B

B

C

C

D

D

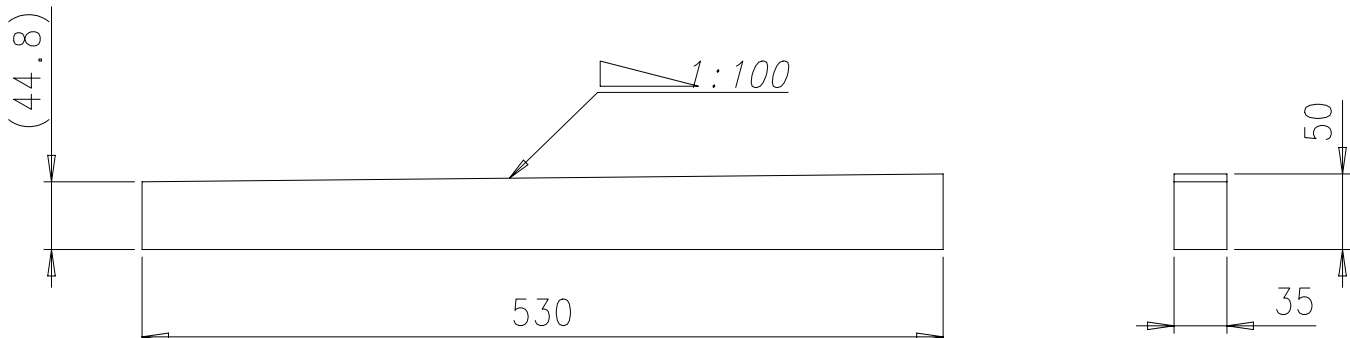
F

F

F

F

SURFACE PROTECTION SEE GROUP 0344
 TOLERANCING PRINCIPLE ISO8015
 GENERAL TOLERANCES ACCORDING TO ISO2768-mK



(A) $\sqrt{Ra6,3}$

Free space for lic.		Q-Code XXXXXX						Main Drw.	
		Standard ISO; JIS							
Modif.	(A)	EAAD091567	25.11.2019	()	()	()	()	()	
	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date	
 WINGD Winterthur Gas & Diesel			Product W-2S		WEDGE Schraeger Keil				
Units	mm kg	NX	Basic Material W-FU-235-JR				Net Weight 6,9		
Made	10.09.2013	tsc005 Schüeli	Scale	1:5	Size	A4	Page	1/1	
Chkd	07.11.2013	afu005 Furrer	Design Group	9710	Drawing ID	DAAD043839		Material ID	PAAD140810
Appd	07.11.2013	bfr005 Frei					Rev.	A	

Approved

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MIDS – Engine Seating Foundation (DG9710)

WinGD X62-S2.0 + X62DF-S1.0 + X62DF-S2.0 + X62DF-A-S1.0 + X62DF-M-S1.0

TRACK CHANGES

DATE	SUBJECT	DESCRIPTION
2020-12-18	DRAWING SET	First web upload
2021-02-08	DAAD138184A DAAD138204A	New revision
2022-03-02	PAAD365793A	New revision
2022-07-11	PAAD365793B	New revision
2023-01-20	PTAA051990-	New drawing
2023-01-08	PAAD139300A	New revision
2024-08-22	PAAD365793C PTAA051990A	New revision

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