


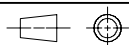
Available executions

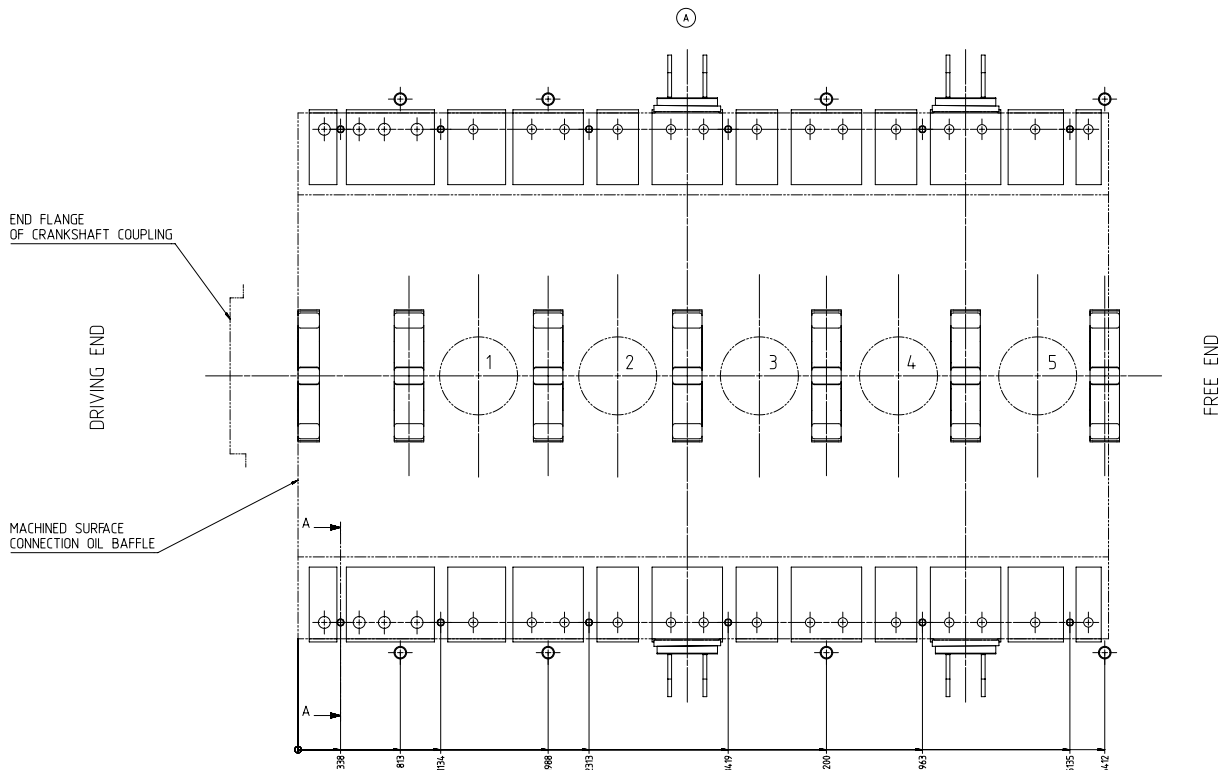
Execution No.	Material ID	Cylinder No.	Attribute 1: Alignment tool type		Attribute 2: Thrust section design	
			SCREWS	WEDGES	INITIAL	COMPACT
001	PAAD325788	5		X	X	
002	PAAD167768	5	X		X	
003	PAAD325977	6		X	X	
004	PAAD103372	6	X		X	
005	PAAD376986	7		X		X
006	PAAD377117	7	X			X
007	PAAD326134	7		X	X	
008	PAAD242995	7	X		X	
009	PAAD322052	8	X		X	
010	PAAD326249	8		X	X	

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.	X62DF-1.1 X62DF-2.1									
Change History	A	sna102			Drawing Updated					
	-	dki021	dst009	06.12.2021	CNAA001106	new Design		-	-	
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Activity Code	E	C	
			TOOL ENGINE ALIGNMENT MIDS master drawing							
separate BOM available			Dimension							
Scale	-		NX	Units [mm] [kg]	Basic Material			Net Weight	194.4	
<small>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.</small>				Main Design	Design Group	9710-01	Q-Code	XXXXX	Standard	WDS
				Qty per	A4	Item ID	PTAA020665		Drawing Page/s	1/1



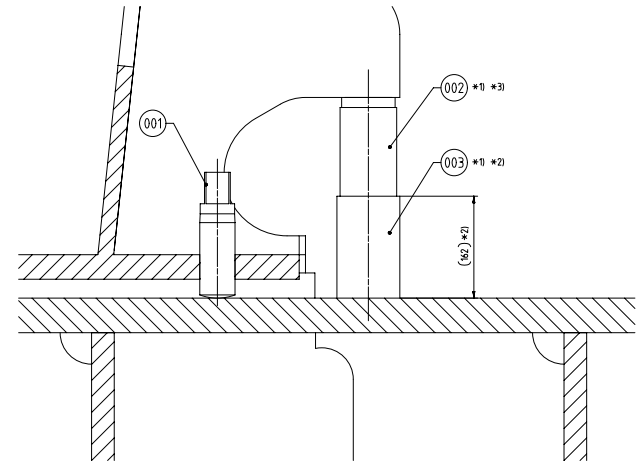
CAUTION

- Risk:**
Tool and/or bedplate damage
- Countermeasure:**
Avoid overloading of jacking screws and/or bedplate areas by observing the appropriate engine alignment/assembly procedure as follows:
- Lift the engine into the engine room and place it on levelled, temporary blocks, underneath the bedplate beside the jacking screws.
 - Screw in all jacking screws until touching the foundation top plate (the full number of jacking screws must be used).
 - Apply hydraulic jacks to the protruding bedplate ribs nearby the jacking screws as indicated in the drawing.
 - Remove the temporary blocks by slightly lifting the engine with the hydraulic jacks.
 - Start with the engine alignment by means of jacking screws. Before turning a jacking screw, reduce its load by use of the hydraulic jacks. Any height adjustment must be performed in small steps - no more than 1 mm per step (equals to 1/2 screw turn, based on 2 mm thread pitch). Changes in height larger than the maximum allowance (1 mm) require a gradual process where all jacking screws are successively adjusted in stages, to ensure the best possible load distribution.

Remarks

- *1) To be provided by the shipyard.
- *2) Height depending on the requirement (check thickness in correlation with maximum permissible extension of the hydraulic jack).
- *3) Hydraulic jack proposal
Type: Enerpac RCS-1002
Load at 700 bar: 880 kN

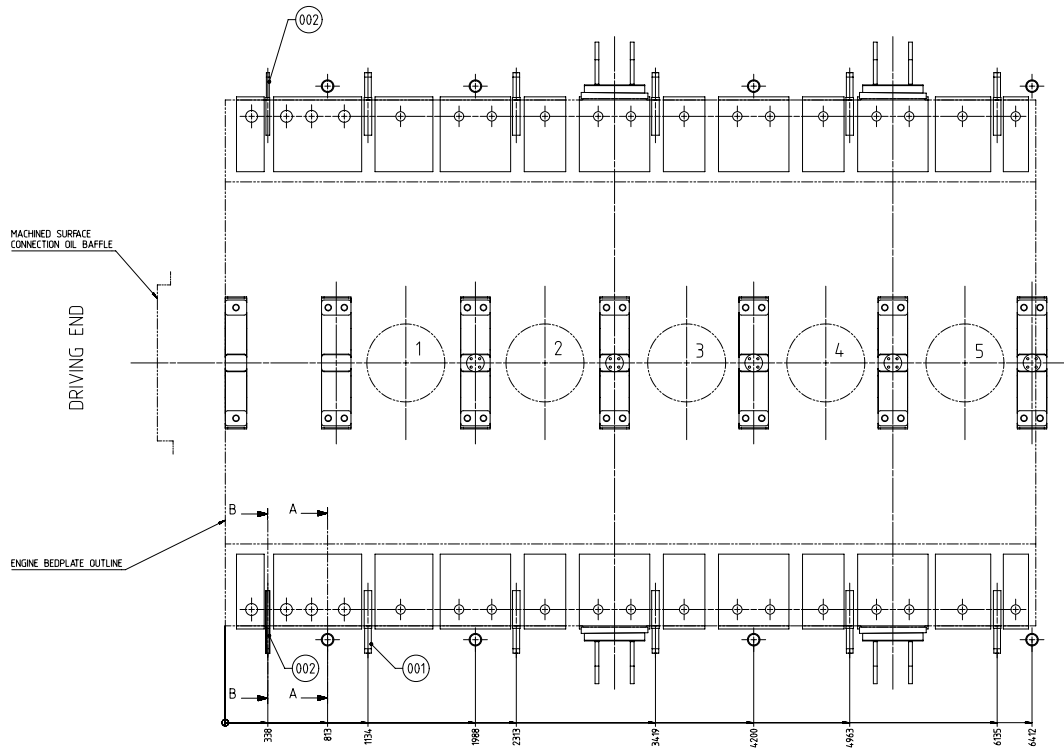
SECTION A-A - 90°
SCALE 1:3



Item No.	Material	Material Name	Quantity	Unit	Weight
8	003	FRAD38480		SUPPORT BLOCK	
8	002	FRAD38478		HYDRAULIC JACK	
12	001	FRAD103276		JACKING SCREW	

WING
WKS62
WKS62-B
WKS62DF

TOOL ENGINE ALIGNMENT
Alignment with Screws
Werkzeug Motorausrichtung



CAUTION

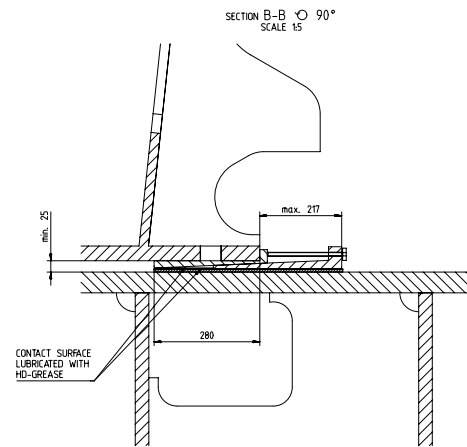
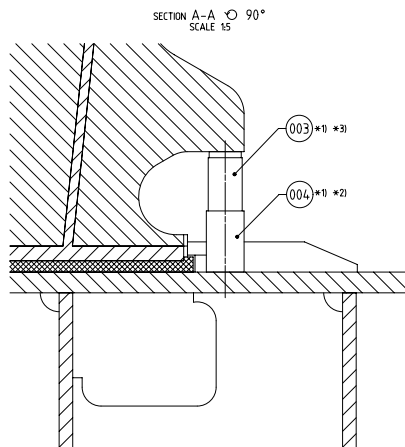
Risk:
Tool and/or bedplate damage

Countermeasure:
Avoid overloading of bedplate areas by observing the appropriate engine alignment/assembly procedure as follows:

- Insert wedges and/or shims in all indicated positions.
- Lift the engine into the engine room and place it on levelled wedges and/or shims (wedges or shims must be inserted as deep as possible below the bedplate to ensure that the support point is as close as possible at the engine monoblock column).
- Apply hydraulic jacks to the protruding bedplate ribs nearby the relevant wedge and/or shim as indicated in the drawing.
- Start with the engine alignment by means of wedges and/or shims. Before adjusting the height of wedges and/or shims lift the engine by the hydraulic jacks. Any height adjustment must be performed in small steps - no more than 1 mm per step. Changes in height larger than the maximum allowance (1mm) require a gradual process where all wedges and/or shims are successively adjusted in stages, to ensure the best possible load distribution.

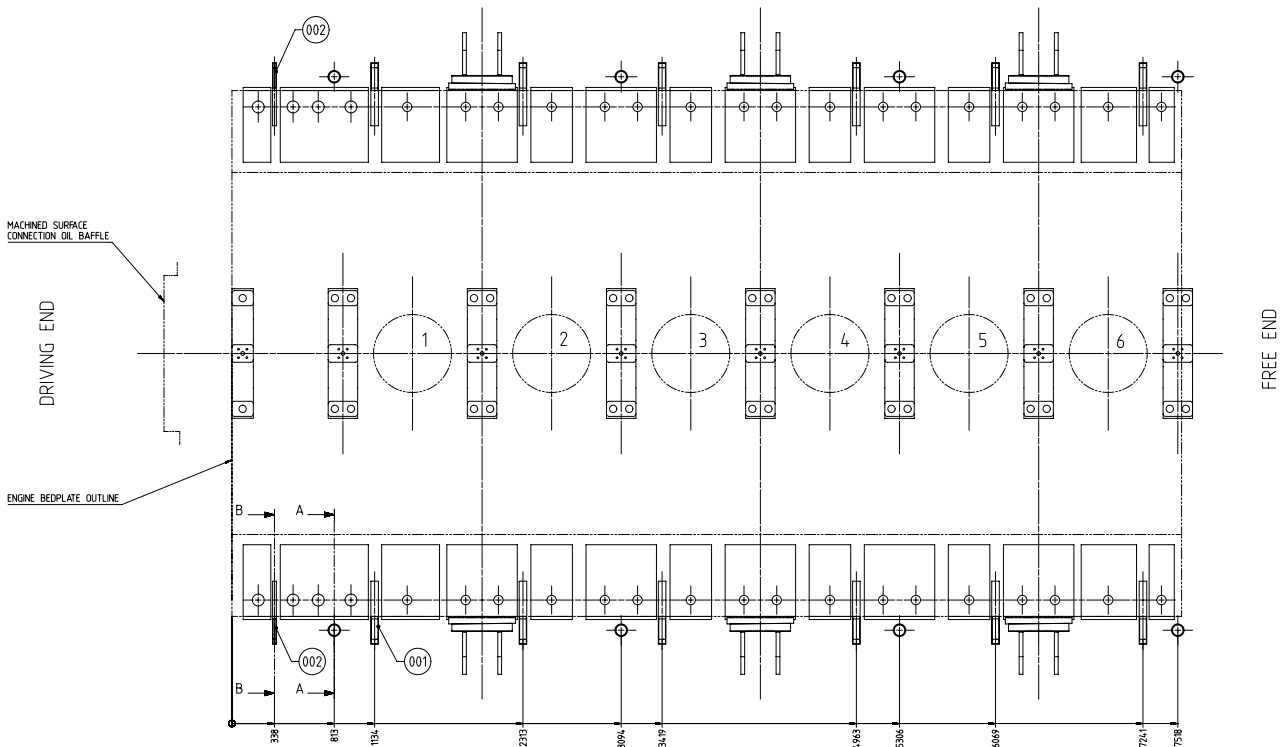
Remarks

- *1) To be provided by the shipyard.
- *2) Height depending on the requirement (check thickness in correlation with maximum permissible extension of the hydraulic jack).
- *3) Hydraulic jack proposal
Type: Enerpac RCS-1002
Load at 700 bar: 880 kN



NO.	QTY	DESCRIPTION	UNIT	WEIGHT
8	004	FRAD384-80 SUPPORT BLOCK		
8	003	FRAD384-78 HYDRAULIC JACK		
2	002	WEDGE NARROW TYPE 107424-346		3,36
10	001	WEDGE 107245-895-200		7,51

NO.	QTY	DESCRIPTION	UNIT	WEIGHT
1	1	TOOL ENGINE ALIGNMENT		
1	1	Alignment with Wedges		
1	1	Werkzeug Motorausrichtung		



CAUTION

Risk:
Tool and/or bedplate damage

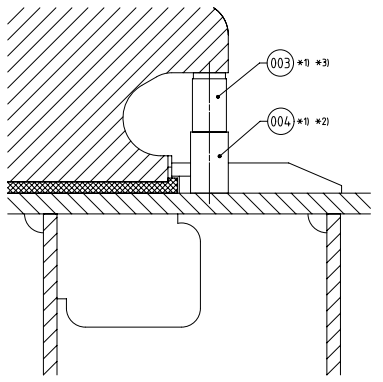
Countermeasure:
Avoid overloading of bedplate areas by observing the appropriate engine alignment/assembly procedure as follows:

- Insert wedges and/or shims in all indicated positions.
- Lift the engine into the engine room and place it on levelled wedges and/or shims (wedges or shims must be inserted as deep as possible below the bedplate to ensure that the support point is as close as possible at the engine monoblock column).
- Apply hydraulic jacks to the protruding bedplate ribs nearby the relevant wedge and/or shim as indicated in the drawing.
- Start with the engine alignment by means of wedges and/or shims. Before adjusting the height of wedges and/or shims lift the engine by the hydraulic jacks. Any height adjustment must be performed in small steps - no more than 1 mm per step. Changes in height larger than the maximum allowance (fmm) require a gradual process where all wedges and/or shims are successively adjusted in stages, to ensure the best possible load distribution.

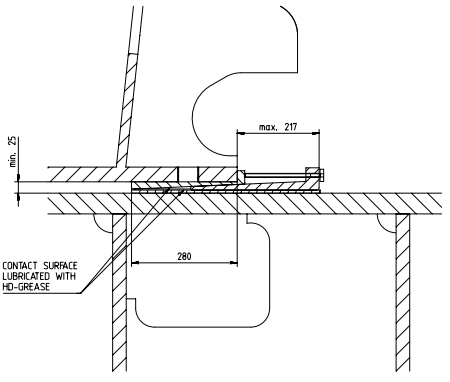
Remarks

- *1) To be provided by the shipyard.
- *2) Height depending on the requirement (check thickness in correlation with maximum permissible extension of the hydraulic jack).
- *3) Hydraulic jack proposal
Type: Enerpac RCS-1002
Load at 700 bar: 880 kN

SECTION A-A \odot 90°
SCALE 1:5



SECTION B-B \odot 90°
SCALE 1:5




NO.	QTY	DESCRIPTION	UNIT	WEIGHT
8	004	FRAD384-80 SUPPORT BLOCK		
8	003	FRAD384-78 HYDRAULIC JACK		
2	002	WEDGE NARROW TYPE 107424-346		3,36
12	001	WEDGE 107245-895-200		7,51

NO.	QTY	DESCRIPTION	UNIT	WEIGHT
1	1	TOOL ENGINE ALIGNMENT Alignment with Wedges Werkzeug Motorausrichtung		

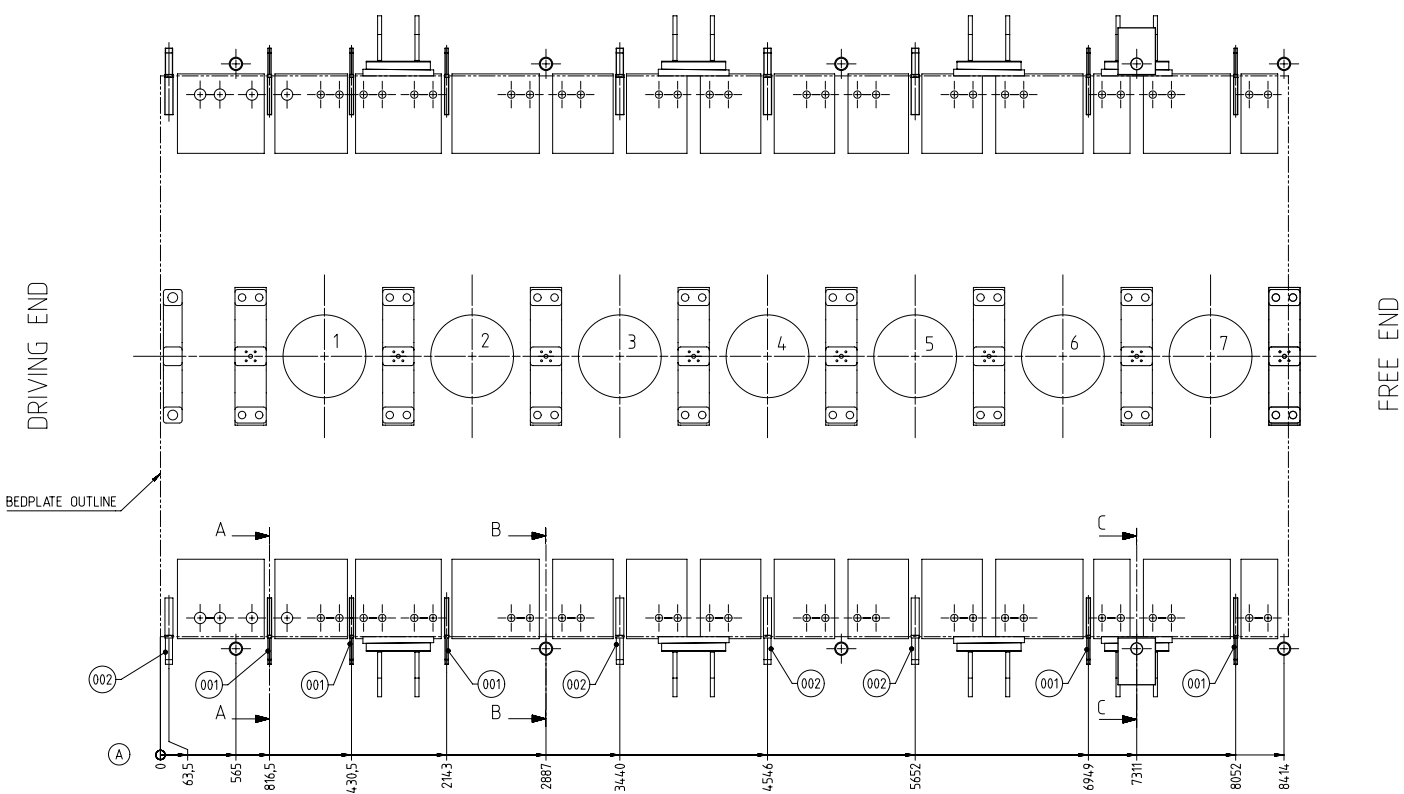
SEQ NO	QTY	Item ID	Item Name	Dimension	Standard-ID	Basic Material	Net Weight
1	10	107.424.346.200	WEDGE	NARROW TYPE			3.357
2	8	107.245.895.200	WEDGE				7.511
3	10	PAAD318478	TOOL ENGINE ALIGNMENT				75
4	8	PAAD318480	TOOL ENGINE ALIGNMENT				75
5	2	PAAD318479	SUPPORT PLATE				



Prod.	7 X62DF-1.1		7 X62DF-2.1						
Change History									
	A	sna102	mhu019	20.12.2022	CNAA002473	See corresponding ChangeNotice	-	-	
	-	dki021	mhu019	15.03.2021		-	-	-	
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Approved	Activity Code	E

	TOOL ENGINE ALIGNMENT
--	-----------------------

Bill Of Material		Dimension						
Copyright Winterthur Gas & Diesel Ltd. All rights reserved. By taking possession of the document the recipient recognizes and honours these rights. Neither the whole nor any part of this document 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.	Units	[m] [kg]	Basic Material	Net Weight	134			
	Main Design	Yes	Design Group	9710-01	Q-Code XXXXX	Standard	WDS	
	Qty per	Engine	A4	Item ID	PAAD376986		BOM Page/s	01/01



CAUTION

Risk:
Tool and/or bedplate damage

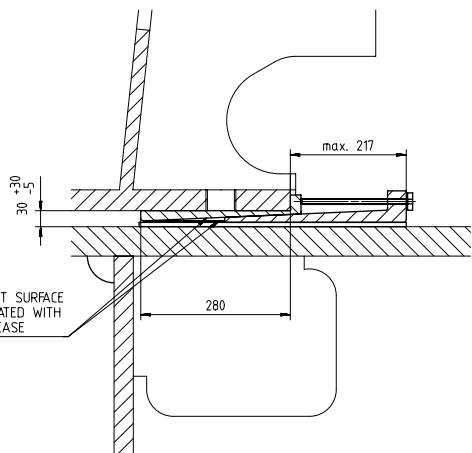
Countermeasure:
Avoid overloading of bedplate areas by observing the appropriate engine alignment/assembly procedure as follows:

- Insert wedges and/or shims in all indicated positions.
- Lift the engine into the engine room and place it on levelled wedges and/or shims (wedges or shims must be inserted as deep as possible below the bedplate to ensure that the support point is as close as possible at the engine monoblock column).
- Apply hydraulic jacks to the protruding bedplate ribs nearby the relevant wedge and/or shim as indicated in the drawing.
- Start with the engine alignment by means of wedges and/or shims. Before adjusting the height of wedges and/or shims lift the engine by the hydraulic jacks. Any height adjustment must be performed in small steps - no more than 1 mm per step. Changes in height larger than the maximum allowance (1mm) require a gradual process where all wedges and/or shims are successively adjusted in stages, to ensure the best possible load distribution.

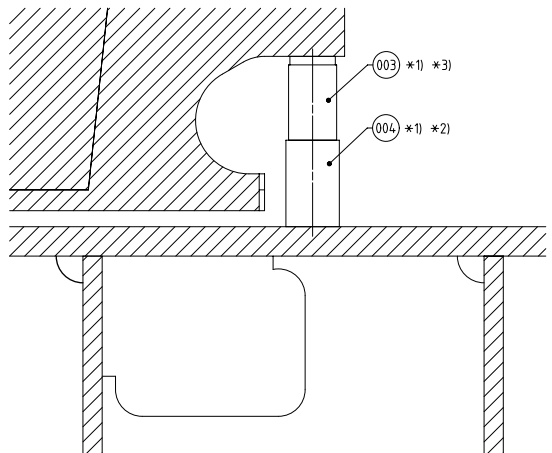
Remarks

- *1) To be provided by the shipyard.
- *2) Height depending on the requirement (chock thickness in correlation with maximum permissible extension of the hydraulic jack).
- *3) Hydraulic jack proposal
Type: Enerpac RCS-1002
Load at 700 bar: 880 kN

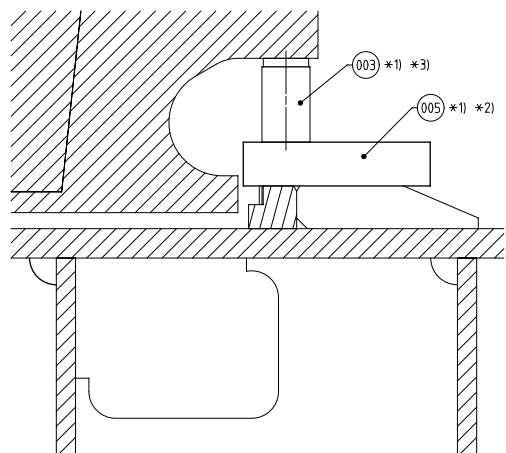
SECTION A-A 90°
SCALE 1:5



SECTION B-B 90°
SCALE 1:5



SECTION C-C 90°
SCALE 1:5




7X62DF-1-1 7X62DF-2-1									
Change History									
A	snd102	mhu019	20.12.2022	ENVA002473	See corresponding ChangeNotice				
-	dk0021	mhu019	15.03.2021	-					
Rev	Creator	Approver	Approval Date	Change ID	Change Symbol	Approval	Activity Code	E	C
WINGD Winterthur Gas & Diesel		TOOL ENGINE ALIGNMENT							
separate BOM available		Dimension		Units [mm] [kg]		Basic Material		Net Weight 134,0	
Scale 1:15	NX								
SURFACE PROTECTION SEE GROUP 0344		Copyright Winterthur Gas & Diesel 1974. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without prior written permission of Winterthur Gas & Diesel AG.		Main Design Yes		Design Group 9710-01		Q-Code XXXXX	
TOLERANCING PRINCIPLE ISO8015		GENERAL TOLERANCES ACCORDING TO ISO2768-MK		CNY per		Engine A1		Item ID PAAD376986	
								Drawing Page 9 1/1	

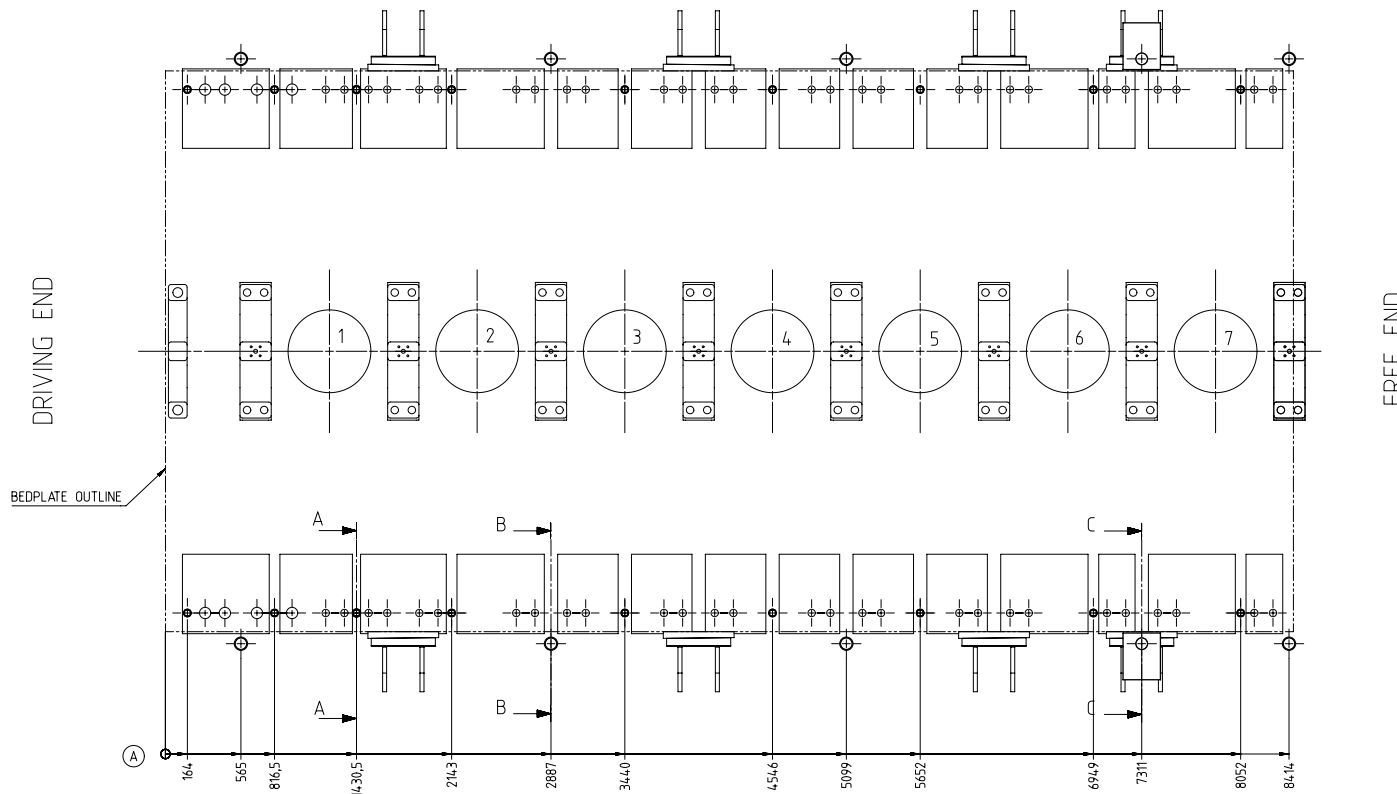
SEQ NO	QTY	Item ID	Item Name	Dimension	Standard-ID	Basic Material	Net Weight
1	18	PAAD103276	JACKING SCREW			W-FU-235-N-T	3.75
2	2	PAAD103306	SPONGE RUBBER RING				0.001
3	10	PAAD318478	TOOL ENGINE ALIGNMENT				75
4	8	PAAD318480	TOOL ENGINE ALIGNMENT				75
5	2	PAAD318479	SUPPORT PLATE				



Prod.	7 X62DF-1.1		7 X62DF-2.1						
Change History									
	A	sna102	mhu019	20.12.2022	CNAA002473	See corresponding ChangeNotice	-	-	
	-	dki021	mhu019	15.03.2021		-	-	-	
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Approved	Activity Code	E

	TOOL ENGINE ALIGNMENT
--	-----------------------

Bill Of Material		Dimension						
Copyright Winterthur Gas & Diesel Ltd. All rights reserved. By taking possession of the document the recipient recognizes and honours these rights. Neither the whole nor any part of this document 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.	Units	[m] [kg]	Basic Material	Net Weight	75			
	Main Design	Yes	Design Group	9710-01	Q-Code XXXXX	Standard	WDS	
	Qty per	Engine	A4	Item ID	PAAD377117		BOM Page/s	01/01



CAUTION

Risk:
Tool and/or bedplate damage

Countermeasure:
Avoid overloading of jacking screws and/or bedplate areas by observing the appropriate engine alignment/ assembly procedure as follows:

- Lift the engine into the engine room and place it on levelled, temporary blocks, underneath the bedplate beside the jacking screws.
- Screw in all jacking screws until touching the foundation top plate (the full number of jacking screws must be used)
- Apply hydraulic jacks to the protruding bedplate ribs nearby the jacking screws as indicated in the drawing.
- Remove the temporary blocks by slightly lifting the engine with the hydraulic jacks.
- Start with the engine alignment by means of jacking screws. Before turning a jacking screw, reduce its load by use of the hydraulic jacks. Any height adjustment must be performed in small steps - no more than 1 mm per step (equals to 1/2 screw turn, based on 2 mm thread pitch). Changes in height larger than the maximum allowance (1 mm) require a gradual process where all jacking screws are successively adjusted in stages, to ensure the best possible load distribution.

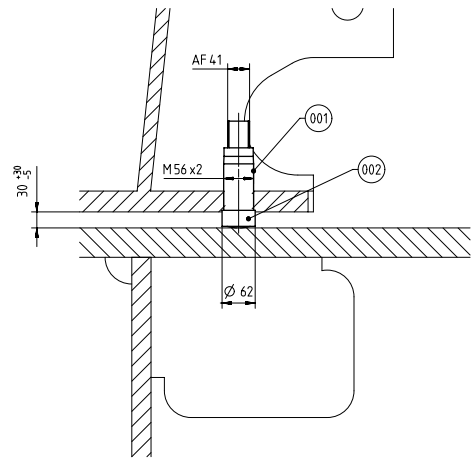
DRIVING END

FREE END

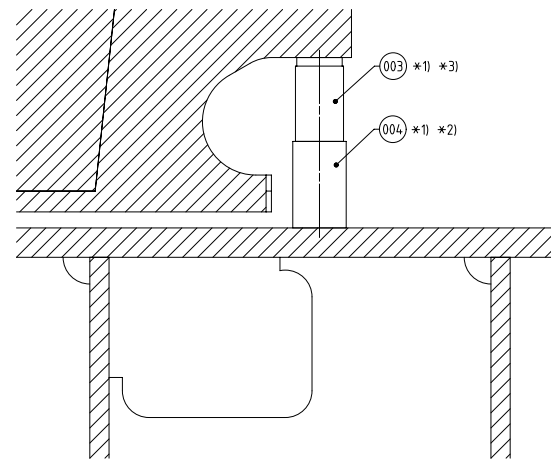
Remarks

- *1) To be provided by the shipyard.
- *2) Height depending on the requirement (chock thickness in correlation with maximum permissible extension of the hydraulic jack).
- *3) Hydraulic jack proposal
Type: Enerpac RCS-1002
Load at 700 bar: 880 kN

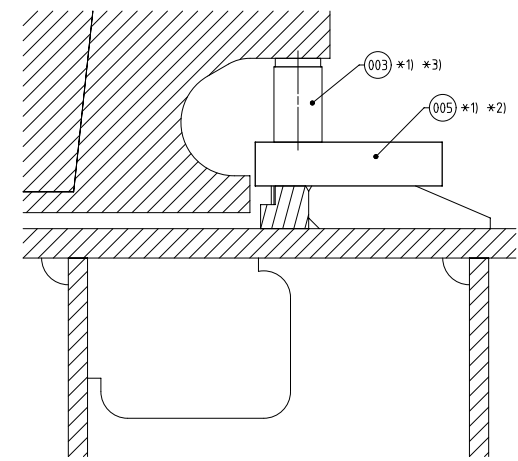
SECTION A-A $\odot 90^\circ$
SCALE 1:5



SECTION B-B $\odot 90^\circ$
SCALE 1:5

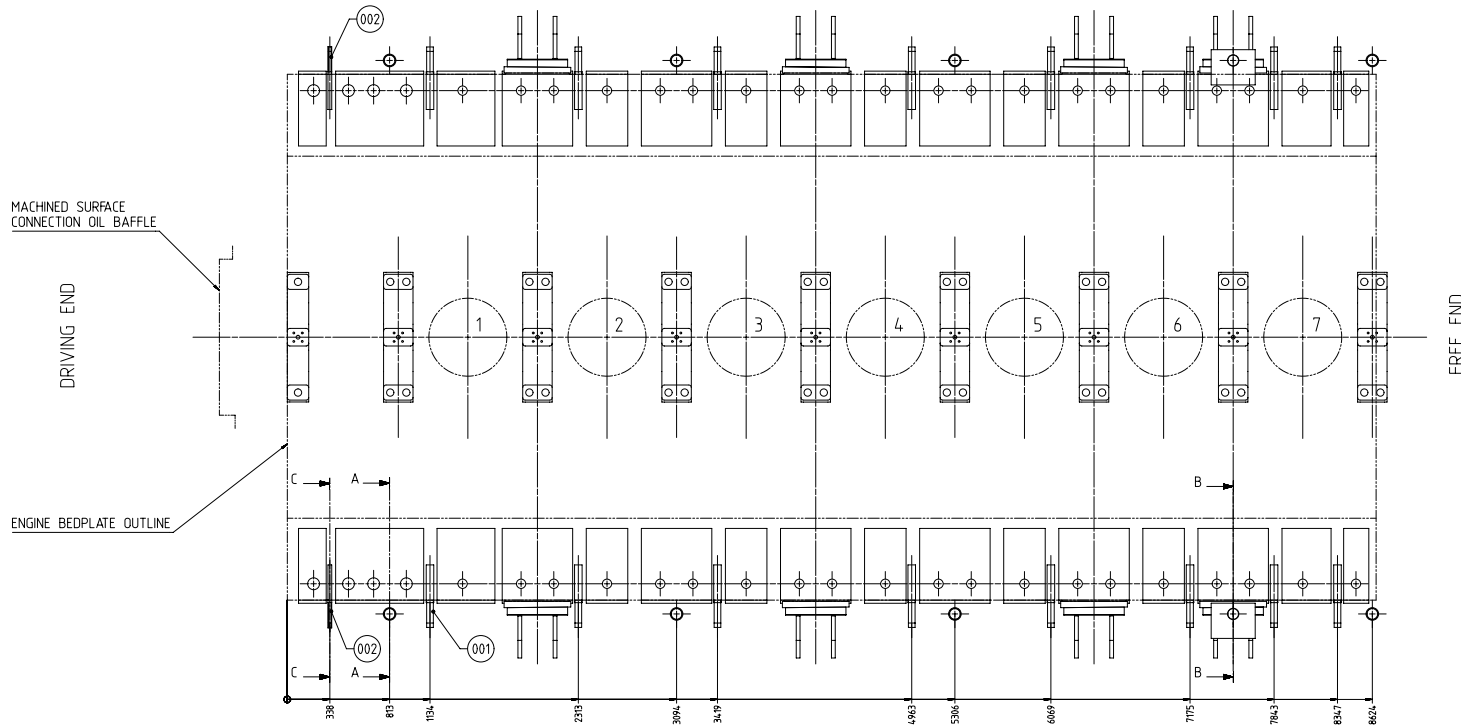


SECTION C-C $\odot 90^\circ$
SCALE 1:5



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

7X62DF-1.1 7X62DF-2.1									
Change History									
A	snd102	mhu019	20.12.2022	ENVA002473	See corresponding ChangeNotice				
-	dk0021	mhu019	15.03.2021	-					
Rev	Creator	Approver	Approval Date	Change ID	Change System	Appr. code	Activity Code	E	C
WIN GD Winterthur Gas & Diesel		TOOL ENGINE ALIGNMENT							
separate BOM available		Dimension							
Scale	1:15	NX	Units [mm]	[kg]	Basic Material			Net Weight	75.00
Copyright Winterthur Gas & Diesel 1974. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior written permission of Winterthur Gas & Diesel AG.		Copyright	Yes	Design Group	9710-01	Q-Code	XXXXX	Standard	WDS
DRY per		Engine	A1	Item ID	PAAD377117		Drawing Page	1/1	



CAUTION

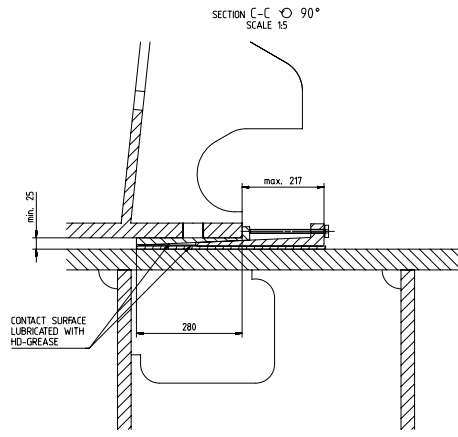
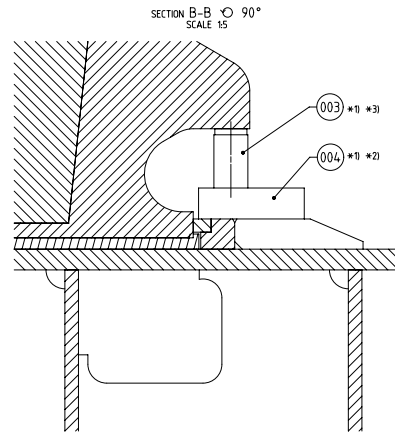
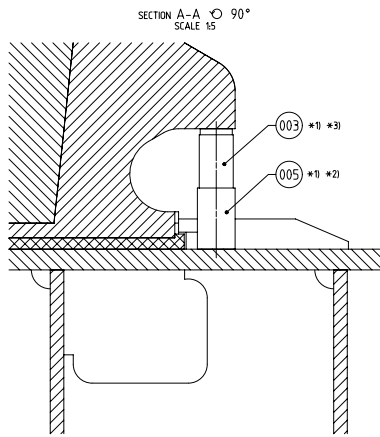
Risk:
Tool and/or bedplate damage

Countermeasure:
Avoid overloading of bedplate areas by observing the appropriate engine alignment/assembly procedure as follows:

- Insert wedges and/or shims in all indicated positions.
- Lift the engine into the engine room and place it on levelled wedges and/or shims (wedges or shims must be inserted as deep as possible below the bedplate to ensure that the support point is as close as possible at the engine monoblock column).
- Apply hydraulic jacks to the protruding bedplate ribs nearby the relevant wedge and/or shim as indicated in the drawing.
- Start with the engine alignment by means of wedges and/or shims. Before adjusting the height of wedges and/or shims lift the engine by the hydraulic jacks. Any height adjustment must be performed in small steps - no more than 1 mm per step. Changes in height larger than the maximum allowance (1mm) require a gradual process where all wedges and/or shims are successively adjusted in stages, to ensure the best possible load distribution.

Remarks

- *1) To be provided by the shipyard.
- *2) Height depending on the requirement (check thickness in correlation with maximum permissible extension of the hydraulic jack).
- *3) Hydraulic jack proposal
Type: Enerpac RCS-1002
Load at 700 bar: 880 kN



ITEM	QTY	Part No.	Description	Material	Weight (kg)
8	005	PAAD3184-80	SUPPORT BLOCK		
2	004	PAAD3184-79	SUPPORT PLATE		
10	003	PAAD3184-78	HYDRAULIC JACK		
2	002	107424-344-200	WEDGE	NARROW TYPE 107424-344	3,36
16	001	107245-895-200	WEDGE	107245-895	7,51

PER ENGINE	Material ID	Material Name	Quantity	Standard or Drawing	Material Standard	Weight (kg)
					XXXXXX	
					ISO/JIS	H

Material	Number	Draw date	Number	Draw date	Number	Draw date

WINGD
W7X62
W7X62-B
W7X62DF

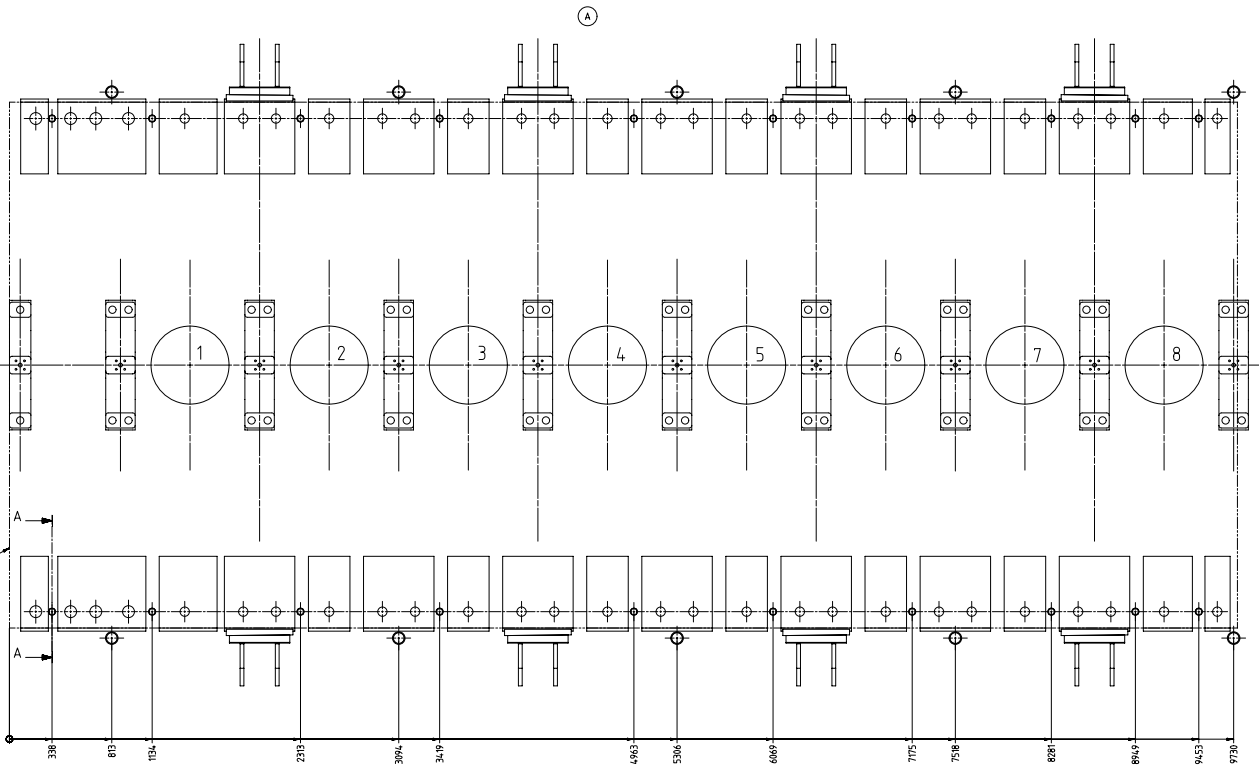
TOOL ENGINE ALIGNMENT
Alignment with Wedges
Werkzeug Motorausrichtung

END FLANGE OF CRANKSHAFT COUPLING

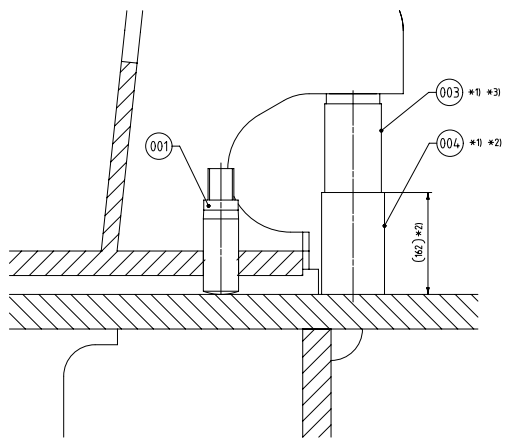
DRIVING END

MACHINED SURFACE CONNECTION OIL BAFFLE

FREE END



SECTION A-A 90°
SCALE 1:3



CAUTION

Risk:
Tool and/or bedplate damage

Countermeasure:
Avoid overloading of jacking screws and/or bedplate areas by observing the appropriate engine alignment/assembly procedure as follows:

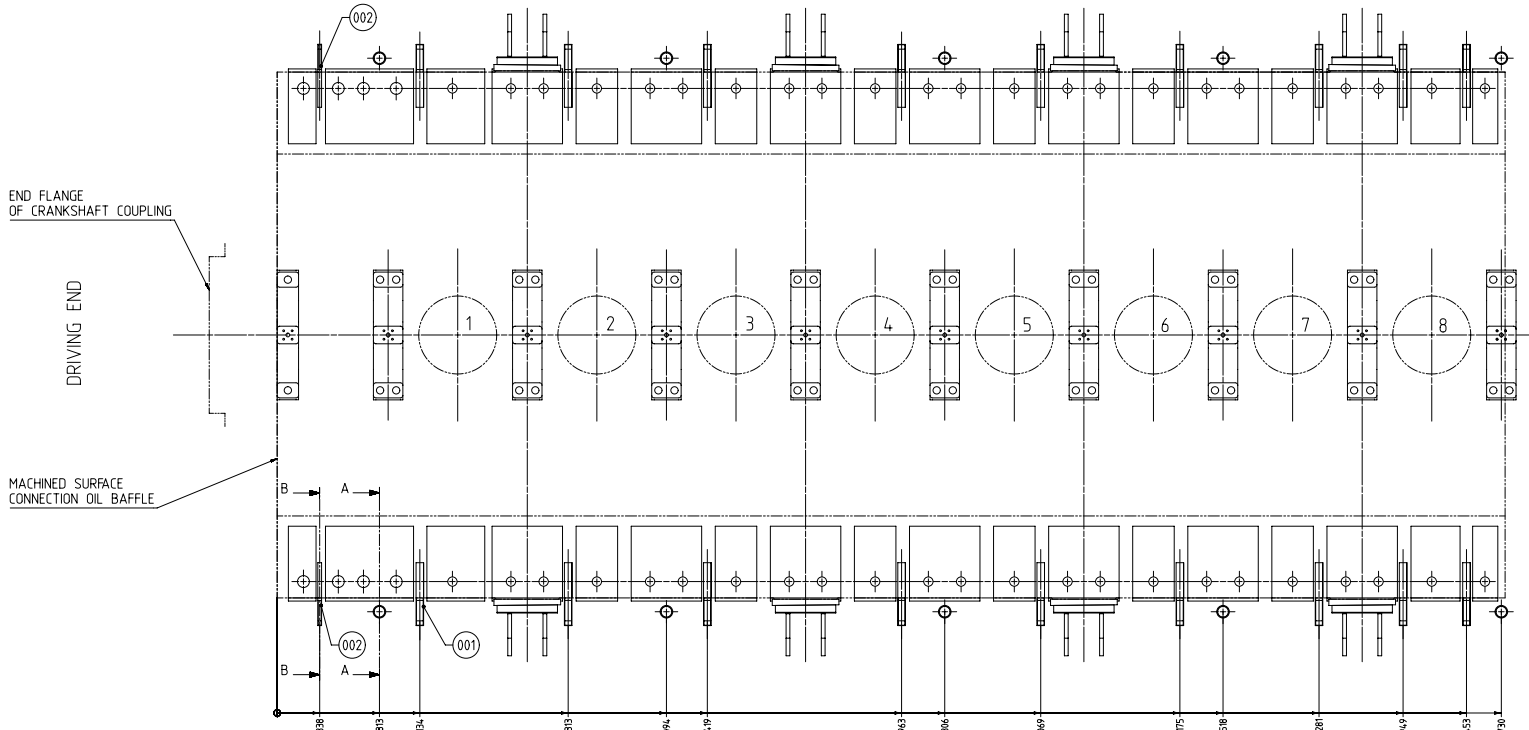
- Lift the engine into the engine room and place it on levelled, temporary blocks, underneath the bedplate beside the jacking screws.
- Screw in all jacking screws until touching the foundation top plate (the full number of jacking screws must be used).
- Apply hydraulic jacks to the protruding bedplate ribs nearby the jacking screws as indicated in the drawing.
- Remove the temporary blocks by slightly lifting the engine with the hydraulic jacks.
- Start with the engine alignment by means of jacking screws. Before turning a jacking screw, reduce its load by use of the hydraulic jacks. Any height adjustment must be performed in small steps - no more than 1 mm per step (equals to 1/2 screw turn, based on 2 mm thread pitch). Changes in height larger than the maximum allowance (1 mm) require a gradual process where all jacking screws are successively adjusted in stages, to ensure the best possible load distribution.

Remarks

- *1) To be provided by the shipyard.
- *2) Height depending on the requirement (check thickness in correlation with maximum permissible extension of the hydraulic jack).
- *3) Hydraulic jack proposal
Type: Enerpac RCS-1002
Load at 700 bar: 880 kN

Part No.	Material	Material Name	Quantity	Unit	Weight
10	004	FRAD3B480	SUPPORT BLOCK		
10	003	FRAD3B478	HYDRAULIC JACK		
20	001	FRAD103276	JACKING SCREW	DAAD032454	W-FU-Z5-N-T

		TOOL ENGINE ALIGNMENT Alignment with Screws Werkzeug Motorausrichtung	
--	--	--	--



CAUTION

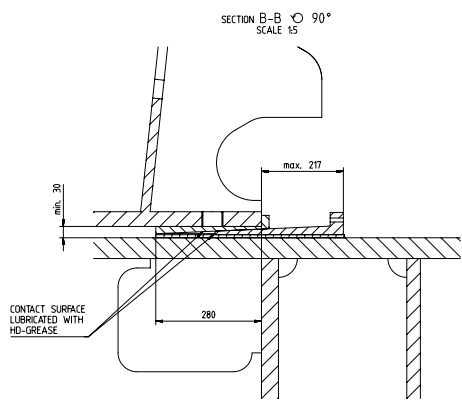
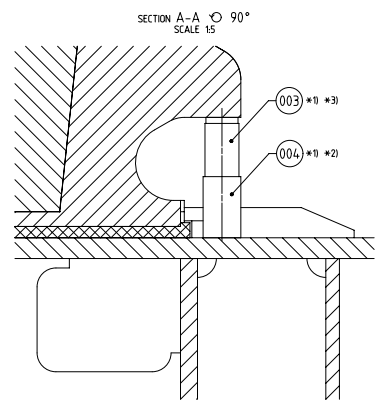
Risk:
Tool and/or bedplate damage

Countermeasure:
Avoid overloading of bedplate areas by observing the appropriate engine alignment/assembly procedure as follows:

- Insert wedges and/or shims in all indicated positions.
- Lift the engine into the engine room and place it on levelled wedges and/or shims (wedges or shims must be inserted as deep as possible below the bedplate to ensure that the support point is as close as possible at the engine monoblock column).
- Apply hydraulic jacks to the protruding bedplate ribs nearby the relevant wedge and/or shim as indicated in the drawing.
- Start with the engine alignment by means of wedges and/or shims. Before adjusting the height of wedges and/or shims lift the engine by the hydraulic jacks. Any height adjustment must be performed in small steps - no more than 1 mm per step. Changes in height larger than the maximum allowance (1mm) require a gradual process where all wedges and/or shims are successively adjusted in stages, to ensure the best possible load distribution.

Remarks

- *1) To be provided by the shipyard.
- *2) Height depending on the requirement (check thickness in correlation with maximum permissible extension of the hydraulic jack).
- *3) Hydraulic jack proposal
Type: Enerpac RCS-1002
Load at 700 bar: 880 kN



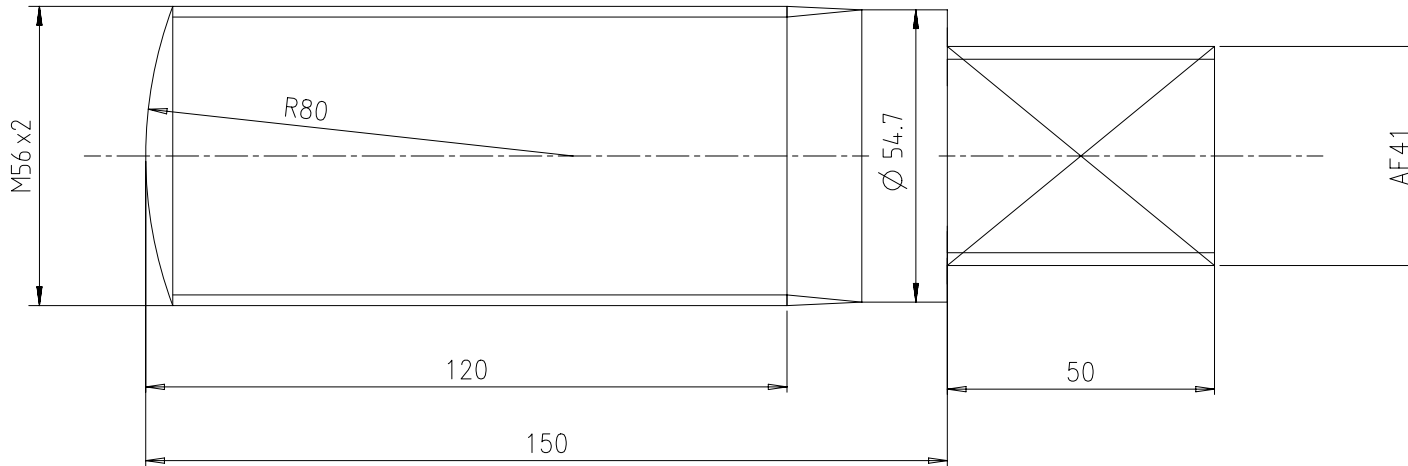
ITEM	QTY	DESCRIPTION	UNIT	WEIGHT
10	004	FRAD384-80 SUPPORT BLOCK		
10	003	FRAD384-78 HYDRAULIC JACK		
2	002	WEDGE NARROW TYPE 107424-346		3,36
16	001	WEDGE 107245-895-200		7,51

PER ENGINE	Material ID	Material Name	Drawing No. (Drawing)	Standard or D-Code	Basic Material Drawing Standard	Weight (kg)	Unit
					XXXXXX		H
					ISO, JIS		

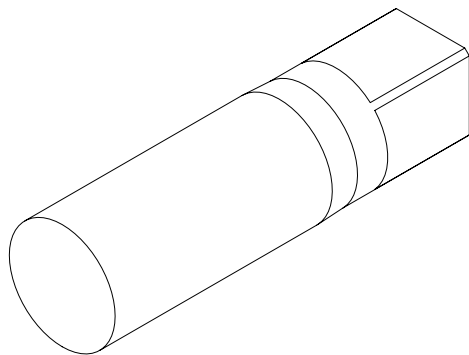
Material	Number	Draw date	Number	Draw date	Number	Draw date	Number	Draw date
WNG	WBX62		WBX62-B		WBX62DF			

TOOL ENGINE ALIGNMENT
Alignment with Wedges
Werkzeug Motorausrichtung

ROLLED THREAD



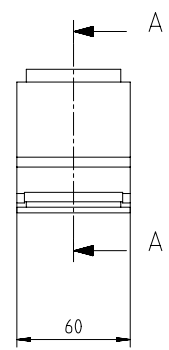
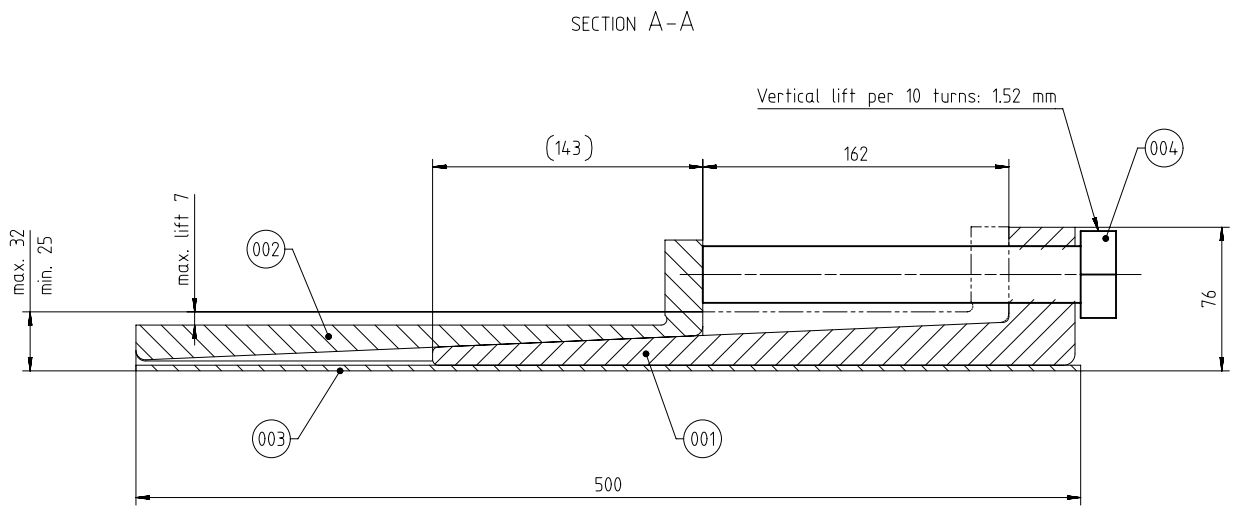
M 1:2



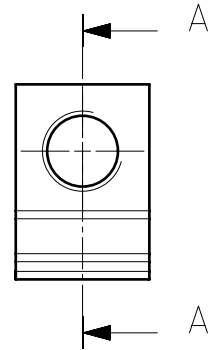
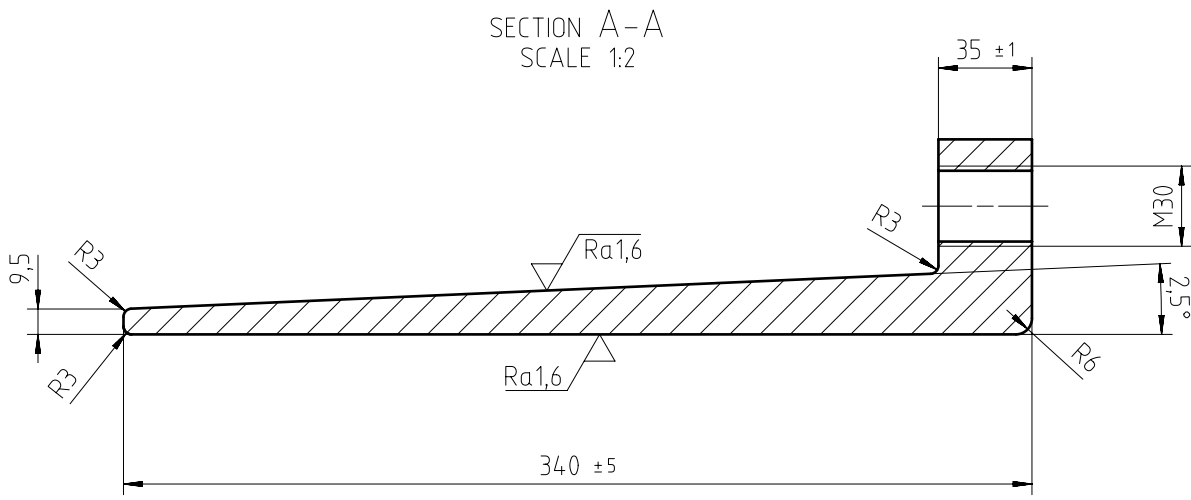
Free space for lic.									Q-Code XXXXXX	Main Drw.			
									Standard ISO; JIS				
Modif.	(A)	EAAD084385	07.04.2015	(B)	EAAD095725	18.01.2021							
		Number	Drawn date		Number	Drawn date		Number	Drawn date	Number	Drawn date		
 Winterthur Gas & Diesel		Product W-2S		JACKING SCREW Abdrueckschraube									
Units	mm kg	NX			Basic Material	W-FU-235-N-T			Net Weight 3,75				
SURFACE PROTECTION SEE GROUP 0344		Made	22.10.2012 asex06 A.Sekulic		Scale	1:2		Size	A3	Page	1/1	Material ID	PAAD103276
TOLERANCING PRINCIPLE ISO8015		Chkd	15.11.2012 mhu019 Hug		Design Group		9710		Drawing ID	DAAD032454		Rev.	B
GENERAL TOLERANCES ACCORDING TO ISO2768-mK		Appd	29.11.2012 wwr001 Wroblewski										

Approved

PD - PRODUCTION DRAWING - Confidential



1	004	015.151.048.701	HEXAGON HEAD SCREW M30x200	ISO 4017	88	1,21						
1	003	107.245.898.001	PLATE	107.245.898	W-FU-235-JR	1,0						
1	002	107.246.894.001	KEY	107.246.894	W-FU-235-JR	3,0						
1	001	107.246.895.001	KEY	107.246.895	W-FU-235-JR	3,3						
QTY	SEQ NO	Material ID	Material Name	Dimension, Occ	Standard or Drawing	Basic Material Material Standard	Weight GR./NET					
Free space for ill.						Q-Code XXXXXX Standard ISO; JIS	Main Drw.					
Modif.	B	EAAD014493	05.02.2002	C	7-73552	19.10.2009	D	EAAD084635	27.06.2013	E	EAAD091472	11.11.2019
	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date		
			Product W-2S		WEDGE Schraeger Keil							
Units	mm	kg	NX	Basic Material		Net Weight 8,51						
SURFACE PROTECTION SEE GROUP 0344			Made	10.07.1996	D.Scheffler		Scale	1:2	Size	A2	Page	1/1
TOLERANCING PRINCIPLE ISO8015			Chkd			Design Group			Material ID	107.245.895.200		
GENERAL TOLERANCES ACCORDING TO ISO2768-mK			Appd	30.08.1996	WCH001 Service User		9710-01	Drawing ID	107.245.895		Rev.	E



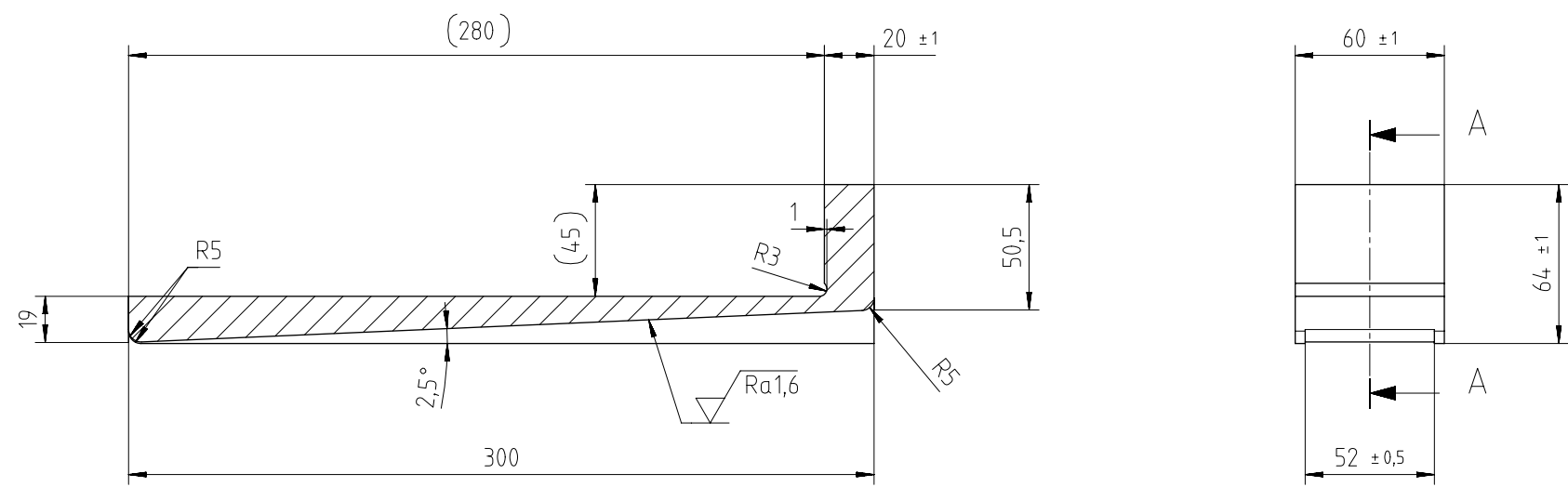
Ra50 (
 Ra1,6
)

Free space for lic.								Q-Code XXXXXX	Main Drw.
								Standard ISO; JIS	
Modif.	A	7-73.552	19.10.2009	B	EAAD091472	04.11.2019			
		Number	Drawn date		Number	Drawn date	Number	Drawn date	Number
 Winterthur Gas & Diesel			Product W-2S			KEY Keil			
Units	mm kg	NX		Basic Material		W-FU-235-JR		Net Weight 3,3	
SURFACE PROTECTION SEE GROUP 0344			Made	16.05.2001 D.ADMINISTRATOR		Scale	1:2		Design Group 9710-01
TOLERANCING PRINCIPLE ISO8015			Chkd			Size	A3		
GENERAL TOLERANCES ACCORDING TO ISO2768-mK			Appd	27.12.2001 WDMS2		Page	1/1		Drawing ID 107.246.895
					Material ID	107.246.895.001			
					Rev.	B			

1 2 3 4 5 6 7 8

A
B
C
D
E
F

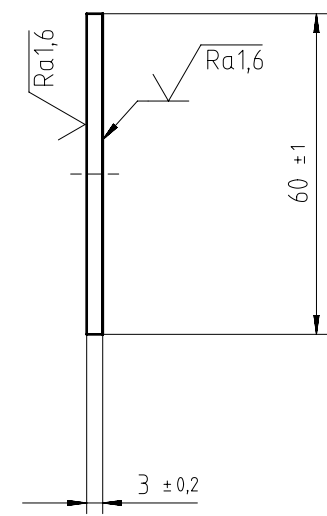
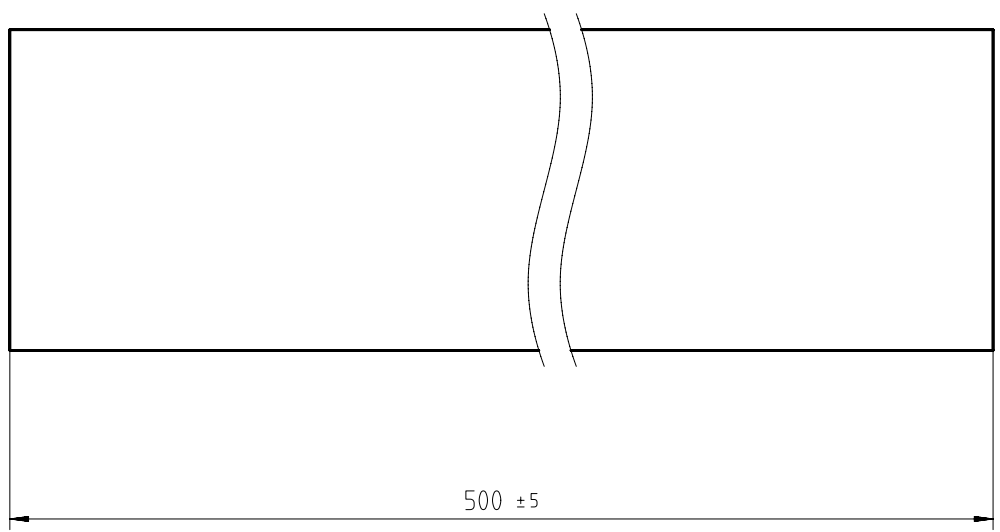
SECTION A-A
SCALE 1:2



$\sqrt{Ra50}$ ($\sqrt{Ra1,6}$)

Free space for lic.								Q-Code XXXXXX	Main Drw.					
								Standard ISO; JIS						
Modif.	A	7-73.552	19.10.2009	B	EAAD091472	05.11.2019								
		Number	Drawn date		Number	Drawn date	Number	Drawn date	Number	Drawn date				
 Winterthur Gas & Diesel			Product W-2S			KEY Keil								
Units	mm kg	NX		Basic Material			W-FU-235-JR	Net Weight 3						
SURFACE PROTECTION SEE GROUP 0344			Made	16.05.2001	D.ADMINISTRATOR		Scale	1:2	Size	A3	Page	1/1	Material ID	107.246.894.001
TOLERANCING PRINCIPLE ISO8015			Chkd				Design Group	9710-01		Drawing ID	107.246.894		Rev.	B
GENERAL TOLERANCES ACCORDING TO ISO2768-mK			Appd	27.12.2001	WDMS2									

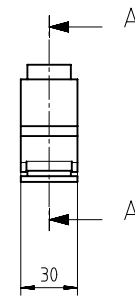
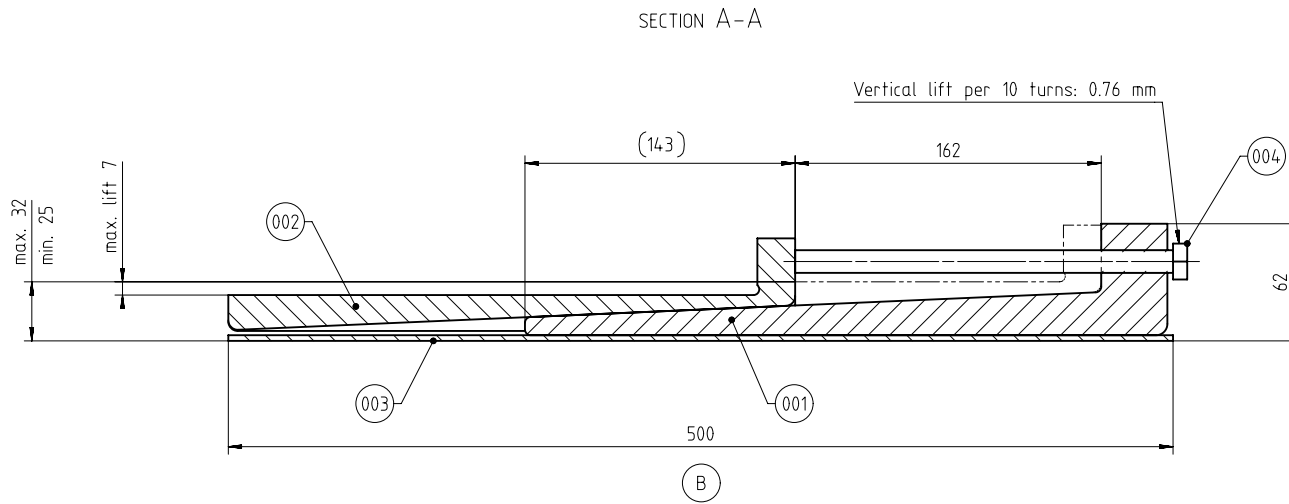
Approved
DIM - DIMENSIONAL DRAWING - Confidential



$\sqrt{Ra50}$ ($\sqrt{Ra1,6}$)

Free space for lic.								Q-Code XXXXXX	Main Drw.					
								Standard ISO; JIS						
Modif.	A	EAAD014305	11.09.1996	B	EAAD091472	05.11.2019								
		Number	Drawn date		Number	Drawn date	Number	Drawn date	Number	Drawn date				
 Winterthur Gas & Diesel		Product W-2S		PLATE Blech										
Units	mm kg	NX			Basic Material	W-FU-235-JR			Net Weight 1					
SURFACE PROTECTION SEE GROUP 0344		Made	11.07.1996 D. Schaeffler		Scale	1:1		Size	A3	Page	1/1	Material ID	107.245.898.001	
TOLERANCING PRINCIPLE ISO8015		Chkd			Design Group	9710-01		Drawing ID	107.245.898			Rev.	B	
GENERAL TOLERANCES ACCORDING TO ISO2768-mK		Appd	22.07.1996 MLU011 Lüthi											

UID - DIMENSIONAL DRAWING - Confidential



QTY	SEQ NO	Material ID	Material Name	Dimension, Occ	Standard or Drawing	Basic Material Material Standard	Weight GR./NET
1	004	015.151.040.701	HEXAGON HEAD SCREW M12x200		ISO 4017	88	0,156
1	003	FAAD34.3262	PLATE		DAAD1234.06	W-FU-235-JR	0,4
1	002	107.424.348.001	KEY		107.424.348	W-FU-235-JR	1,5
1	001	107.424.347.001	KEY		107.424.347	W-FU-235-JR	1,7

Modif.	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date
A	EAAD084635	27.06.2013	B	EAAD091472	06.11.2019			

WINGD
Winterthur Gas & Diesel

Product
W-2S

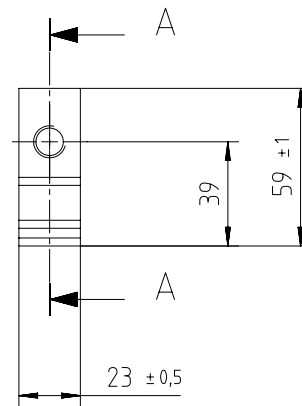
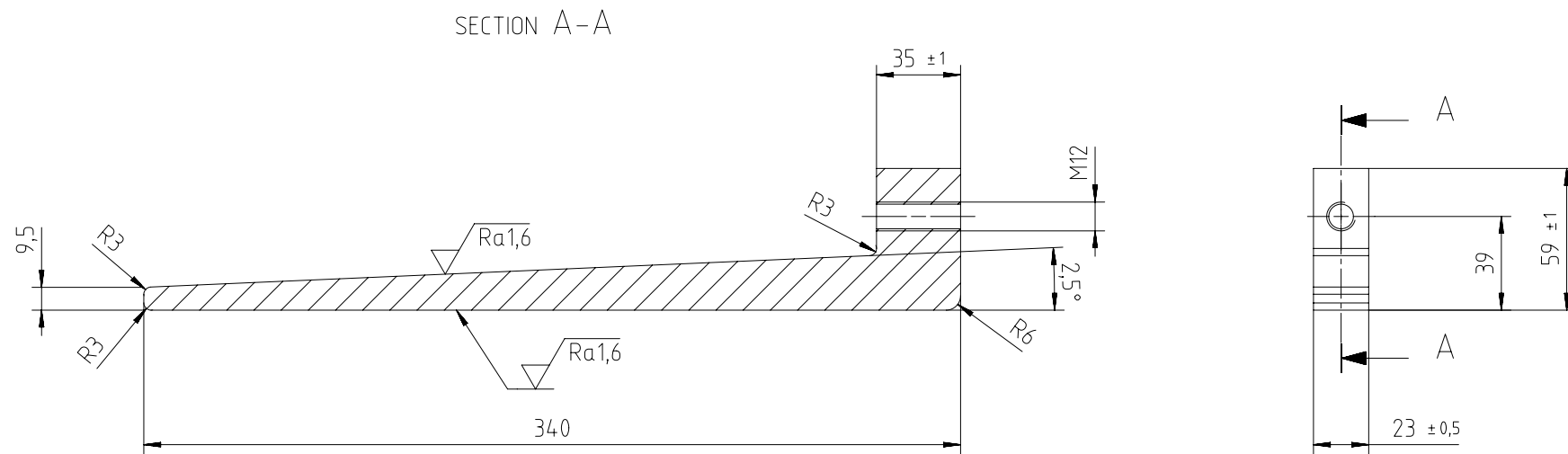
WEDGE
Schraeger Keil

Units mm kg NX

Basic Material W-FU-235-JR

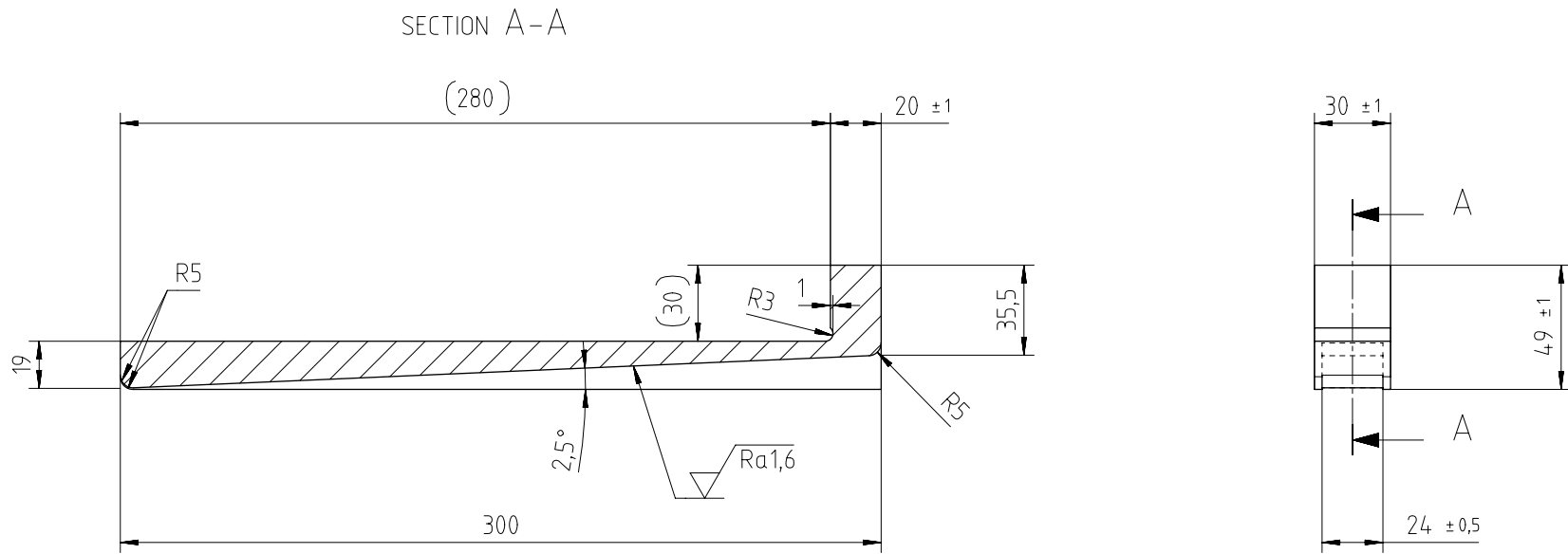
Net Weight 3,8

SURFACE PROTECTION SEE GROUP 0344	Made	05.08.2009	jba029	J.BAUMANN	Scale	1:2	Size	A2	Page	1/1	Material ID	107.424.346.200
TOLERANCING PRINCIPLE ISO8015	Chkd				Design Group		Drawing ID	9710-01				
GENERAL TOLERANCES ACCORDING TO ISO2768-mK	Appd	28.09.2009	JBA029	Baumann								Rev. B



$\sqrt{Ra50}$ ($\sqrt{Ra1,6}$)

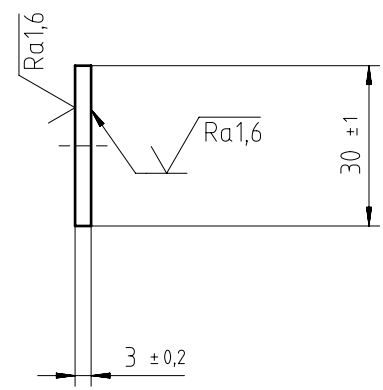
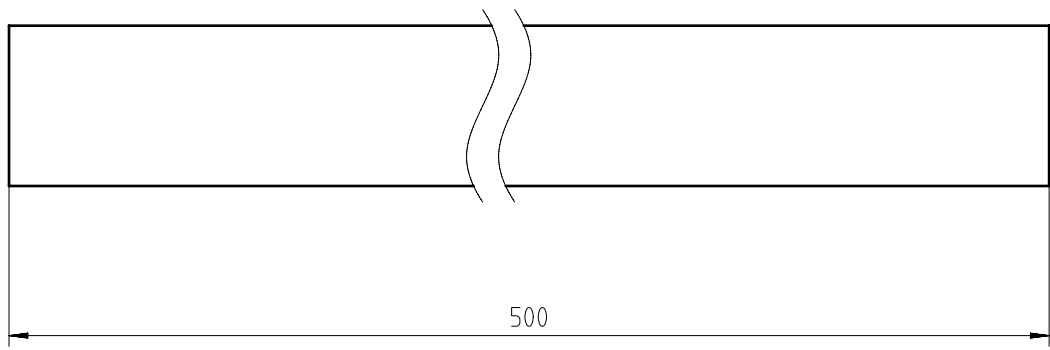
Free space for lic.	Q-Code XXXXXX								Main Drw.					
	Standard ISO; JIS													
Modif.	A	EAAD091472	05.11.2019											
	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number					
				Product W-2S		KEY								
						Keil								
Units	mm kg	NX		Basic Material W-FU-235-JR				Net Weight 1,7						
SURFACE PROTECTION SEE GROUP 0344		Made	05.08.2009 J.BAUMANN		Scale	1:2		Size	A3	Page	1/1	Material ID	107.424.347.001	
TOLERANCING PRINCIPLE ISO8015		Chkd			Design Group		9710-01		Drawing ID		107.424.347		Rev.	A
GENERAL TOLERANCES ACCORDING TO ISO2768-mK		Appd	28.09.2009 JBA029 Baumann											



$\sqrt{Ra50}$ ($\sqrt{Ra1,6}$)

Free space for lic.									Q-Code XXXXXX	Main Drw.					
									Standard ISO; JIS						
Modif.	A	EAAD091472	06.11.2019	○	○	○	○	○	○	○					
	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date					
				Product W-2S		KEY Keil									
Units	mm kg	NX			Basic Material W-FU-235-JR				Net Weight 1,5						
SURFACE PROTECTION SEE GROUP 0344		Made	05.08.2009 J.BAUMANN		Scale	1:2		Size	A3	Page	1/1		Material ID	107.424.348.001	
TOLERANCING PRINCIPLE ISO8015		Chkd			Design Group		9710-01		Drawing ID		107.424.348		Rev.	A	
GENERAL TOLERANCES ACCORDING TO ISO2768-mK		Appd	28.09.2009 JBA029 Baumann												

UID - DIMENSIONAL DRAWING - Confidential



$\sqrt{Ra50}$ $\left(\sqrt{Ra1,6} \right)$

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	
		Product W-2S		PLATE Blech					
Units	mm kg	NX		Basic Material		W-FU-235-JR		Net Weight 0,4	
SURFACE PROTECTION SEE GROUP 0344		Made	06.11.2019 dki021 DH.Kim		Scale	1:1		Size A3 Page 1/1 Material ID PAAD343262	
TOLERANCING PRINCIPLE ISO8015		Chkd	26.11.2019 jpi101 Pickup		Design Group		9710-01 Drawing ID DAAD123406 Rev. -		
GENERAL TOLERANCES ACCORDING TO ISO2768-mK		Appd	02.12.2019 mhu019 Hug						

UID - DIMENSIONAL DRAWING - Confidential

MIDS - TOOL-ENGINE-ALIGNMENT (DG9710-01)

WinGD X62DF-1.1/-2.1

TRACK CHANGES

DATE	SUBJECT	DESCRIPTION
2021-03-16	DRAWING SET	First web upload
2021-05-20	DAAD032454	Jacking Screw drg – new revision
2023-01-17	PAAD376986 PAAD377117	Main drgs – new revision
2023-10-19	PAAD325788- PAAD167768a PAAD325977- PAAD103372b PAAD326134- PAAD242995a PAAD326249- PAAD322052a	New drawings added

DISCLAIMER

© Copyright by Winterthur Gas & Diesel Ltd.

All rights reserved. No part of this document may be reproduced or copied in any form or by any means (electronic, mechanical, graphic, photocopying, recording, taping or other information retrieval systems) without the prior written permission of the copyright owner.

THIS PUBLICATION IS DESIGNED TO PROVIDE AN ACCURATE AND AUTHORITATIVE INFORMATION WITH REGARD TO THE SUBJECT-MATTER COVERED AS 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 CAN NOT ACCEPT ANY RESPONSIBILITY OR LIABILITY FOR ANY EVENTUAL ERRORS OR OMISSIONS IN THIS BOOKLET 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.