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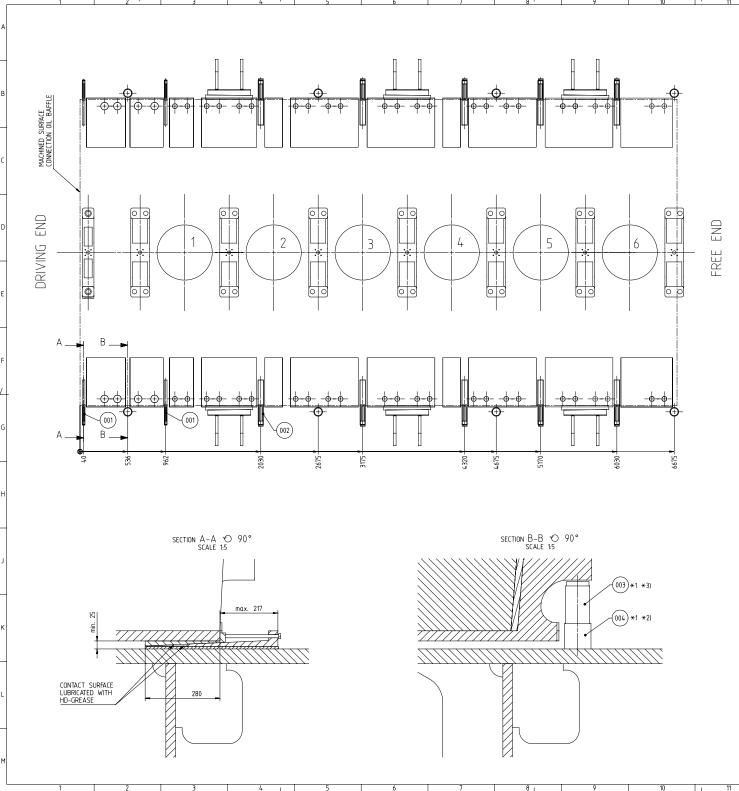
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3

SEQ NO	QTY	/ Item ID		Item Name				Dimension	Standard-ID	Basic Material			Net Weight
1	4	107.42	4.346.200	WEDGE				NARROW TYPE		W-FU-235-JR			3.8
2	10	107.24	5.895.200	WEDGE									8.51
3	8	PAAD3	18478	HYDRAULIC	JACK								
4	8	PAAD3	18480	SUPPORT BL	OCK								
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cons copie	truction, ed in any	fabrication, i way nor mad	marketing or an e accessible to	sed in any way for y other purpose nor third parties without r Gas & Diesel Ltd.	Otv	Engine	A4	ltem ID	PAAD37		BOM Page/s		1/01



### 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.

A ssh102 mhu019 19.01.2022 CNAA001119 Drawing Updated

separate BOM available Dimension Scele 1:15 + + + NX Units [mm] [kg] Basic Material

Qty

TOOL ENGINE ALIGNMENT Alignment with Wedges

> Yes Design Group

Engine A1 Iten

Net Weight 88.50

1/1

9710-01 Q-Code XXXXX Standard WDS

PAAD373621 Drawing Page/s

dki021 mhu019 26.02.2021

Winterthur Ges & Diesel

### Remarks

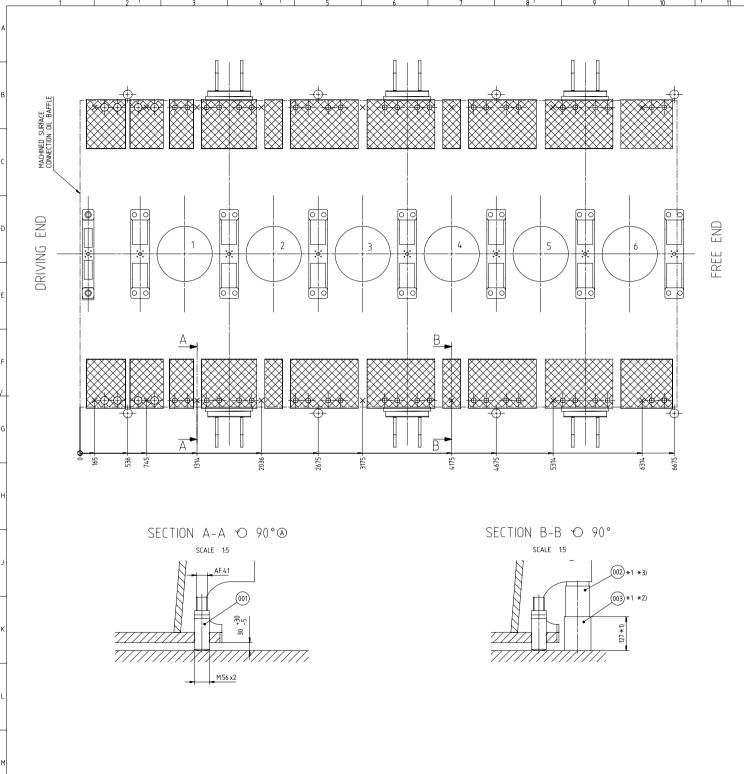
SURFACE PROTECTION SEE GROUP 0344

GENERAL TOLERANCES ACCORDING TO ISO2768-mil

Tolerancing principle isobots

\*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

SEQ NO	QTY	Item ID		Item Name				Dimension	Standard-ID	Basic Material			Net Neight
001	16	PAAD1	03276	JACKING SCF	REW					W-FU-235-N-T			3.75
002	8	PAAD3	318478	HYDRAULIC J	IACK								
003	8	PAAD3	318480	SUPPORT BL	OCK								
	Ů	170000											
Prod.			6 X62-S	2.0	6	X62DF-M-	S1.0		6 X62DF-S2.0				
Ā			6 X62DF	-A-S1.0	6	X62DF-S1	.0						
ory													
Change History	А	npa101	mhu019	28.08.2023	CNAA004291	New Ma	ainDrawi	ing updated				4	3
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	Rev.	Creator	Approver	Approval Date	Change ID	Change S	ynopsis			Approved	Activity Code	E	С
	V	Л		50	TOOL	ΕN	GIN		GNMENT	-			
			ır Gas &		Alignment	with J	ackin	g Screws					
<u> </u>		Rill (	Of Materia	al	Dimension			-					
Copyr Bv t	ight <b>Win</b> aking pr	terthur Gas	s & Diesel Ltd	All rights reserved. ment the recipient	Units	[m] [kg]	Basic Mat	terial			Net Weight		60
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### 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.
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### Remarks

SURFACE PROTECTION SEE GROUP 0344

ENERAL TOLERANCES ACCORDING TO ISO2768-m

Tolerancing principle iso8015

\*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

> 6X62-S2 6X62DF-A-S1

A npa101

Winterthur Gas & Diesel

separate BOM available Dimension

icale 1:15 🕀 🗣 NX Units [mm] [kg] Basic Material

6X62DF-M-S1.0 6X62DF-S1.0

npa101 mhu019 20.01.2023 (NAA003121 Main Design/Drawing Introduced

New MainDrawing updated

TOOL ENGINE ALIGNMENT

Alignment with Jacking Screws

Yes Design

Engine A1 Item

- -

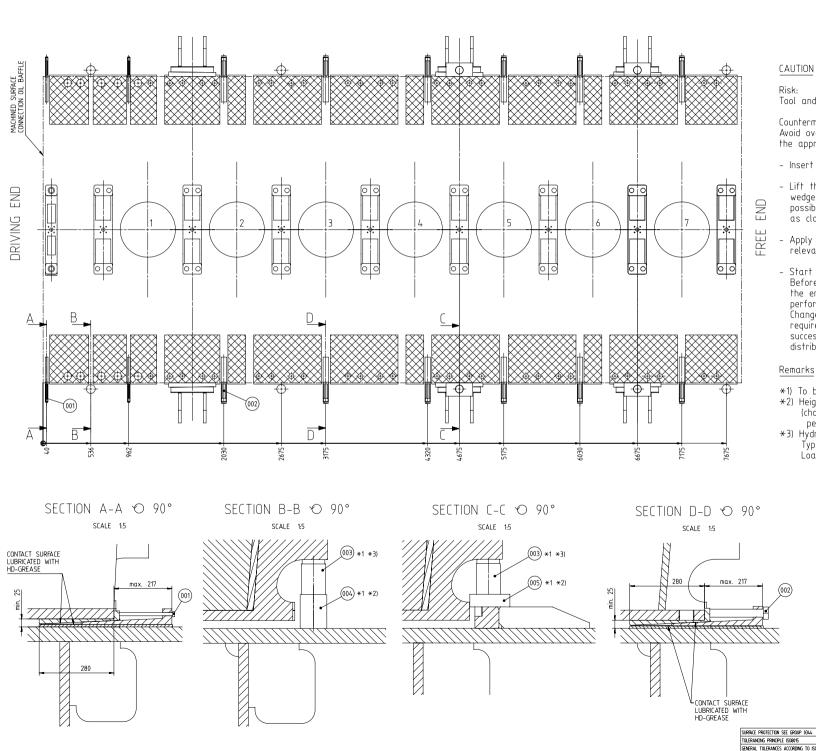
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Net Weight 60.00

9710-01 Q-Code X X M Standard WDS

PTAA054127 Drawing Page/s

SEQ NO	QTY	Item ID		Item Name				Dimension	Standard-ID		Basic Material		,	Net Weight
001	4	107.424	1.346.200	WEDGE				NARROW TYPE			W-FU-235-JR			3.8
002	12	107.24	5.895.200	WEDGE										8.51
003	10	PAAD3	18478	HYDRAULIC J	ACK									
004	6	PAAD3	18480	SUPPORT BL	ORT BLOCK									
005	4	PAAD3	18479	SUPPORT PL	ATE									
Prod.			7 X62-S2 7 X62DF		7 7	X62DF-S1 X62DF-S2								1
, Ano														
Change History														
Ch		npa101	mhu019	20.01.2023	CNAA003121		-	wing Introduced	d				-	-
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		erthur Gas		. All rights reserved.	Dimension Units	[m] [kg]	Basic Mate	rial				Net Weight	1	17.3
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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).
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7X62DF-S1.0 7X62DF-S2.0

TOOL ENGINE ALIGNMENT

Net Weight 117 3

1/1

9710-01 Q-Code XXXXX Standard WDS

PTAA052129 Drawing Page/s

npa101 mhu019 20.012023 awwo03121 Main Design/Drawing Introduced

Alignment with Wedges

Yes Group

Engine A1 Iten

### 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).

7X62-S2

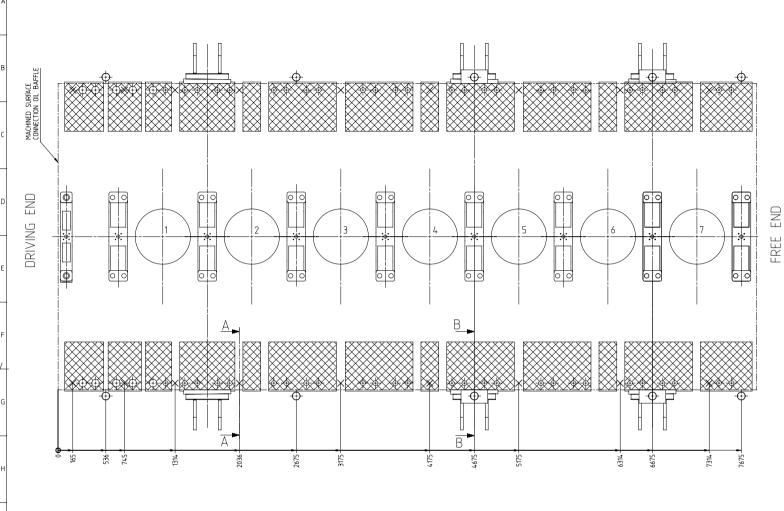
Winterthur Gas & Diesel

separate BOM available Dimension

icale 1:15 🔁 🗣 NX Units [MM] [kg] Basic Material

- \*3) Hydraulic jack proposal
  - Type: Enerpac RCS-1002 Load at 700 bar: 880 kN

SEQ NO	QTY	/ Item ID		Item Name				Dimension	Standard-ID	Basic Material		,	Net Neight
001	18	PAAD1	03276	JACKING SCF	REW					W-FU-235-N-T			3.75
002	10	PAAD	318478	HYDRAULIC	JACK								
003	6	PAAD3	318480	SUPPORT BL	OCK								
004	4	PAAD		SUPPORT PL	ATE								
004	4	PAAD	010479										
Prod.			7 X62-S 7 X62DI		7	X62DF-S1 X62DF-S2							
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Change History	A	npa101	mhu019	28.08.2023	CNAA004291			ing updated				4	3
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	IXEV.	Ciedioi	Арріочеі	Approvar Date	-	1					Activity Code	L	U
	V	VII	NC	G	TOOL	ΕN	GIN		GNMENT	-			
			r Gas &		Alignment	with: 、	Jackir	ng Screws					
$\vdash$		Bill C	Of Materia	al	Dimension								
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## CAUTION

Risk: Tool and/or bedplate damage

### Countermeasure:

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

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- 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).
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### Remarks

SURFACE PROTECTION SEE GROUP 0344

ENERAL TOLERANCES ACCORDING TO

Tolerancing principle iso8015

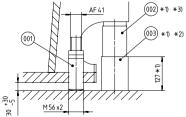
\*1) To be provided by the shipyard.

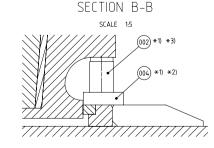
\*2) Height depending on the requirement (chock thickness in correlation with maximum

permissible extension of the hydraulic jack). \*3) Hydraulic jack proposal

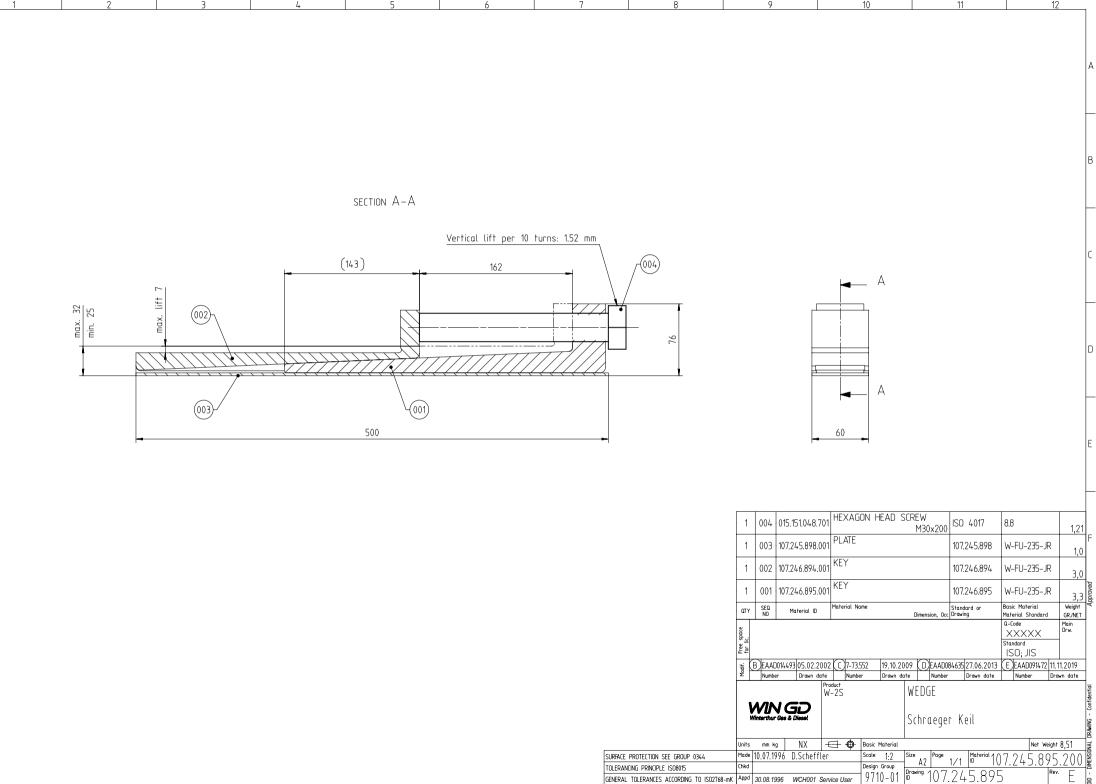
Type: Enerpac RCS-1002 Load at 700 bar: 880 kN

SECTION A-A@ scale 1:5





7X62-S2 7X62DF-A-S1 7X62DF-S1.0 7X62DF-S2.0 A npa101 New MainDrawing updated npa101 mhu019 20.01.2023 CNAA003121 Main Design/Drawing Introduced - | -TOOL ENGINE ALIGNMENT Winterthur Gas & Diesel Alignment with: Jacking Screws separate BOM available Dimension icale 1:15 🕀 🗣 NX Units [mm] [kg] Basic Material Net Weight 67.50 Yes Group 9710-01 Q-Code X X M Standard WDS PTAA052984 Drawing Page/s Engine A1 Item 1/1



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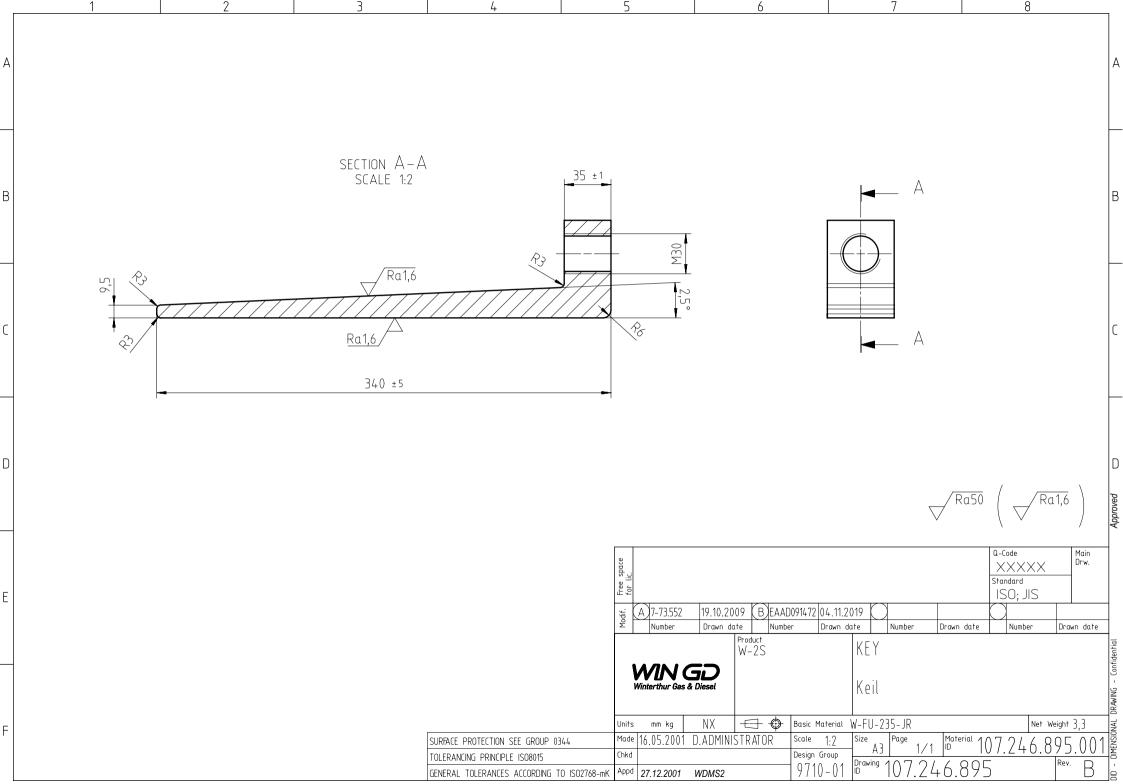
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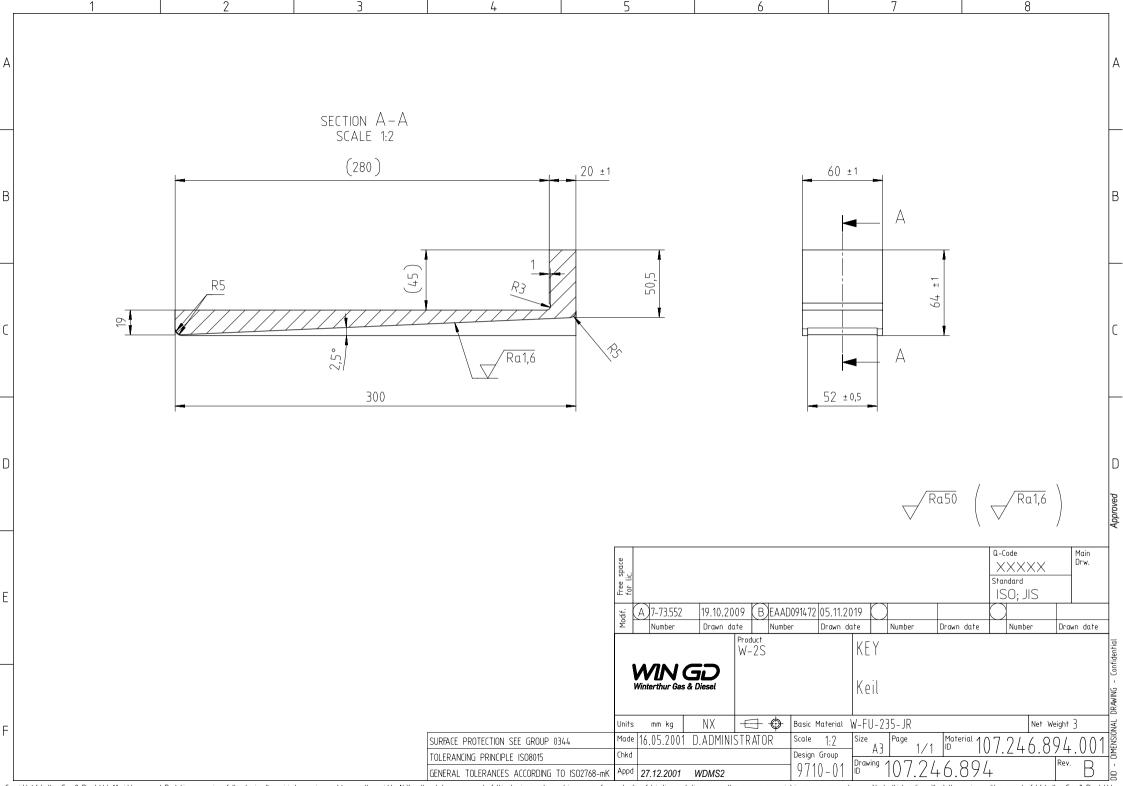
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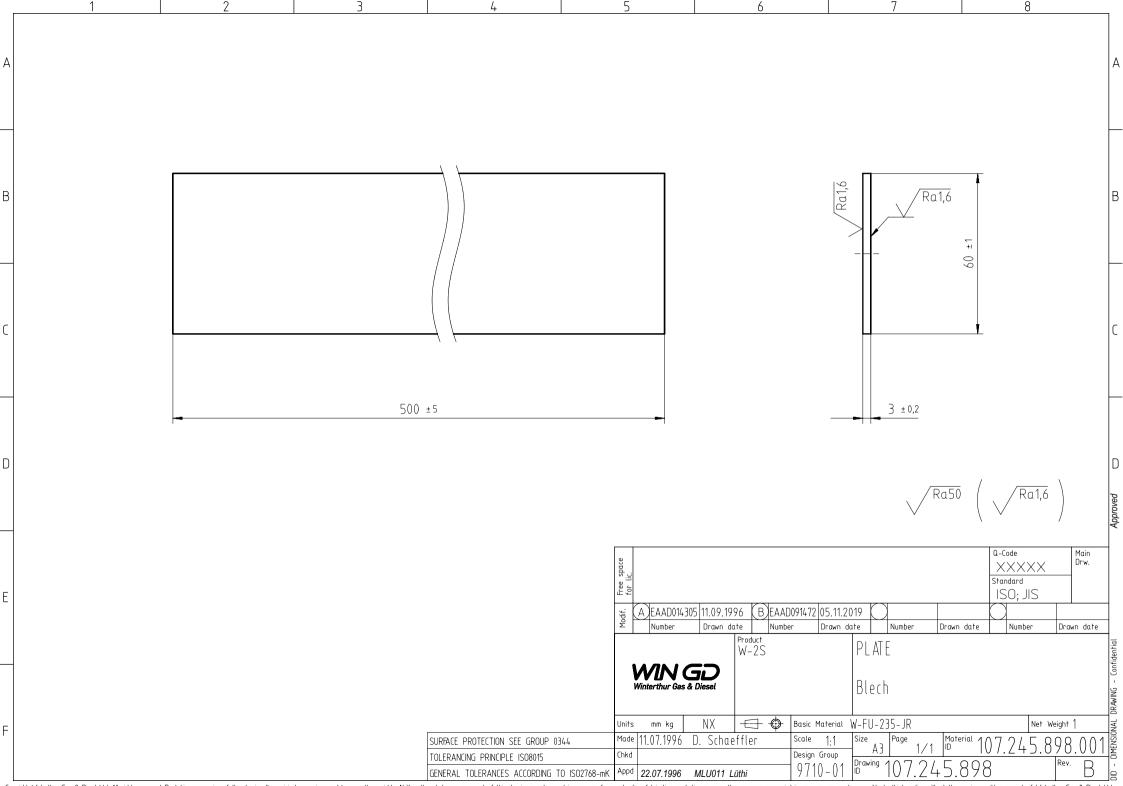
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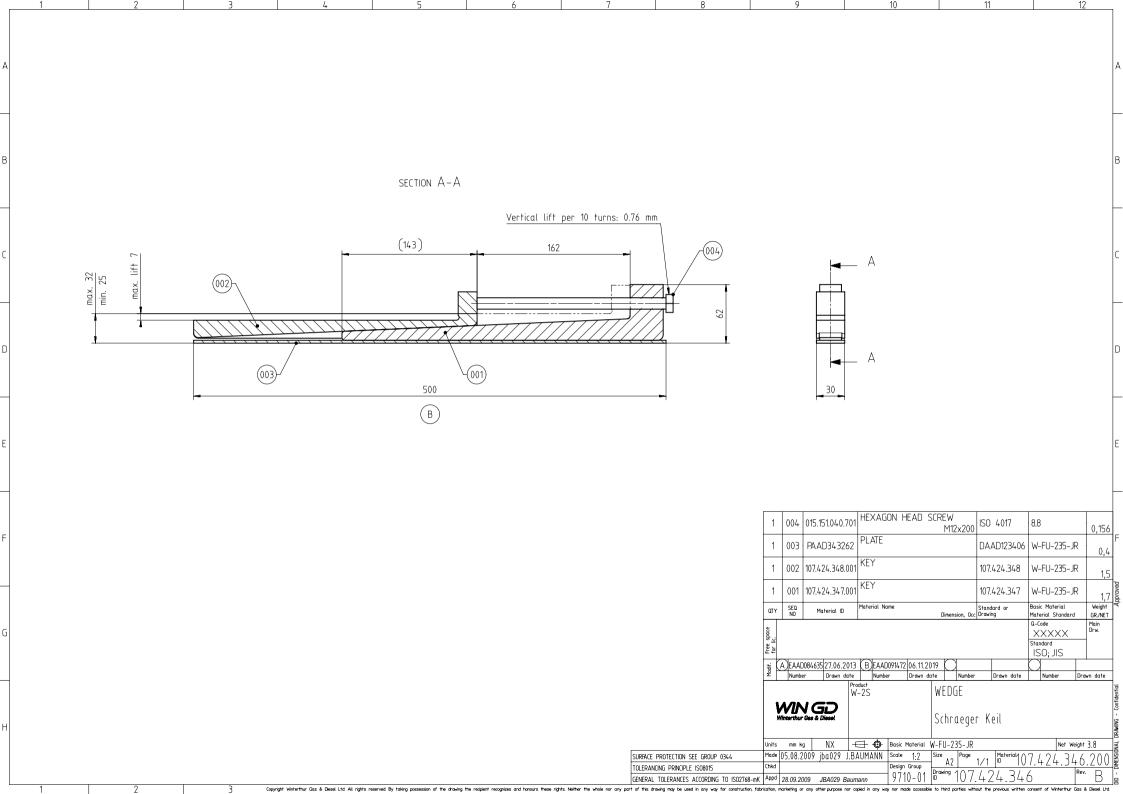
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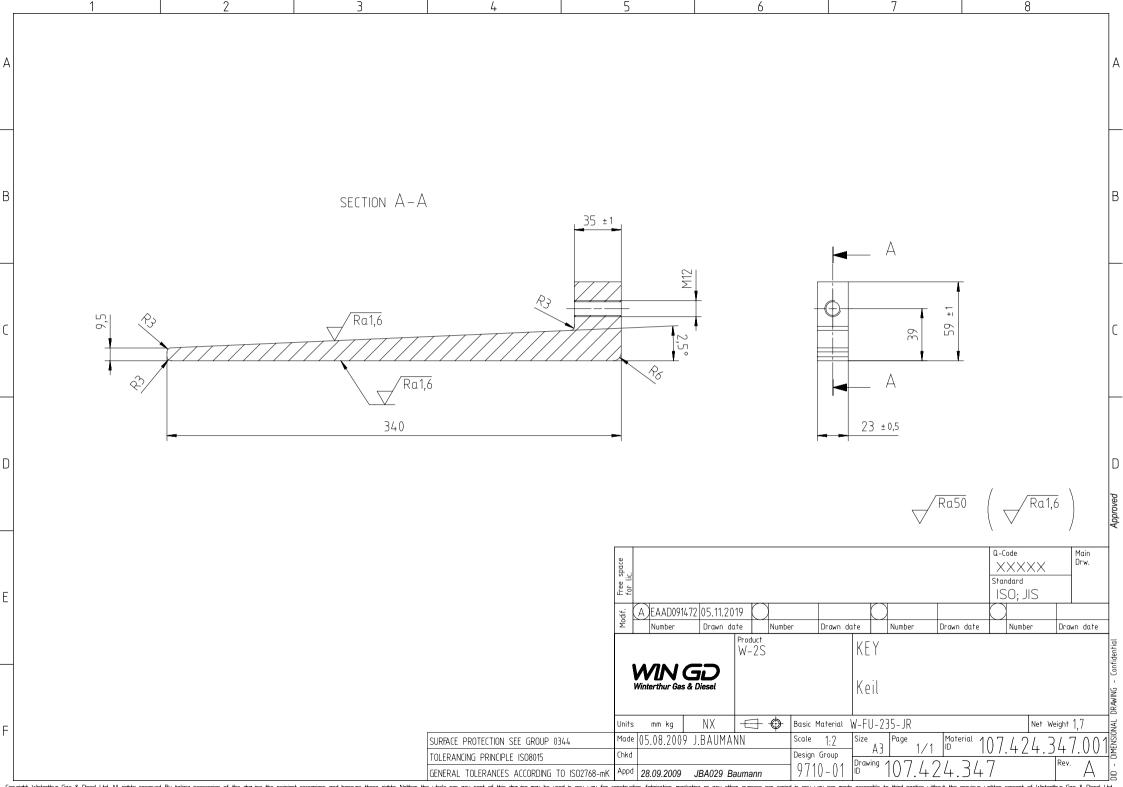


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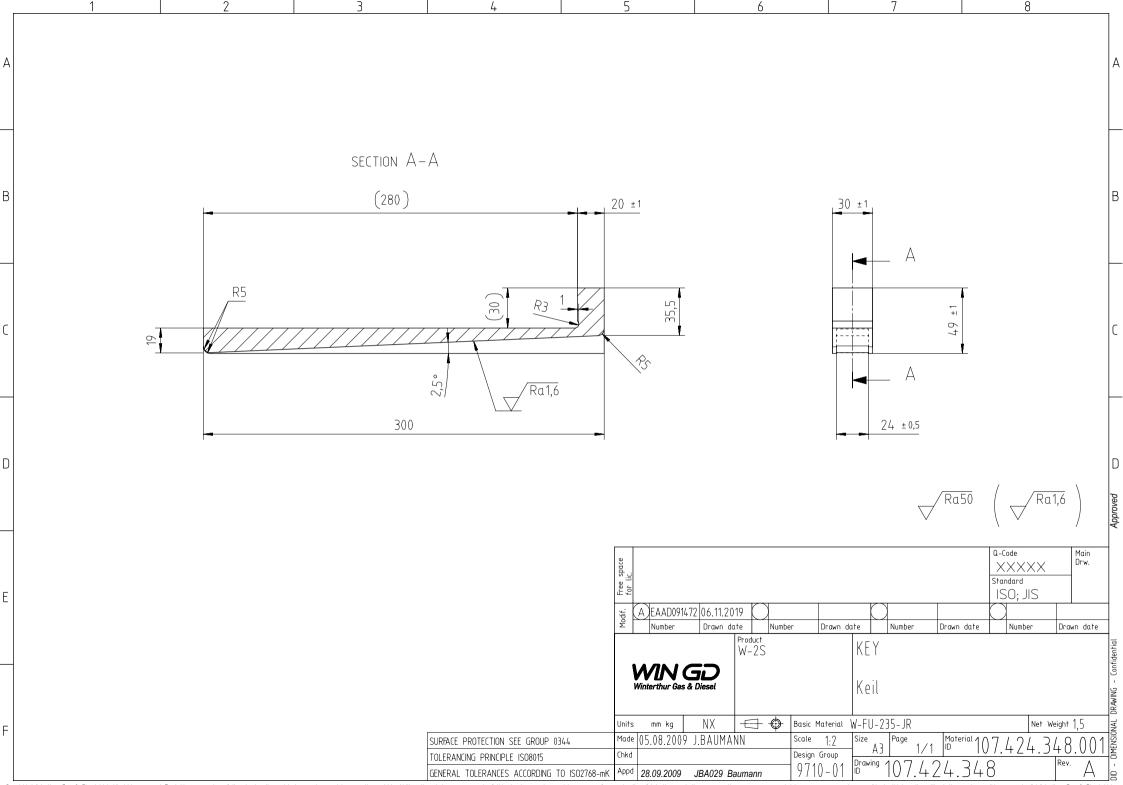


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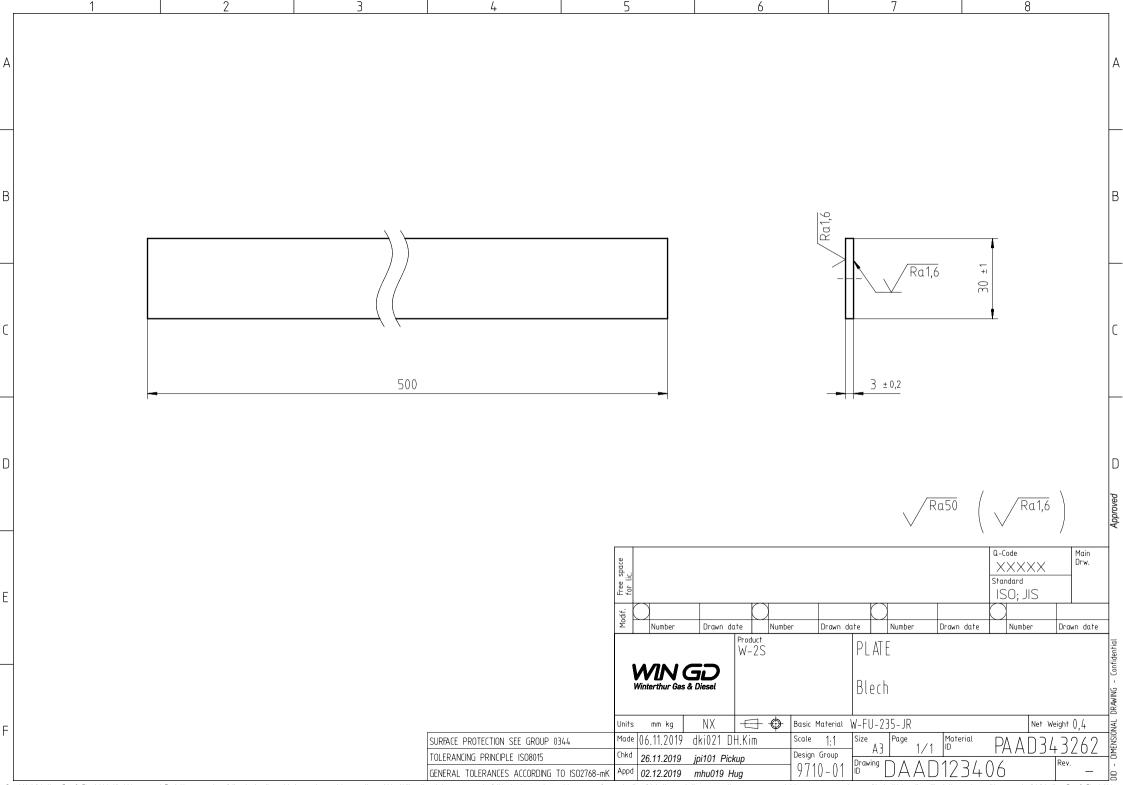




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# MIDS – Tool Engine Alignment (DG97010-01)

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

### TRACK CHANGES

DATE	SUBJECT	DESCRIPTION		
2021-03-01	01 DRAWING SET First web upload			
2022-03-02 PAAD373621 System drg. – new execution				
2023-01-20	PTAA054127 PTAA052984 PTAA052129	New main drgs, 6&7 cylinder		
2023-11-08 PTAA052984 New rev		New revision		

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