

1234

Available executions

Execution No.	Material ID	Cylinder No.
001	PTAA056757	5
002	PAAD381194	6
003	PTAA092786	7

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.

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.

Prod.	X52-S2.0 X52DF-A-S1.0		X52DF-M-S1.0 X52DF-S1.0		X52DF-S2.0		
Change History							
	A	npa101			Master Drawing Updated		
	-	sna102	mhu019	20.04.2023	CNAA003507	New Master Design	
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	
					Activity Code	E	C

WIN GD

Winterthur Gas & Diesel

ENGINE SEATING/FOUNDATION

MIDS master drawing

separate BOM available		Dimension							
Scale	-		NX	Units [mm] [kg]	Basic Material	Net Weight	0.001		
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				Q-Code		X X M		Standard	WDS
				Qty per		A4	Item ID	PTAA025638	

1234

SEQ NO	QTY	Item ID	Item Name	Dimension	Standard-ID	Basic Material	Net Weight
001	1	PAAD381145	RIB			W-FU-355-J0	26
002	1	107.398.394.500	EPOXY RESIN				0.001
003	48	107.345.876.002	ROUND NUT	M30		W-FA-42CrMo-Q T	0.37
004	6	PAAD380992	SLEEVE			W-FA-34CrMo-Q T	6.8
005	6	PAAD381136	BUSH			W-FU-355-J0	2.6
006	48	PAAD381118	ELASTIC BOLT			W-FA-42CrMo-Q T	2.1
007	6	PAAD381113	CONICAL SOCKET			W-FA-34CrMo-Q T	6
008	42	PAAD381128	CONICAL SOCKET			W-FA-34CrMo-Q T	1.3
009	42	PAAD381130	BUSH			W-FU-355-J0	4.1
010	48	PAAD379030	SPHERICAL ROUND NUT			W-FA-42CrMo-Q T	0.376
011	1	107.367.119.001	SEALING PIECE				0.001
012	6	PTAA086389	JOINT DISC				0
013	42	PAAD024777	PLUG			W-FU-235-JR	0.001
014	2	PAAD214749	ENGINE SIDE STOPPER				20.3
015	2	PAAD214952	ENGINE SIDE STOPPER				24
016	4	107.325.275.001	WEDGE	45x25x450		W-FU-235-JR	3.8
017	1	107.401.839	FITTING INSTRUCTIONS				

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Prod.	5 X52-S2.0 5 X52DF-S1.0				5 X52DF-S2.0							
Change History												
	A	ara101	mhu019	22.02.2024	CNAA005102	Drawing updated					4	3
	-	npa101	mhu019	03.04.2023	CNAA003284	New MainDesign					-	-
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis			Approved	Activity Code		E

WIN GD Winterthur Gas & Diesel	ENGINE SEATING/FOUNDATION FOUNDATION ARRANGEMENT: STANDARD
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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 PTAA056757		BOM Page/s	01/01

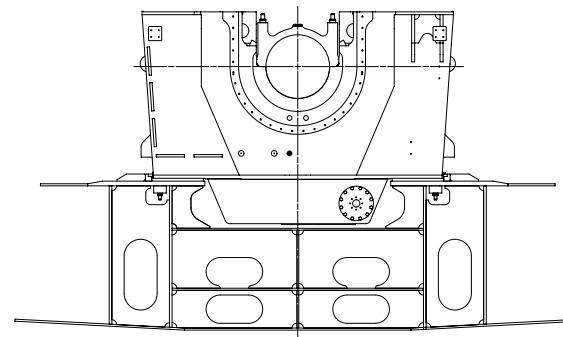
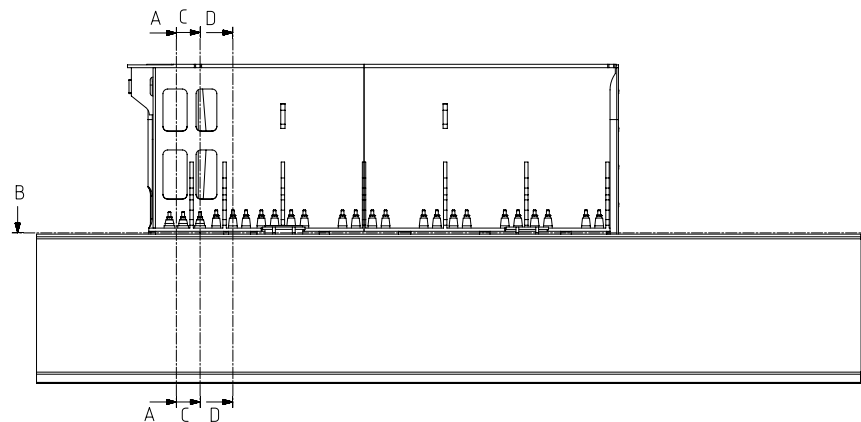
Technical drawing of a mechanical assembly, likely a valve or actuator, showing a cross-section. The drawing includes dimensions: 250 (width), 200 (height), 25 (radius), 30 (radius), 40 (radius), and 50 (radius). The assembly consists of a main body with a central vertical shaft and a horizontal flange. The flange has a central opening and is surrounded by a thick, hatched section. The shaft has a central nut and a small component at the top. The drawing is enclosed in a circular frame.

- THICKNESS 22

THICKNESS 22-

(C-00-3)

FREE END

[illegible]

SECTION B-B CHOCKING AND DRILLING PLAN FOR FOUNDATION BOLTS

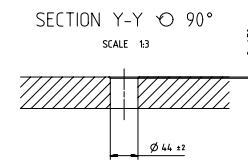
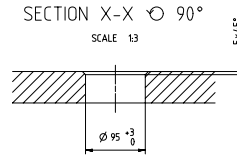
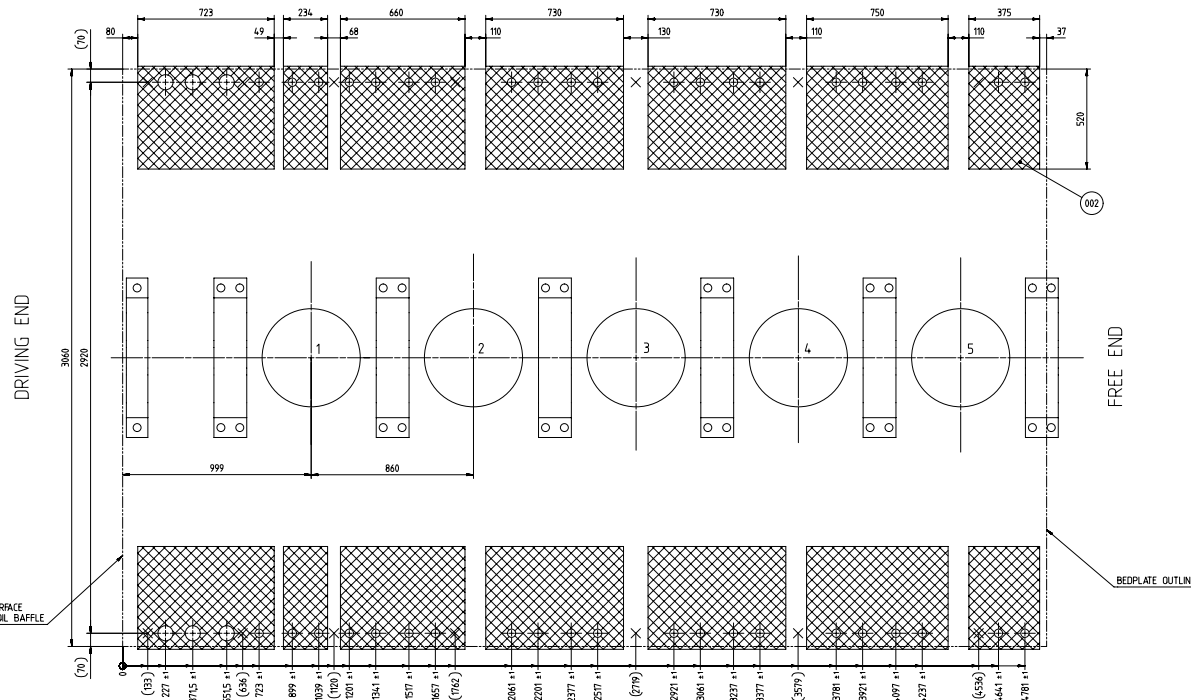
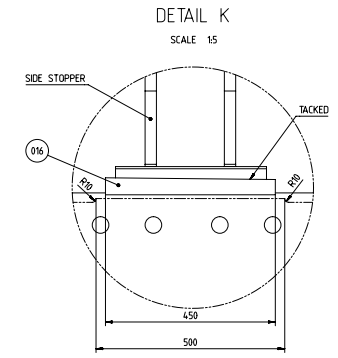
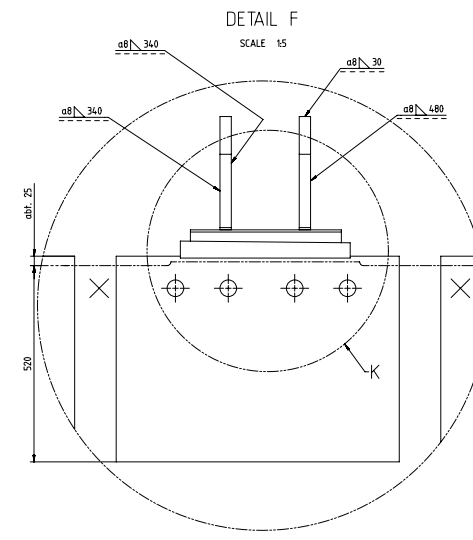
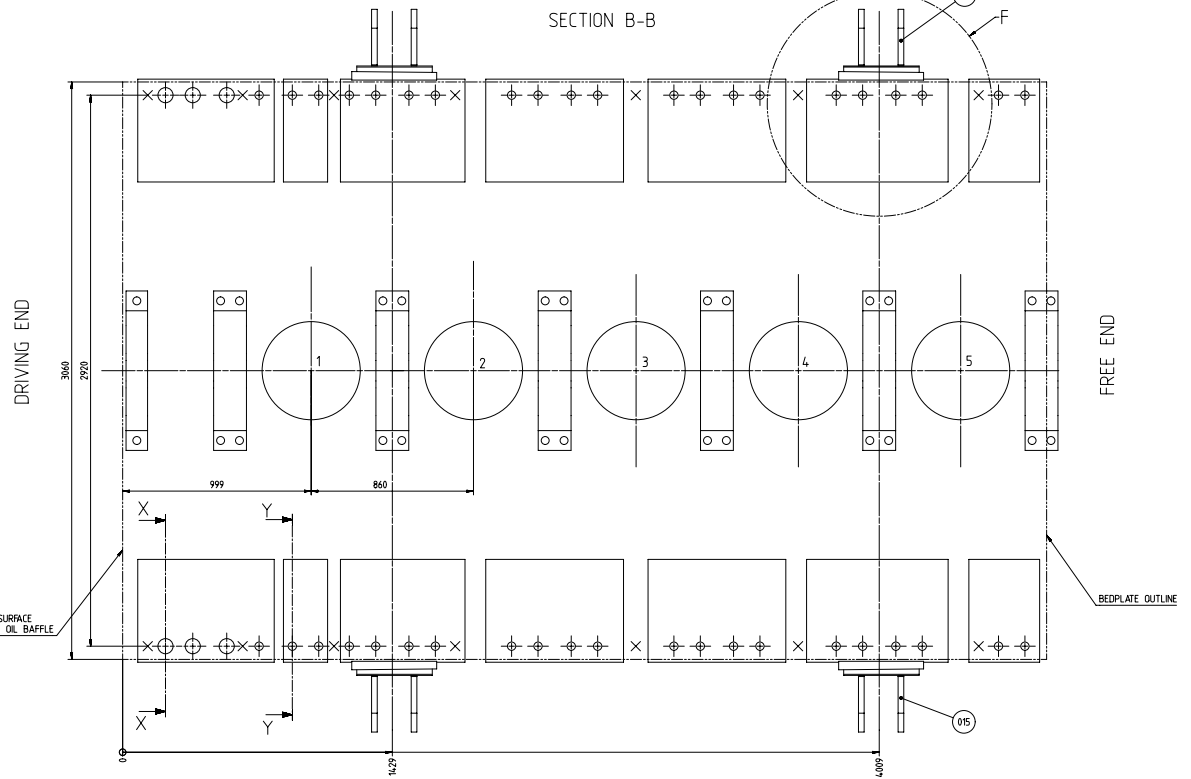


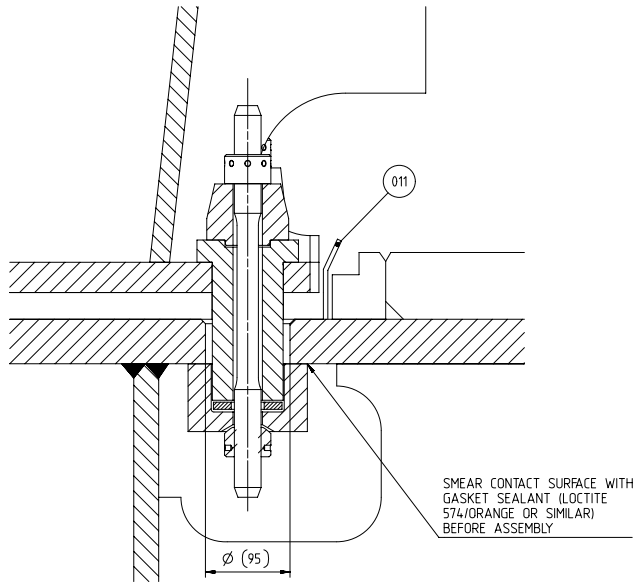
Table: Design values

No. of cylinders	No. of thrust sleeves	Total no. of bolt holes
5	6	48
Proposed dimension of epoxy resin chock *1)		
Chock length per side (mm)	Chocking area (cm ²)	Chock volume requirements *2) (dm ³)
4,202	4,4862	min. 120 max. 288

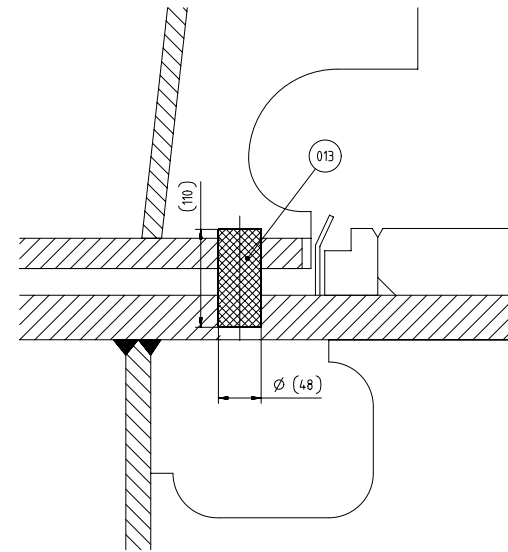
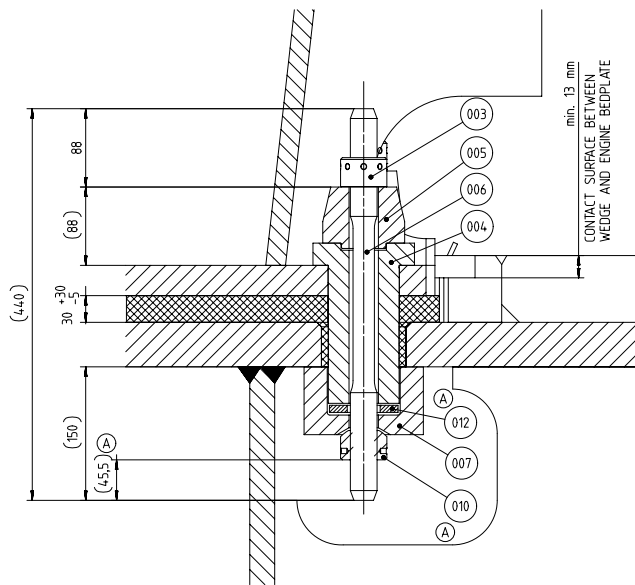
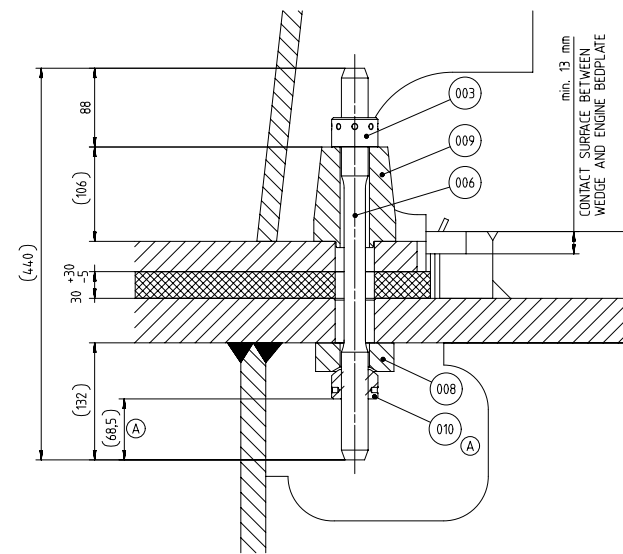
- Remarks:
- *1) Proposed dimensions are based on the following assumptions:
 - The maximum permissible mean static pressure is 4.5 N/mm² *3)
 - The dead-weight loading from the engine (incl. net engine mass, vibration damper, flywheel, water and oil results in a mean static pressure below 0.8 N/mm²
 - Engine fastener loading is in line with fully tightened bolts (in accordance with fitting instruction).
 - *2) Referring to a standardized chock thickness of 25 mm to 60 mm.
 - *3) The verification of the maximum permissible mean static pressure for the epoxy resin chock is to be conducted in conjunction with the chock manufacture during the early stages of the project. This allows the shipyard to determine the final chock dimensions to achieve the relevant class approval.
 - *4) Execution shown on drawing.



SECTION C-C

ARRANGEMENT BEFORE POURING
THE EPOXY RESIN CHOCK

SECTION D-D

ARRANGEMENT BEFORE POURING
THE EPOXY RESIN CHOCKSECTION C-C
ARRANGEMENT AFTER POURING
THE EPOXY RESIN CHOCKSECTION D-D
ARRANGEMENT AFTER POURING
THE EPOXY RESIN CHOCK

SEQ NO	QTY	Item ID	Item Name	Dimension	Standard-ID	Basic Material	Net Weight
1	1	PAAD381145	RIB			W-FU-355-J0	26
2	1	107.398.394.500	EPOXY RESIN				0.001
3	56	107.345.876.002	ROUND NUT	M30		W-FA-42CrMo-QT	0.37
4	8	PAAD380992	SLEEVE			W-FA-34CrMo-QT	6.8
5	8	PAAD381136	BUSH			W-FU-355-J0	2.6
6	56	PAAD381118	ELASTIC BOLT			W-FA-42CrMo-QT	2.1
7	8	PAAD381113	CONICAL SOCKET			W-FA-34CrMo-QT	6
8	48	PAAD381128	CONICAL SOCKET			W-FA-34CrMo-QT	1.3
9	48	PAAD381130	BUSH			W-FU-355-J0	4.1
10	56	PAAD379030	SPHERICAL ROUND NUT			W-FA-42CrMo-QT	0.376
11	1	107.367.119.001	SEALING PIECE				0.001
12	8	PTAA086389	JOINT DISC				0
13	48	PAAD024777	PLUG			W-FU-235-JR	0.001
14	3	PAAD214749	ENGINE SIDE STOPPER				20.3
15	3	PAAD214952	ENGINE SIDE STOPPER				24
18	6	107.325.275.001	WEDGE	45x25x450		W-FU-235-JR	3.8
19	1	107.401.839	FITTING INSTRUCTIONS				

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Prod.	6 X52-S2.0 6 X52DF-A-S1.0				6 X52DF-M-S1.0 6 X52DF-S1.0		6 X52DF-S2.0				
Change History	C	ara101	mhu019	22.02.2024	CNAA005102	Drawing updated				4	3
	B	sna102	mhu019	22.11.2022	CNAA002783	Drawing Updated				4	3
	A	sna102	dst009	05.07.2022	CNAA002149	Drawing Updated				4	3
	-	dkl021	mhu019	29.04.2021	EAAD787467	-				-	-
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Approved	Activity Code	E	C	

				ENGINE SEATING/FOUNDATION FOUNDATION ARRANGEMENT: STANDARD							
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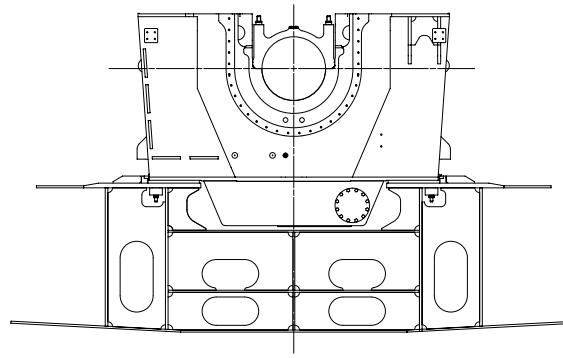
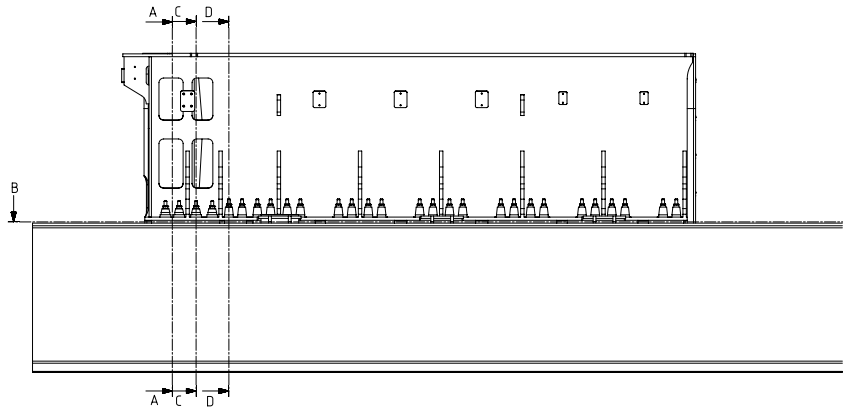
Bill Of Material		Dimension							
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	Main Design	Yes	Design Group		9710	Q-Code	X X M	Standard	WDS
	Qty per	Engine	A4	Item ID	PAAD381194			BOM Page/s	01/01

- THICKNESS 22

THICKNESS 22-

min. 600 *3)

FREE END



1	KINDENGE		KINDENGE		KINDENGE	
A	intw	intw	intw	intw	intw	intw
B	intw	intw	intw	intw	intw	intw
C	intw	intw	intw	intw	intw	intw
D	intw	intw	intw	intw	intw	intw
E	intw	intw	intw	intw	intw	intw
F	intw	intw	intw	intw	intw	intw
G	intw	intw	intw	intw	intw	intw
H	intw	intw	intw	intw	intw	intw
I	intw	intw	intw	intw	intw	intw
J	intw	intw	intw	intw	intw	intw
K	intw	intw	intw	intw	intw	intw
L	intw	intw	intw	intw	intw	intw
M	intw	intw	intw	intw	intw	intw
N	intw	intw	intw	intw	intw	intw
O	intw	intw	intw	intw	intw	intw
P	intw	intw	intw	intw	intw	intw
Q	intw	intw	intw	intw	intw	intw
R	intw	intw	intw	intw	intw	intw
S	intw	intw	intw	intw	intw	intw
T	intw	intw	intw	intw	intw	intw
U	intw	intw	intw	intw	intw	intw
V	intw	intw	intw	intw	intw	intw
W	intw	intw	intw	intw	intw	intw
X	intw	intw	intw	intw	intw	intw
Y	intw	intw	intw	intw	intw	intw
Z	intw	intw	intw	intw	intw	intw

SURFACE PROTECTION SEE GROUP 0344
TOLERANCING PRINCIPLE ISO8015
GENERAL TOLERANCES ACCORDING TO ISO

011

SMEAR CONTACT SURF
GASKET SEALANT (LO
574/ORANGE OR SIMILAR
BEFORE ASSEMBLY

Ø (95)

$\varnothing (95)$

Technical drawing showing a cross-section of a mechanical assembly, likely a wedge and an engine bedplate. The drawing includes dimensions and callouts for specific parts.

Dimensions:

- Overall height: 88
- Height of the upper section: (88)
- Height of the lower section: 30 ± 0.30
- Overall width: (440)
- Width of the lower section: (150)
- Width of the lower section (with tolerance): (45.5) ± 0.5
- Minimum gap: min. 13 mm

Callouts for specific parts:

- 003
- 005
- 006
- 004
- 012 C
- 007
- 010 C

CONTACT SURFACE BETWEEN WEDGE AND ENGINE BEDPLATE

min. 13 mm

Technical drawing showing a cross-section of a wedge and engine bedplate assembly. Dimensions are given in millimeters.

Dimensions:

- Total height: (440)
- Distance from top to contact surface: 88
- Distance from contact surface to top of wedge: (106)
- Distance from contact surface to bottom of wedge: 30 ± 0.5
- Distance from bottom of wedge to base: (132)
- Distance from base to contact surface: (68.5)

Callouts:

- 003
- 006
- 009
- 008
- 010

min. 13 mm

CONTACT SURFACE BETWEEN WEDGE AND ENGINE BEDPLATE

9

SURFACE PROTECTION SEE GROUP 1344		Change		C	ara01	rn010	22.02.2024	CHAA005102	Drawing updated		A	3				
TOLERANCING PRINCIPLE 530815		Rev.	Created	Approved	Approved	Change Is	Change Synopsis		Approved		Activity Code	E	C			
GENERAL TOLERANCES ACCORDING TO ISO2768-MK		Specify tolerance class (DIN EN 60064) according to drawing details. When the required tolerance class is not given, specify the value of the tolerance class according to the tolerance class of the part. When the tolerance class is not specified, the tolerance class is IT12.							13	NX	A1	then	PAAD381194	Drawing	Pages	3/3

SEQ NO	QTY	Item ID	Item Name	Standard-ID	Basic Material	Net Weight
001	1	PAAD381145	RIB		W-FU-355-J0	26
002	1	107.398.394.500	EPOXY RESIN			0.001
003	64	107.345.876.002	ROUND NUT	M30	W-FA-42CrMo-Q T	0.37
004	8	PAAD380992	SLEEVE		W-FA-34CrMo-Q T	6.8
005	8	PAAD381136	BUSH		W-FU-355-J0	2.6
006	64	PAAD381118	ELASTIC BOLT		W-FA-42CrMo-Q T	2.1
007	8	PAAD381113	CONICAL SOCKET		W-FA-34CrMo-Q T	6
008	56	PAAD381128	CONICAL SOCKET		W-FA-34CrMo-Q T	1.3
009	56	PAAD381130	BUSH		W-FU-355-J0	4.1
010	64	PAAD379030	SPHERICAL ROUND NUT		W-FA-42CrMo-Q T	0.376
011	1	107.367.119.001	SEALING PIECE			0.001
012	8	PTAA086389	JOINT DISC			0
013	56	PAAD024777	PLUG		W-FU-235-JR	0.001
014	4	PAAD214749	ENGINE SIDE STOPPER			20.3
015	4	PAAD214952	ENGINE SIDE STOPPER			24
016	8	107.325.275.001	WEDGE	45x25x450	W-FU-235-JR	3.8
017	1	107.401.839	FITTING INSTRUCTIONS			

Prod.	7 X52-S2.0 7 X52DF-A-S1.0	7 X52DF-M-S1.0 7 X52DF-S1.0	7 X52DF-S2.0
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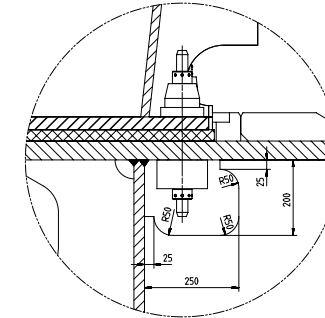


Bill Of Material	Dimension								
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	Main Design	Yes	Design Group		9710	Q-Code	X X M	Standard	WDS
	Qty per	Engine	A4	Item ID	PTAA092786		BOM Page/s	01/01	

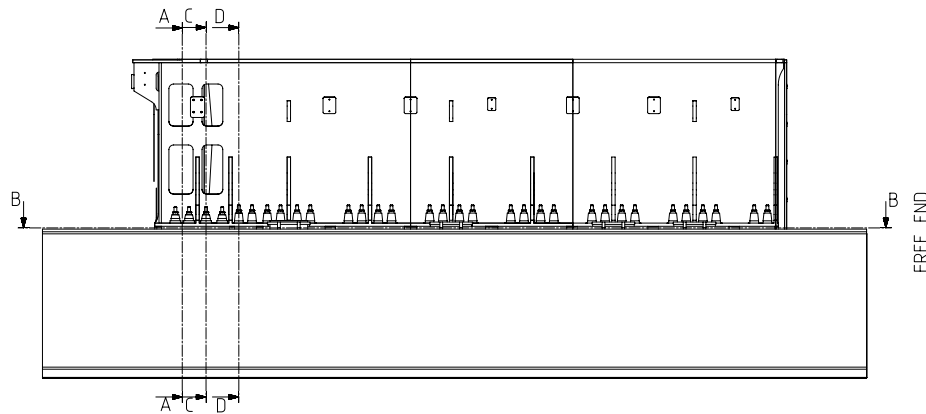
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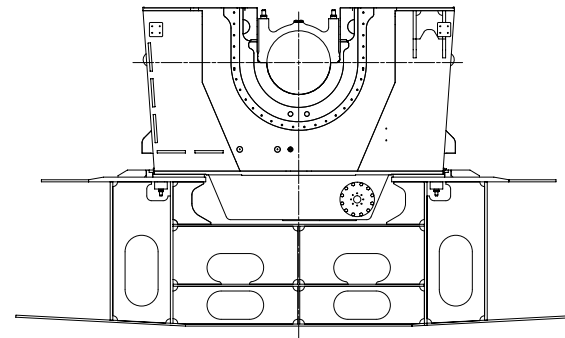
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- DRIVING END



FREE END 8



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011

SMEAR CONTACT SURFACE WITH GASKET SEALANT (LOOSELY APPLIED) BEFORE ASSEMBLY

$\varnothing (95)$

SMEAR CONTACT SURFACE WITH
GASKET SEALANT (LOCTITE
574/ORANGE OR SIMILAR)
BEFORE ASSEMBLY

Ø (95)

Technical drawing showing a cross-section of a mechanical assembly, likely a wedge and engine bedplate. The drawing includes dimensions and callouts:

- Dimensions: (440), (88), (150), (45,5), 30⁺³⁰₋₅.
- Callouts: 003, 005, 006, 004, 012, 007, 010.
- Note: CONTACT SURFACE BETWEEN WEDGE AND ENGINE BEDPLATE (min. 13 mm).

min. 13 mm

(440)

88

(106)

30 ± 0.5

(132)

(66.5)

003

006

009

008

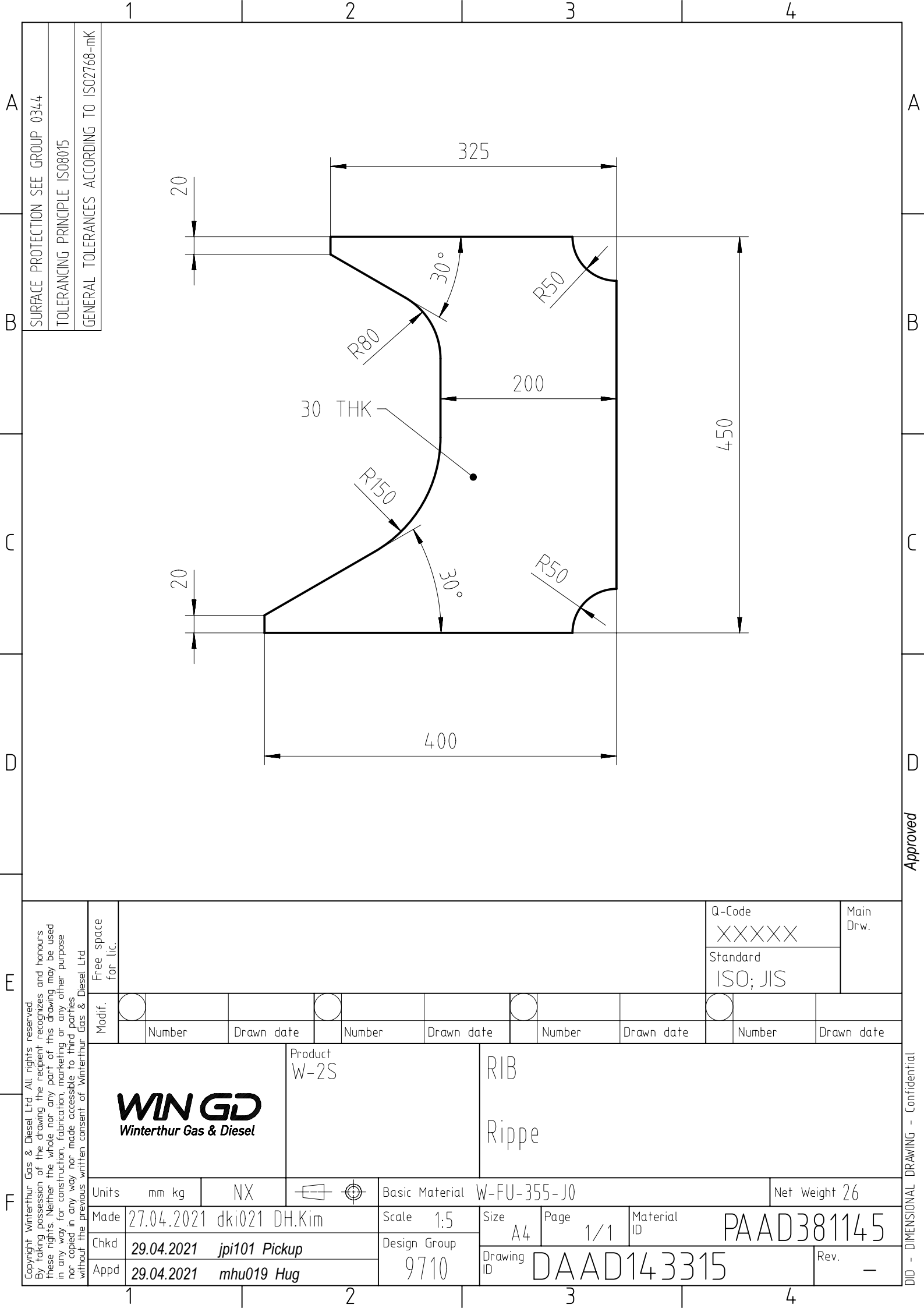
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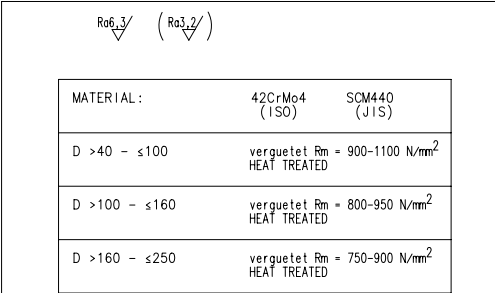
min. 13 mm

CONTACT SURFACE BETWEEN
WEDGE AND ENGINE BEDPLATE

min. 13 mm
CONTACT SURFACE BETWEEN
WEDGE AND ENGINE REPIRATE

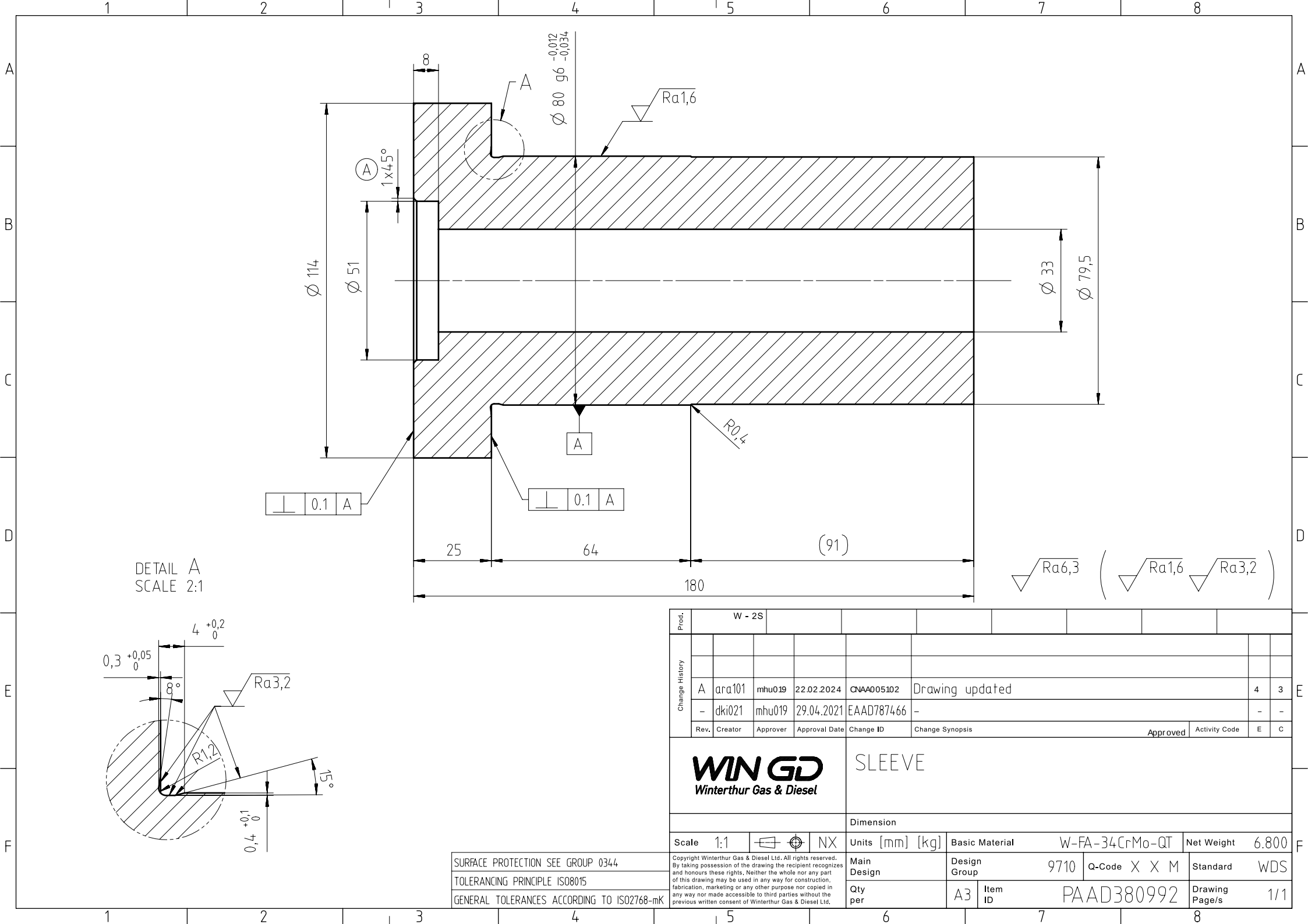
										CNC045392		New Main Design introduced		-	N
SURFACE PROTECTION SEE GROUP 0344			Rev.	Creator	Approved Date	Change ID	Change Synopsis			Activity Code	E	C			
GENERAL TOLERANCE PRINCIPLE ISO8015		Design tolerances (see 5.2.4.1.1.1) are given by the approved date of the drawing, the manufacturing and finished date. These tolerances are not to be exceeded. The manufacturing tolerances are not to be exceeded. The manufacturing tolerances are not to be exceeded. The manufacturing tolerances are not to be exceeded.				(mm)	1:3 ±	A1	Item ID	P7AA092786	Drawing Page(s)	3/3			
GENERAL TOLERANCES ACCORDING TO ISO2768-mK							NX								

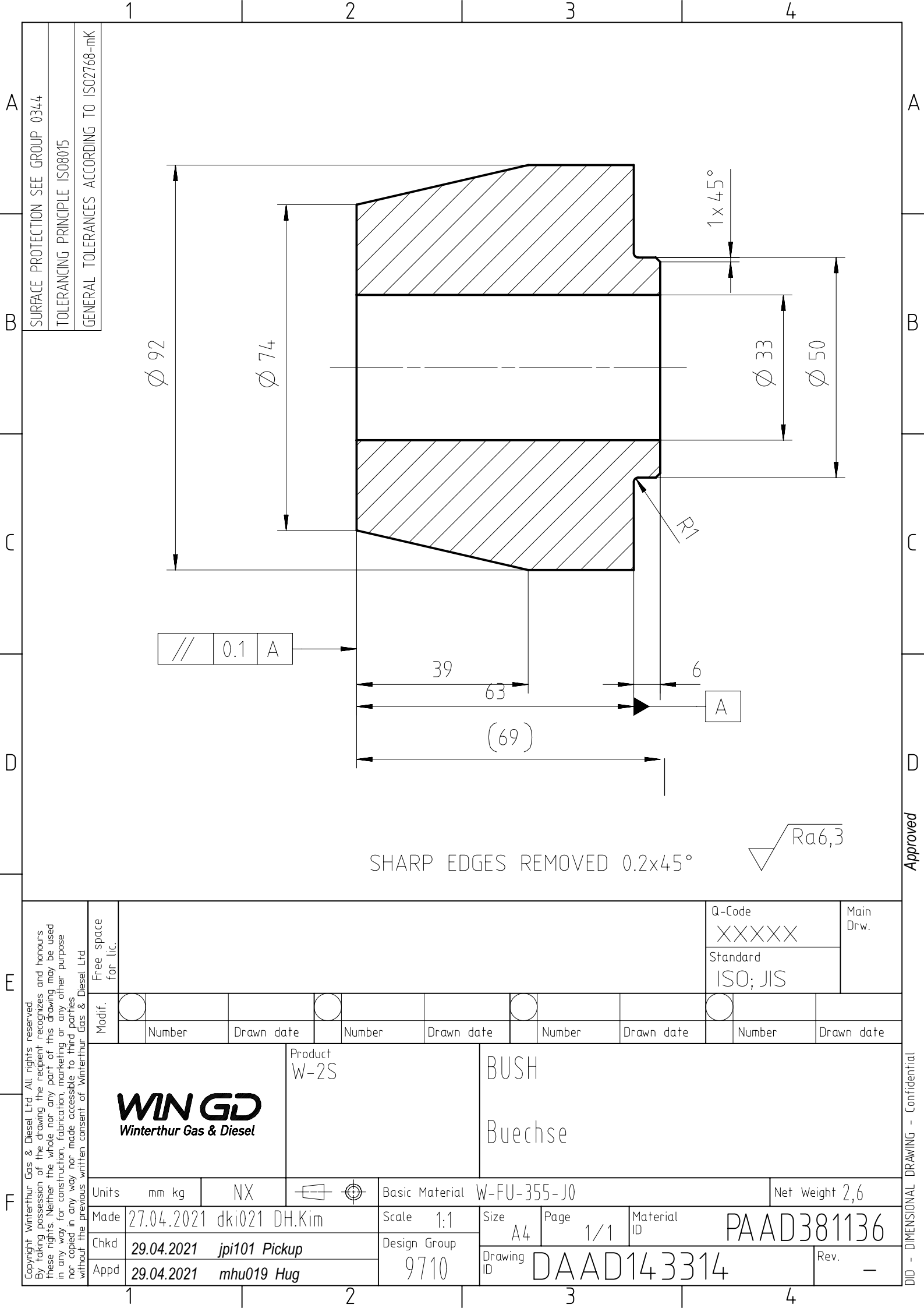




1	020	107.345.876.020	ROUND NUT	M100	107.345.876	W-FA-42C*Mo-Cr	13,2
1	019	107.345.876.019	ROUND NUT	M95	107.345.876	W-FA-42C*Mo-Cr	11,4
1	018	107.345.876.018	ROUND NUT	M90	107.345.876	W-FA-42C*Mo-Cr	9,7
1	017	107.345.876.017	ROUND NUT	M85	107.345.876	W-FA-42C*Mo-Cr	8,1
1	016	107.345.876.016	ROUND NUT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

SURFACE PROTECTION SEE GROUP 0344	Made	19.08.2004	pne001 P.Neracher	Scale	1:1	Size	A1	Page	1/1	Material	ID
TOLERANCING PRINCIPLE ISO8015	Chkd			Design Group		Drawing ID	107.34	5.876			Rev. C
GENERAL TOLERANCES ACCORDING TO ISO2768-mK	Appd	20.08.2004	PNE001 Neracher		3306						





SURFACE PROTECTION SEE GROUP 03/44

TOLERANCING PRINCIPLE ISO8015

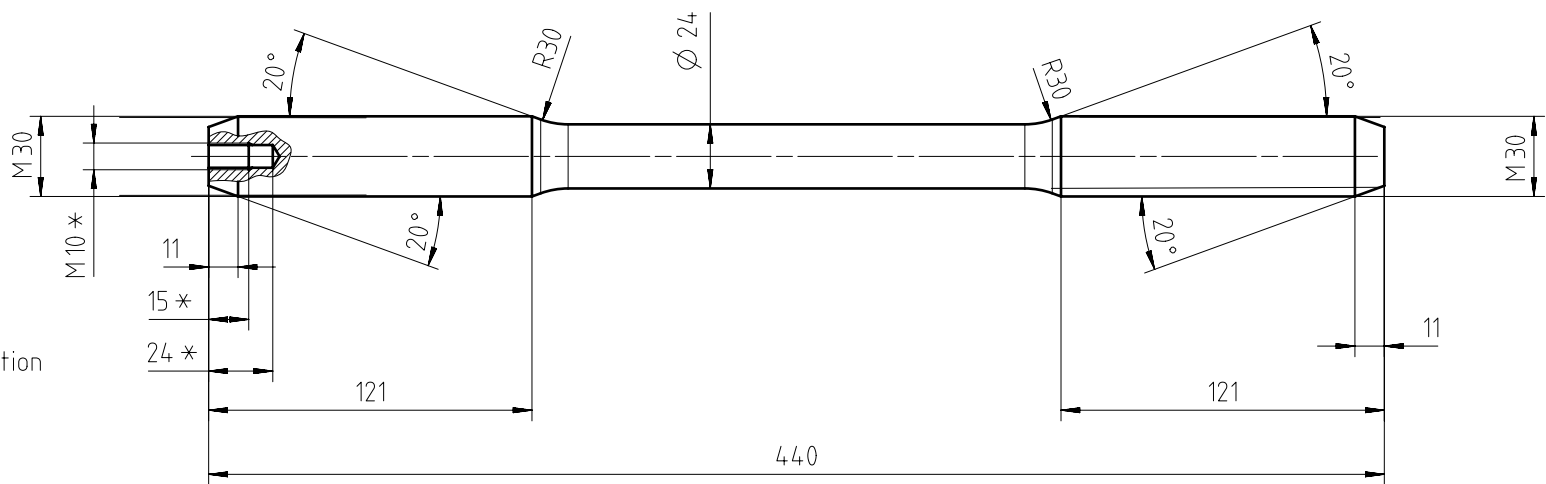
GENERAL TOLERANCES ACCORDING TO ISO2768-mK

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Modif.		Free space for lic.		Q-Code				Main Drw.	
				XXXXXX					
				Standard					
				ISO; JIS					
Number		Drawn date		Number		Drawn date		Number	
Drawn date		Number		Drawn date		Number		Drawn date	
Product		W-2S		BUSH					
Buechse									
Units		mm kg		NX		Basic Material		W-FU-355-J0	
Net Weight		2,6							
Made		27.04.2021		dki021 DH.Kim		Scale		1:1	
Size		A4		Page		1/1		Material ID	
PAAD381136									
Chkd		29.04.2021		jpi101 Pickup		Design Group		9710	
Appd		29.04.2021		mhu019 Hug		Drawing ID		DAAD143314	
Rev.		-							

DID - DIMENSIONAL DRAWING - Confidential

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



* Optional for installation

Ra3,2

QUENCH HARDENED AND TEMPERED

$R_m = 1000 +^{200}_0 \text{ N/mm}^2$

MACHINED BEFORE THREAD ROLLING

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

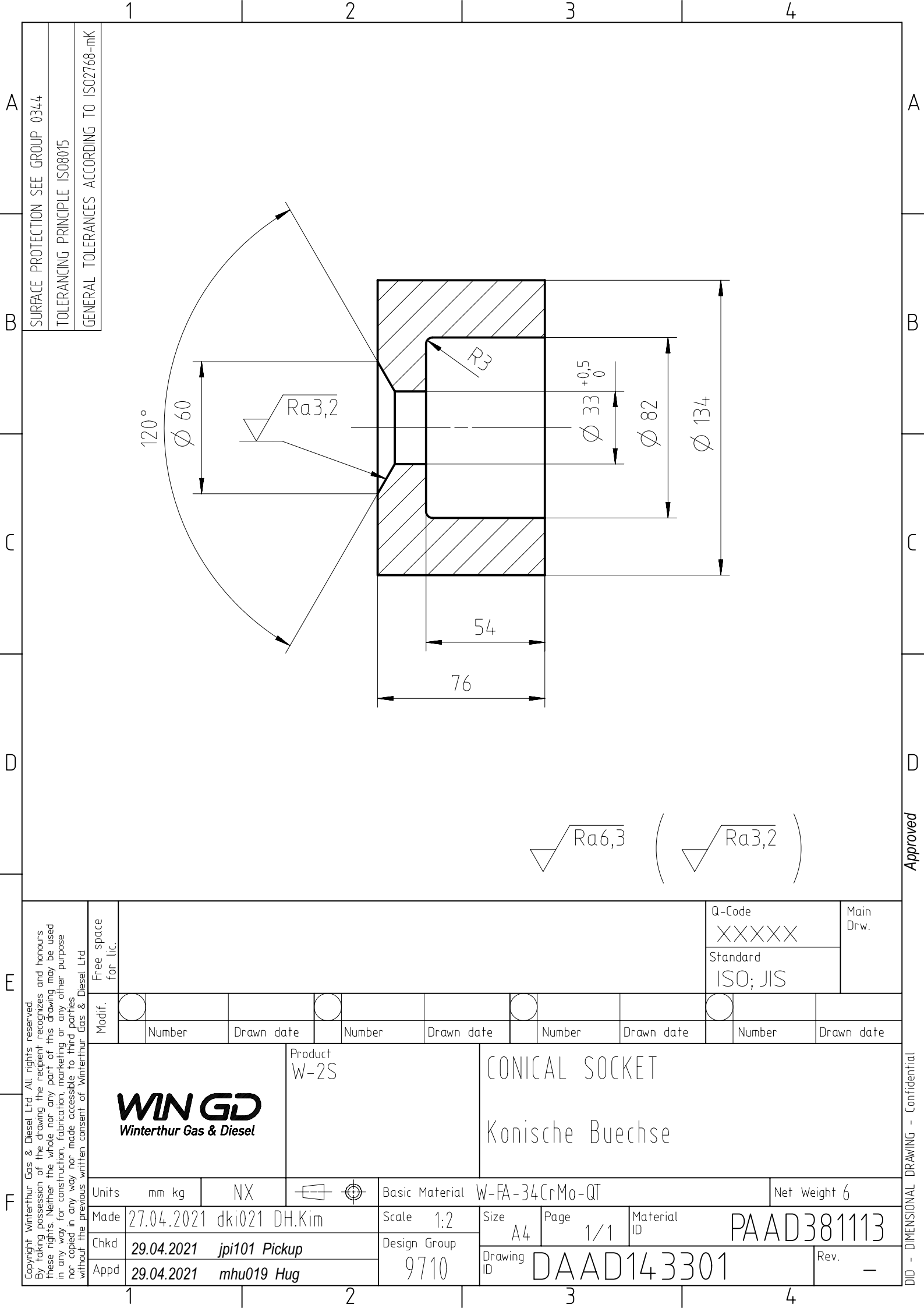
ELONGATION AFTER FRACTURE

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

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

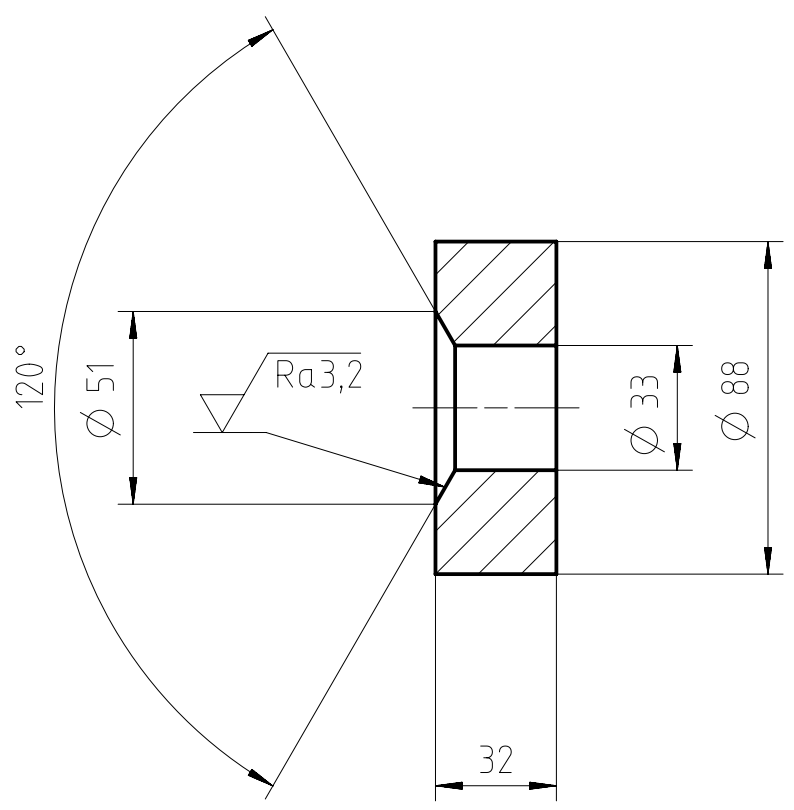
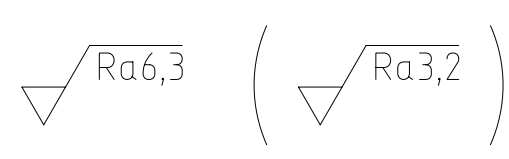
SURFACE PROTECTION SEE GROUP 0344	Made	27.04.2021 dki021 DH.Kim
TOLERANCING PRINCIPLE ISO8015	Chkd	29.04.2021 jpi101 Pickup
GENERAL TOLERANCES ACCORDING TO ISO2768-mK	Appd	29.04.2021 mhu019 Hug

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 Material Standard	Weight GR./NET
Free space for lic.								Q-Code 1QXP1	Main Drw.
								Standard ISO; JIS	
Modif.									
	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date	
WIN GD Winterthur Gas & Diesel			Product W-2S		ELASTIC BOLT Dehnbolzen				
Units	mm kg	NX		Basic Material W-FA-42CrMo-QT				Net Weight 2,1	
Made	27.04.2021 dki021 DH.Kim			Scale 1:2	Size A3	Page 1/1	Material ID	PAAD381118	
Chkd	29.04.2021 jpi101 Pickup			Design Group	Drawing ID	DAAD143304	Rev.	—	
Appd	29.04.2021 mhu019 Hug			9710					



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Free space for lic.										Q-Code XXXXXX		Main Drw.
										Standard ISO; JIS		
Modif.												
		Number	Drawn date			Number	Drawn date			Number	Drawn date	
WIN GD Winterthur Gas & Diesel				Product W-2S			CONICAL SOCKET Konische Buechse					
Units		mm kg	NX				Basic Material W-FA-34CrMo-QT				Net Weight 6	
Made	27.04.2021 dki021 DH.Kim				Scale 1:2		Size A4	Page 1/1	Material ID PAAD381113			
Chkd	29.04.2021 jpi101 Pickup				Design Group 9710		Drawing ID DAAD143301			Rev. —		
Appd	29.04.2021 mhu019 Hug											

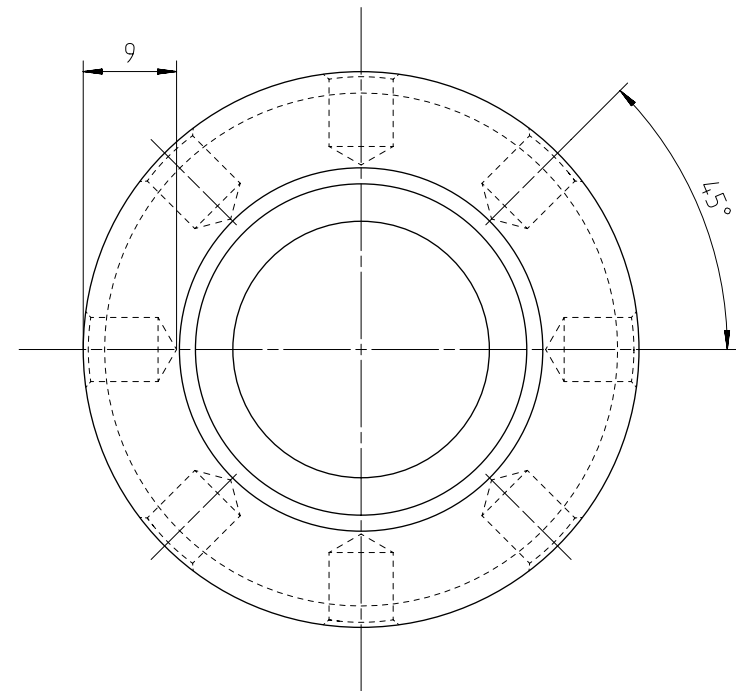
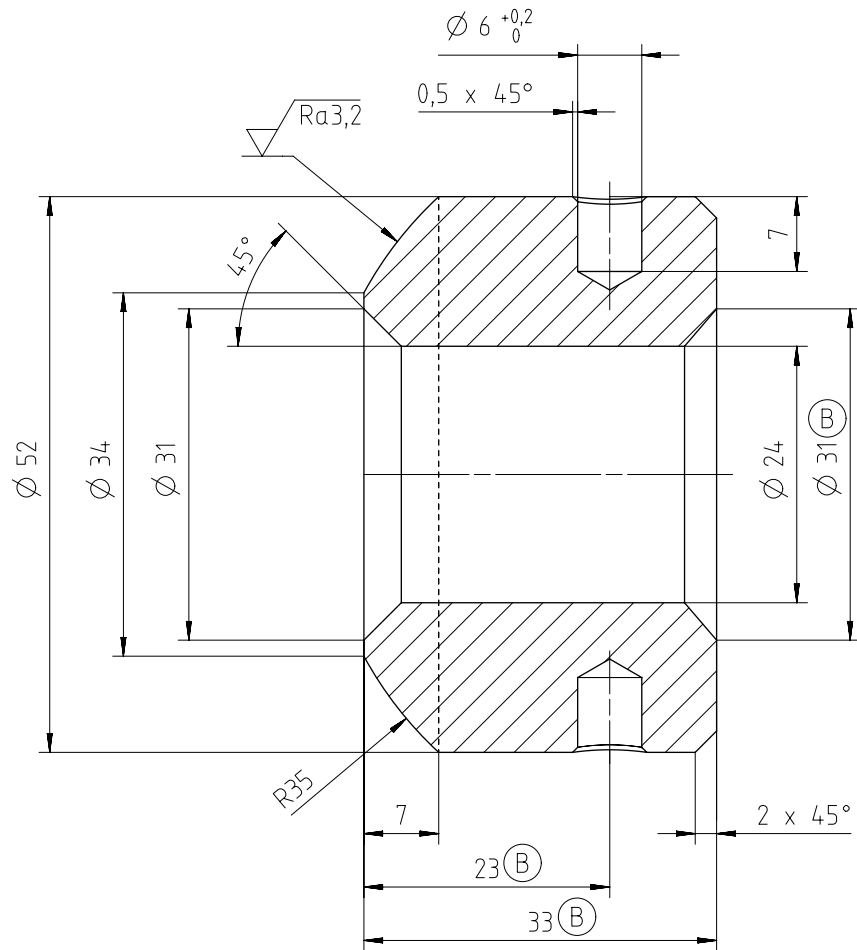
CONFIDENTIAL

1		2		3		4																	
A		B		C		D																	
SURFACE PROTECTION SEE GROUP 03/44		TOLERANCING PRINCIPLE ISO8015		GENERAL TOLERANCES ACCORDING TO ISO2768-mK																			
																							
																							
F		F		F		F																	
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.		Free space for lic.		Q-Code XXXXXX		Main Drw.																	
Modif.		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		1,3											
Made		27.04.2021		dki021 DH.Kim		Scale		1:2		Size		A4		Page		1/1		Material		ID		PAAD381128	
Chkd		29.04.2021		jpi101 Pickup		Design Group		9710		Drawing ID		DAAD143307		Rev.		-							
Appd		29.04.2021		mhu019 Hug																			
1		2		3		4																	

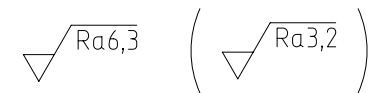


 Ra6,3

CONFIDENTIAL - DIMENSIONAL DRAWING - Confidential



SHARP EDGES TO BE REMOVED 0,2x45°



(B) Rm = 900 ⁺²⁰⁰ 0 N/mm²
quench hardened and tempered

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

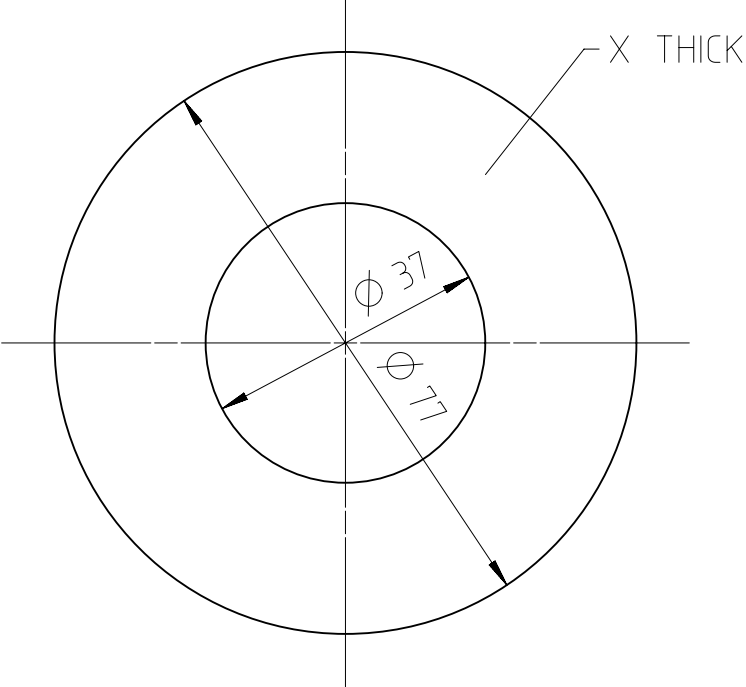
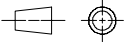
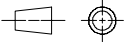
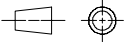
Prod.	X52-S2.0 X52DF-A-S1.0		X52DF-M-S1.0 X52DF-S1.0		X52DF-S2.0								
Change History													
	B	ara101	mhu019	22.02.2024	CNA005102	Drawing updated				4	3		
	A	sde101	mhu019	24.03.2023	CNA003448	Drawing update				4	3		
	-	dk1021	mhu019	14.04.2021	EAAD787337	-				-	-		
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis				Approved	Activity Code	E	C
WIN GD Winterthur Gas & Diesel					SPHERICAL ROUND NUT								
					Dimension								
Scale		2:1		NX	Units	[mm]	[kg]	Basic Material		W-FA-42CrMo-QT		Net Weight	0.376
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K	Qty per		A3		Item ID		PAAD379030				Drawing Page/s		1/1

GENERAL TOLERANCES ACCORDING TO ISO2768-mK

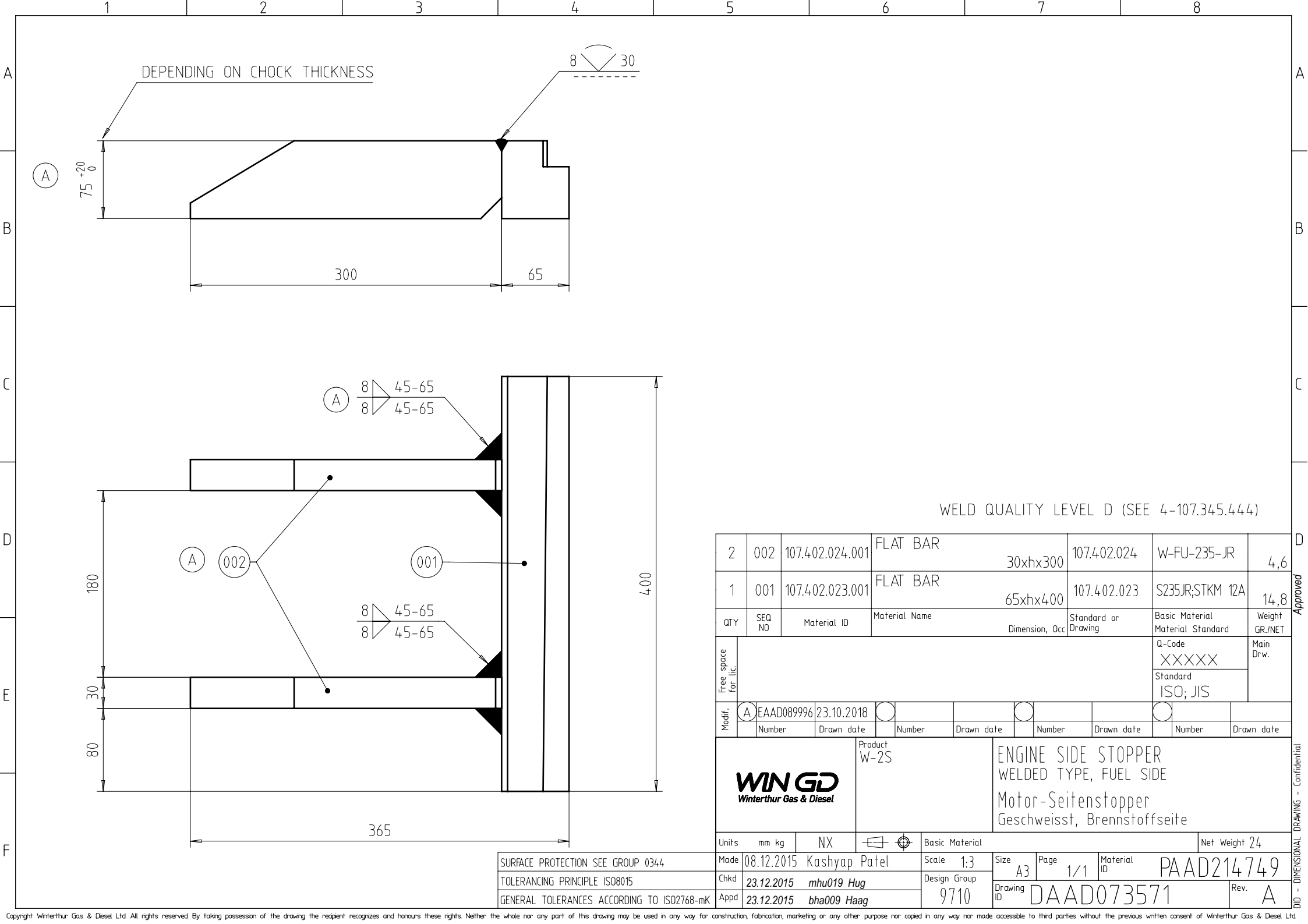


Dichtleiste

CPD - PRODUCTION DRAWING - Confidential

	1	2	3	4																																																																												
A	SURFACE PROTECTION SEE GROUP 03/44 TOLERANCING PRINCIPLE ISO8015 GENERAL TOLERANCES ACCORDING TO ISO2768-mK				A																																																																											
B					B																																																																											
C					C																																																																											
D	X = determined during assembly				D																																																																											
E	<table><tr><td>Prod.</td><td colspan="2">W - 2S</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td rowspan="5">Change History</td><td></td><td></td><td></td><td></td><td></td><td colspan="4"></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td colspan="4"></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td colspan="4"></td><td></td><td></td></tr><tr><td>-</td><td>ara101</td><td>mhu019</td><td>22.02.2024</td><td>CNAA005102</td><td colspan="4">new Design</td><td>-</td><td>-</td></tr><tr><td>Rev.</td><td>Creator</td><td>Approver</td><td>Approval Date</td><td>Change ID</td><td colspan="4">Change Synopsis</td><td>Approved</td><td>Activity Code</td><td>E</td><td>C</td></tr></table>										Prod.	W - 2S										Change History																																		-	ara101	mhu019	22.02.2024	CNAA005102	new Design				-	-	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis				Approved	Activity Code	E	C	E
Prod.	W - 2S																																																																															
Change History																																																																																
	-	ara101	mhu019	22.02.2024	CNAA005102	new Design				-	-																																																																					
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis				Approved	Activity Code	E	C																																																																			
F	WINGD Winterthur Gas & Diesel JOINT DISC <table><tr><td colspan="2">Scale</td><td>1:1</td><td></td><td>NX</td><td colspan="2">Dimension</td><td colspan="2"></td><td colspan="2"></td></tr><tr><td colspan="2">Units</td><td colspan="2">[mm] [kg]</td><td colspan="3">Basic Material</td><td colspan="2">Net Weight</td><td colspan="2">0.000</td></tr><tr><td colspan="2">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.</td><td colspan="2">Main Design</td><td colspan="2">Design Group</td><td>9710</td><td colspan="2">Q-Code</td><td>X X M</td><td>Standard</td><td>WDS</td></tr><tr><td colspan="2">Qty per</td><td colspan="2">A4</td><td colspan="2">Item ID</td><td colspan="2">PTAA086389</td><td colspan="2">Drawing Page/s</td><td colspan="2">1/1</td></tr></table>										Scale		1:1		NX	Dimension						Units		[mm] [kg]		Basic Material			Net Weight		0.000		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		X X M	Standard	WDS	Qty per		A4		Item ID		PTAA086389		Drawing Page/s		1/1		F																							
Scale		1:1		NX	Dimension																																																																											
Units		[mm] [kg]		Basic Material			Net Weight		0.000																																																																							
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Qty per		A4		Item ID		PTAA086389		Drawing Page/s		1/1																																																																						
	1	2	3	4																																																																												

A		1		2		3		4		A																																							
B		SURFACE PROTECTION SEE GROUP 03/44 TOLERANCING PRINCIPLE ISO8015 GENERAL TOLERANCES ACCORDING TO ISO2768-mK										B																																					
C		110 ø48 *) Material according to shipyard expierence										C																																					
D												D																																					
E		Free space for lic. Q-Code XXXXXX Standard ISO; JIS Main Drw. <table><tr><td>Modif.</td><td>A</td><td>EAAD091567</td><td>23.11.2019</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>Number</td><td>Drawn date</td><td></td><td>Number</td><td>Drawn date</td><td></td><td>Number</td><td>Drawn date</td><td></td><td>Number</td><td>Drawn date</td></tr></table> WIN GD Winterthur Gas & Diesel Product W-2S PLUG										Modif.	A	EAAD091567	23.11.2019										Number	Drawn date		Number	Drawn date		Number	Drawn date		Number	Drawn date	E													
Modif.	A	EAAD091567	23.11.2019																																														
	Number	Drawn date		Number	Drawn date		Number	Drawn date		Number	Drawn date																																						
F		Unitsmm kgNX Basic Material *) Net Weight 0,001 <table><tr><td>Made</td><td>22.11.2010</td><td>S. Feuerstein</td><td>Scale</td><td>1:1</td><td>Size</td><td>A4</td><td>Page</td><td>1/1</td><td>Material ID</td><td>PAAD024777</td></tr><tr><td>Chkd</td><td>19.01.2011</td><td>wwr001 Wroblewski</td><td>Design Group</td><td>9710</td><td>Drawing ID</td><td colspan="4">DAAD011552</td><td>Rev.</td><td>A</td></tr><tr><td>Appd</td><td>19.01.2011</td><td>dst009 Strödecke</td><td colspan="8"></td><td></td><td></td></tr></table>										Made	22.11.2010	S. Feuerstein	Scale	1:1	Size	A4	Page	1/1	Material ID	PAAD024777	Chkd	19.01.2011	wwr001 Wroblewski	Design Group	9710	Drawing ID	DAAD011552				Rev.	A	Appd	19.01.2011	dst009 Strödecke											F	
Made	22.11.2010	S. Feuerstein	Scale	1:1	Size	A4	Page	1/1	Material ID	PAAD024777																																							
Chkd	19.01.2011	wwr001 Wroblewski	Design Group	9710	Drawing ID	DAAD011552				Rev.	A																																						
Appd	19.01.2011	dst009 Strödecke																																															
		1		2		3		4																																									



DEPENDENT ON CHOCK THICKNESS

8 30

A

75 +20
0

300

65

A

8 45-65
8 45-65

A

002

001

8 45-65
8 45-65

180

30

80

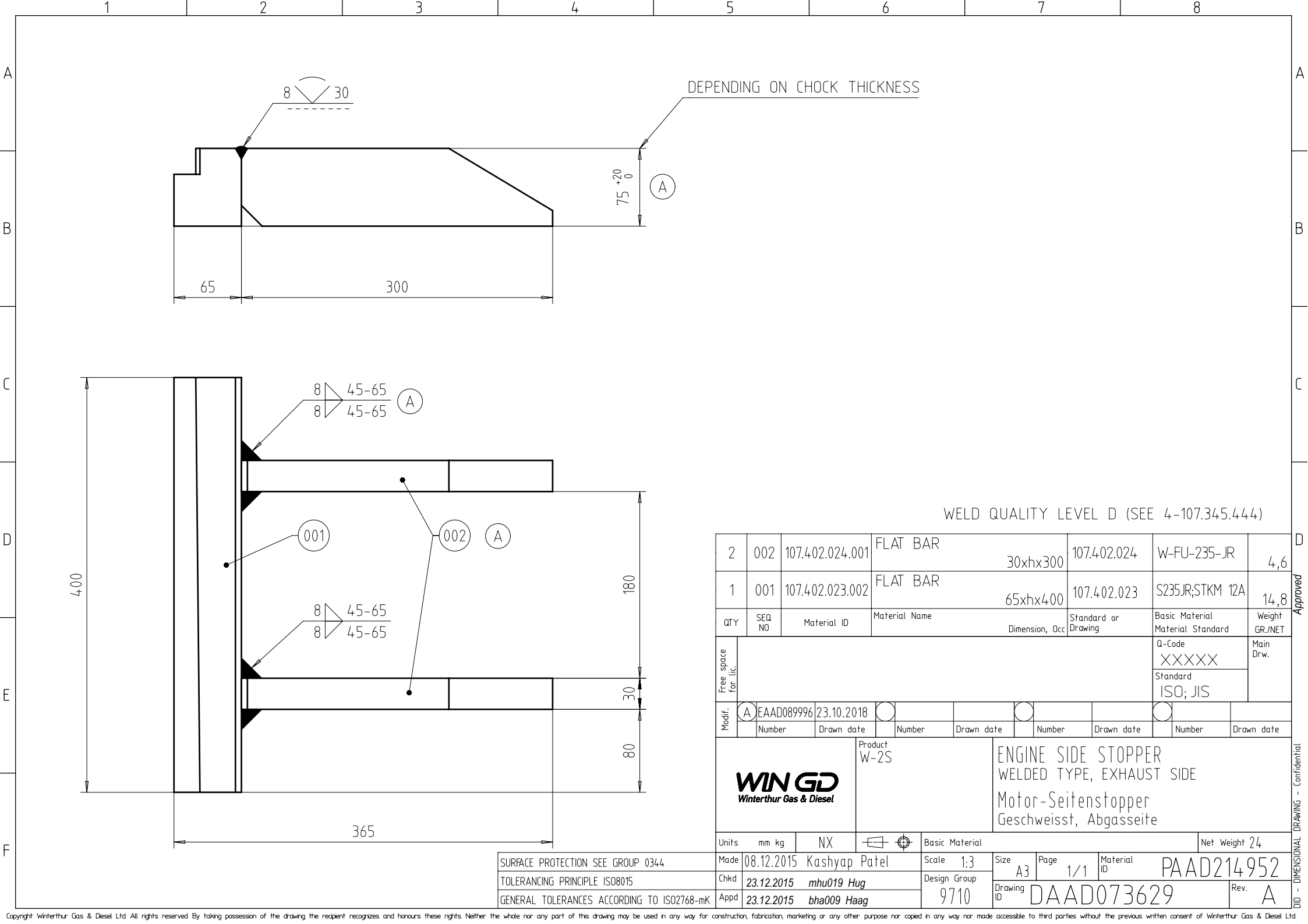
400

365

WELD QUALITY LEVEL D (SEE 4-107.345.444)

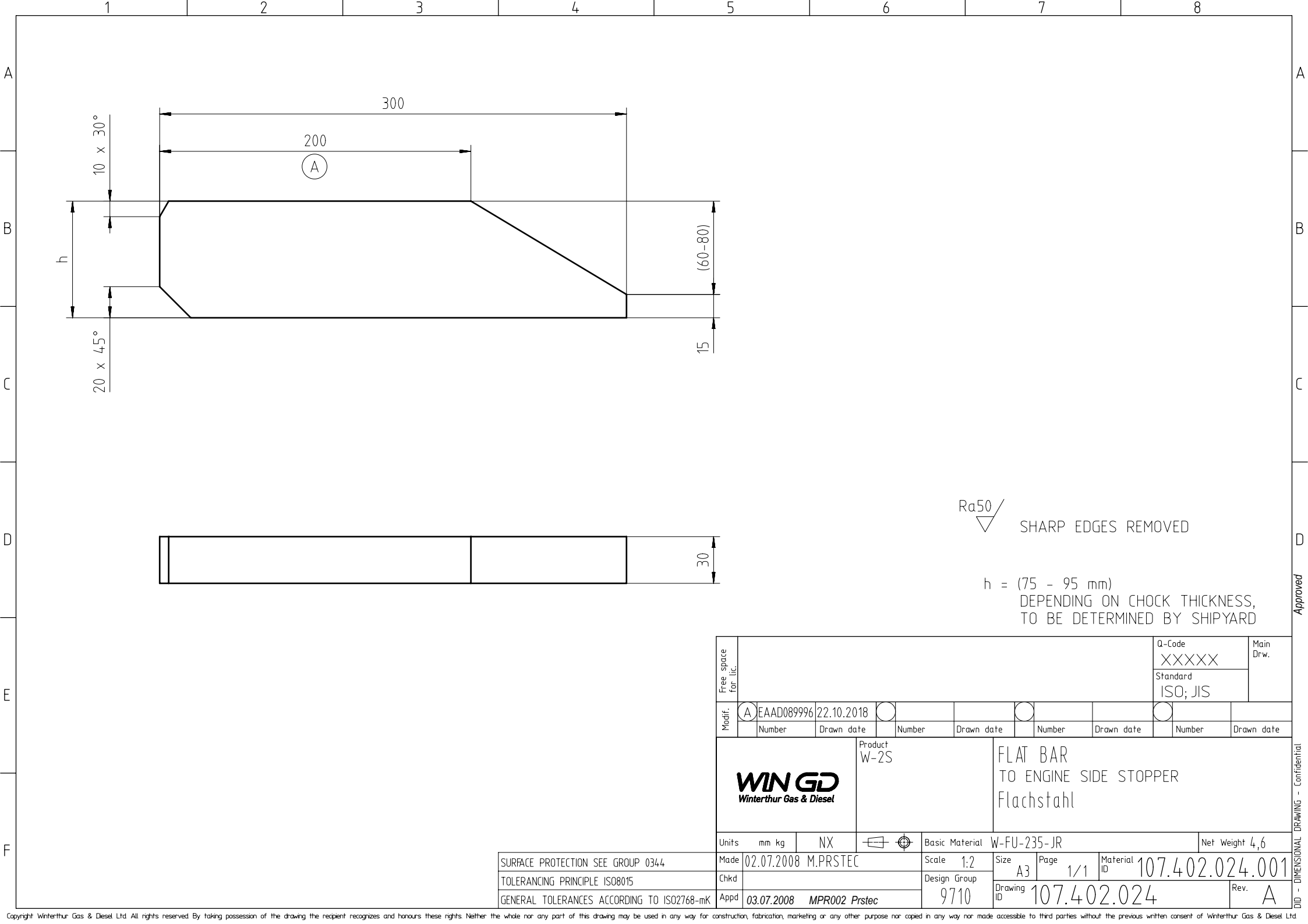
2	002	107.402.024.001	FLAT BAR	30xhx300	107.402.024	W-FU-235-JR	4,6
1	001	107.402.023.001	FLAT BAR	65xhx400	107.402.023	S235JR;STKM 12A	14,8
QTY	SEQ NO	Material ID	Material Name	Dimension, Occ	Standard or Drawing	Basic Material Material Standard	Weight GR./NET
Free space for lic.						Q-Code XXXXX Standard ISO; JIS	Main Drw.
Modif.	A	EAAD089996	23.10.2018				
	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number
WIN GD Winterthur Gas & Diesel			Product W-2S	ENGINE SIDE STOPPER WELDED TYPE, FUEL SIDE Motor-Seitenstopper Geschweisst, Brennstoffseite			
Units	mm kg	NX		Basic Material	Net Weight 24		
Made	08.12.2015	Kashyap Patel	Scale	1:3	Size	A3	Page 1/1
Chkd	23.12.2015	mhu019 Hug	Design Group	9710	Drawing ID	DAAD073571	Rev. A
Appd	23.12.2015	bha009 Haag					

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





 $\sqrt{\text{Ra}_{6,3}}$



Ra50 /
SHARP EDGES REMOVED

h = (75 - 95 mm)
DEPENDING ON CHOCK THICKNESS,
TO BE DETERMINED BY SHIPYARD

Free space for lic.								Q-Code XXXXXX	Main Drw.			
								Standard ISO; JIS				
Modif.	A	EAAD089996	22.10.2018									
	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date				
WIN GD 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 4,6				
Made	02.07.2008 M.PRSTEC				Scale	1:2	Size	A3	Page	1/1	Material ID	107.402.024.001
Chkd					Design Group							
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MIDS - ENGINE SEATING and FOUNDATION (DG9710)

WinGD X52/-S2.0/DF-S1.0/DF-A-S1.0/DF-M-S1.0

TRACK CHANGES

DATE	SUBJECT	DESCRIPTION
2021-07-05	DRAWING SET	First web upload
2022-07-05	PAAD381194	Main drg – new drg revision
2022-12-08	PAAD381194	Main drg – new drg revision
2023-03-27	PAAD379030	Component (nut) drg - added
2023-04-04	PTAA056757	5 cyl. variant - added
2024-04-24	PAAD379030-B PAAD380992-A PAAD381194-C PTAA056757-A PTAA086389--	New revision
2024-05-07	PTAA092786_	New revision for 7 cyl.

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