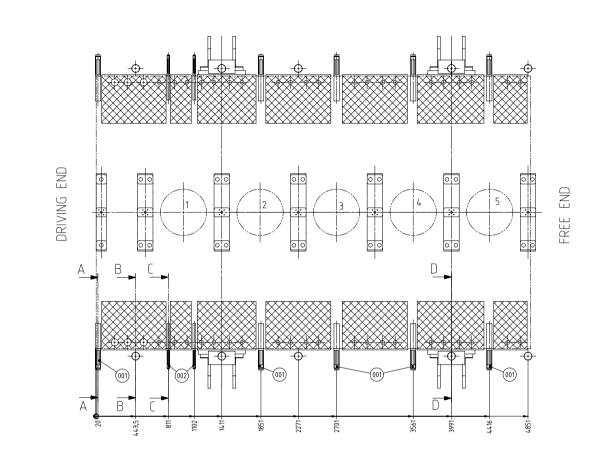
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SEQ NO	QTY	Item ID		Item Name				Dimension	Standard-ID	Basic Material			Net Weight
001	10	107.24	5.895.200	WEDGE									8.51
002	4	107.42	4.346.200	WEDGE				NARROW TYPE		W-FU-235-JR			3.8
003	10	PAAD3	18478	HYDRAULIC	JACK								
004	6	PAAD3	18480	SUPPORT BL	.OCK								
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005	4	PAAD3	18479										
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Соруг	ight Wi	terthur Gas	of Materia & Diesel Ltd	I. All rights reserved.	Dimension Units	[m] [kg]	Basic Ma	terial			Net Weight		100
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constr	ruction,	fabrication, n way nor mad	narketing or ar e accessible to	sed in any way for ny other purpose nor o third parties without ur Gas & Diesel Ltd.	Otv	Engine		Item ID	PTAAO				1/01



CAUTION

Risk:

Tool and/or bedplate damage

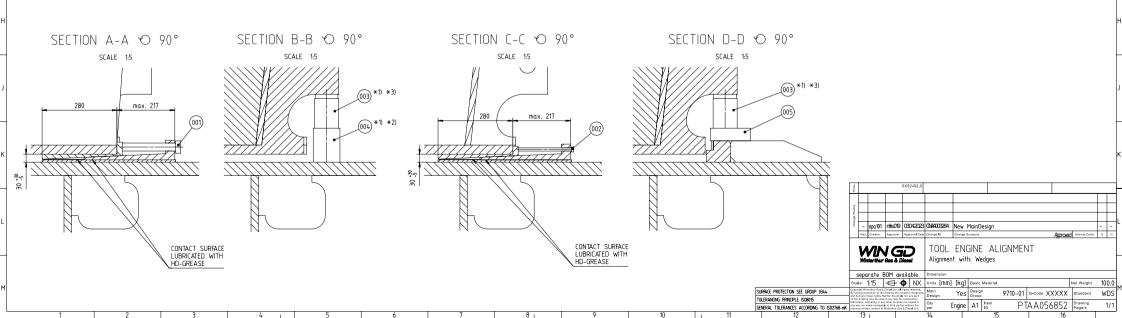
Countermeasure: Avoid overloading of bedplate areas by observing the appropriate engine alignment/assembly procedure as follows:

- Insert wedges and/or shims in all indicated positions.

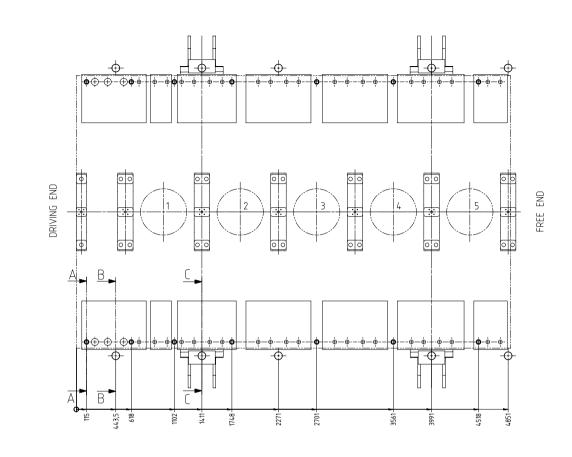
- Lift the engine into the engine room and place it on levelled wedges and/or shims (wedges or shims must be inserted as deep as possible below the bedplate to ensure that the support point is as close as possible at the engine monoblock column).
- Apply hydraulic jacks to the protruding bedplate ribs 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.

Remarks

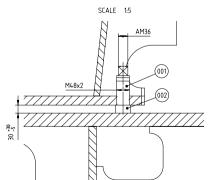
- *1) To be provided by the shipyard*2) Height depending on the
- requirement (chock thickness in
- correlation with maximum
- permissible extension of the
- hydraulic jack)
- *3) Hýdraulic jack proposal Type: Enerpac RCS-1002 Load at 700 bar: 880 kN



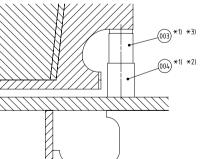
SEQ NO	QTY	/ Item ID		Item Name				Dimension	Standard-ID	Basic Material			Net Weight
001	14	PAAD	05430	JACKING SCF	REW					W-FU-235-N-T			2.3
002	14	PTAAC	31559	SPONGE RUE	BBER RING								0.115
003	10	PAAD	318478	HYDRAULIC	JACK								
004	6	PAAD	318480	SUPPORT BL	.OCK								
005	4	PAAD	318479	SUPPORT PL	ATE								
Prod.			5 X52-S	2.0									
Change History													
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Сору	ight Wi	nterthur Ga	s & Diesel Ltd	I. All rights reserved.	Unite	[m] [kg]	Basic Mat	terial			Net Weight	3	3.81
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SECTION A-A ⊙ 90°







SECTION C-C 0 90°

SCALE 1:5 *1) *3) (603) (005

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

SURFACE PROTECTION SEE GROUP 0344

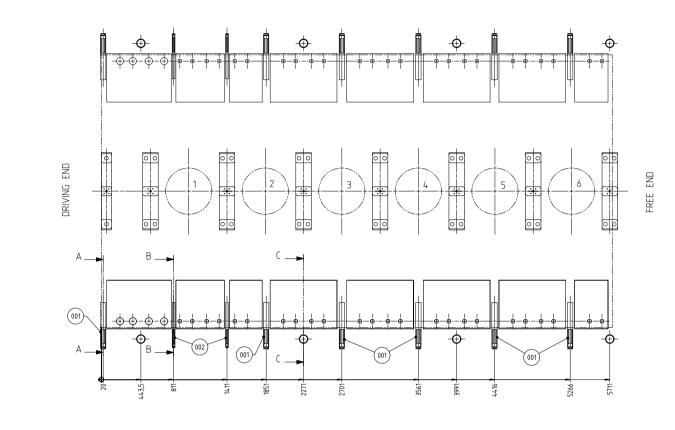
Tolerancing principle isobots

*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 Weight
001	12	107.24	5.895.200	WEDGE										8.51
002	4	107.42	4.346.200	WEDGE				NARROW TYPE			W-FU-235-J	R		3.8
003	8	PAAD	318478	HYDRAULIC .	JACK									
004	8	PAAD;	318480	SUPPORT BL	OCK									
Prod.			6 X52-S 6 X52DI	2.0 S1.0	6	X52DF-S2	2.0						Ī	I
Change History														
Chanç	-	dki021	mhu019	02.05.2022	CNAA001768	New MI	DS intro	oduced					-	-
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			V C ır Gas &		Alignment									
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Сору	right Wi	nterthur Ga	Of Materia s & Diesel Lto	I. All rights reserved.	Dimension Units	[m] [kg]	Basic Ma	terial				Net Weight	1	17.3
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Risk: Tool and/or bedplate damage

Countermeasure:

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

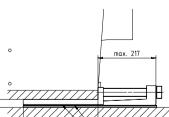
- Insert wedges and/or shims in all indicated positions.
- Lift the engine into the engine room and place it on levelled wedges and/or shims (wedges or shims must be inserted as deep as possible below the bedplate to ensure that the support point is as close as possible at the engine monoblock column).
- 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

 \star 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

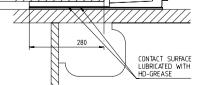


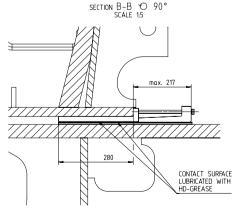


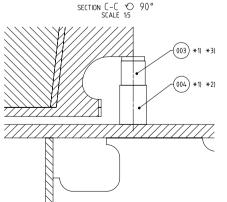
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SECTION A-A O 90°

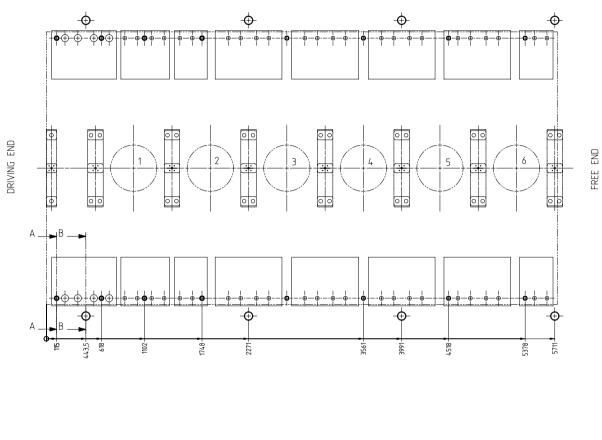
SCALE 1:5



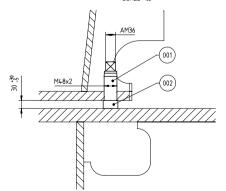




SEQ NO	QTY	/ Item ID		Item Name				Dimension	Standard-ID	Basic Material		١	Net Veight
001	16	PAAD	05430	JACKING SCI	REW					W-FU-235-N-T			2.3
002	12	PTAA	031559	SPONGE RU	BBER RING							().115
003	8	PAAD	318478	HYDRAULIC .	JACK								
004	8	PAAD	318480	SUPPORT BL	.OCK								
jq			6 X52-S	2.0	6	X52DF-S2	2.0						
Prod.			6 X52DF	-S1.0									
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			ır Gas &		Alignment	with:	Jackir	ng Screws					
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SECTION A-A O 90° SCALE 1:5



SECTION B-B 0 90° -(003) ×1) ×3) (004) *1) *2)

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)
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Remarks

SURFACE PROTECTION SEE GROUP 0344

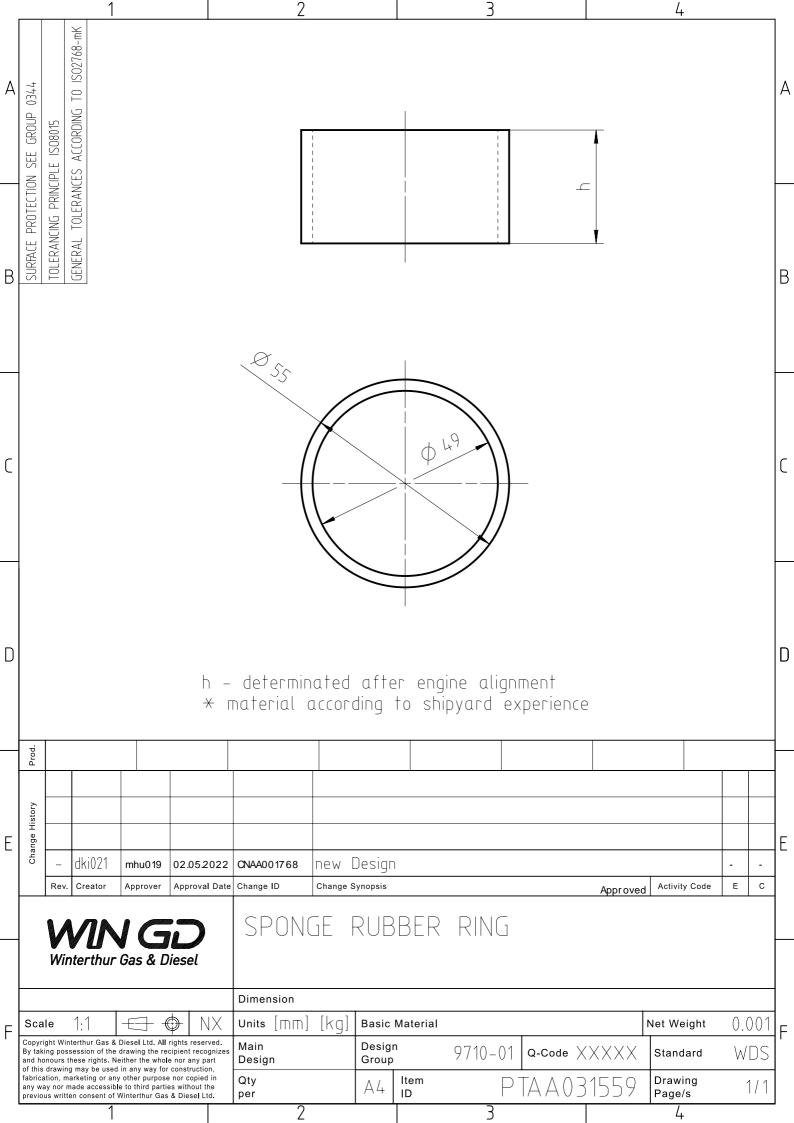
Tolerancing principle iso8015

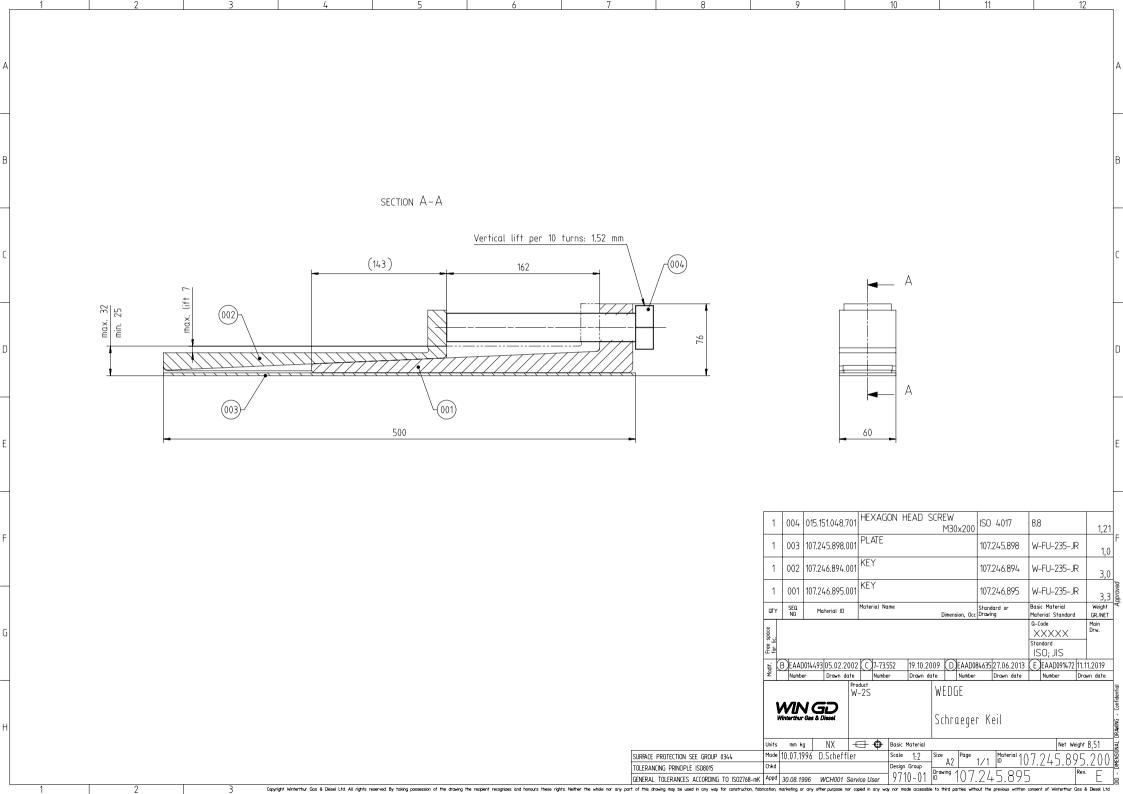
*1) To be provided by the shipyard +2) Height depending on the requirement (chock thickness in correlation with maximum permissible extension of the hydraulic jack) *3) Hydraulic jack proposal Type: Enerpac RCS-1002 Load at 700 bar: 880 kN

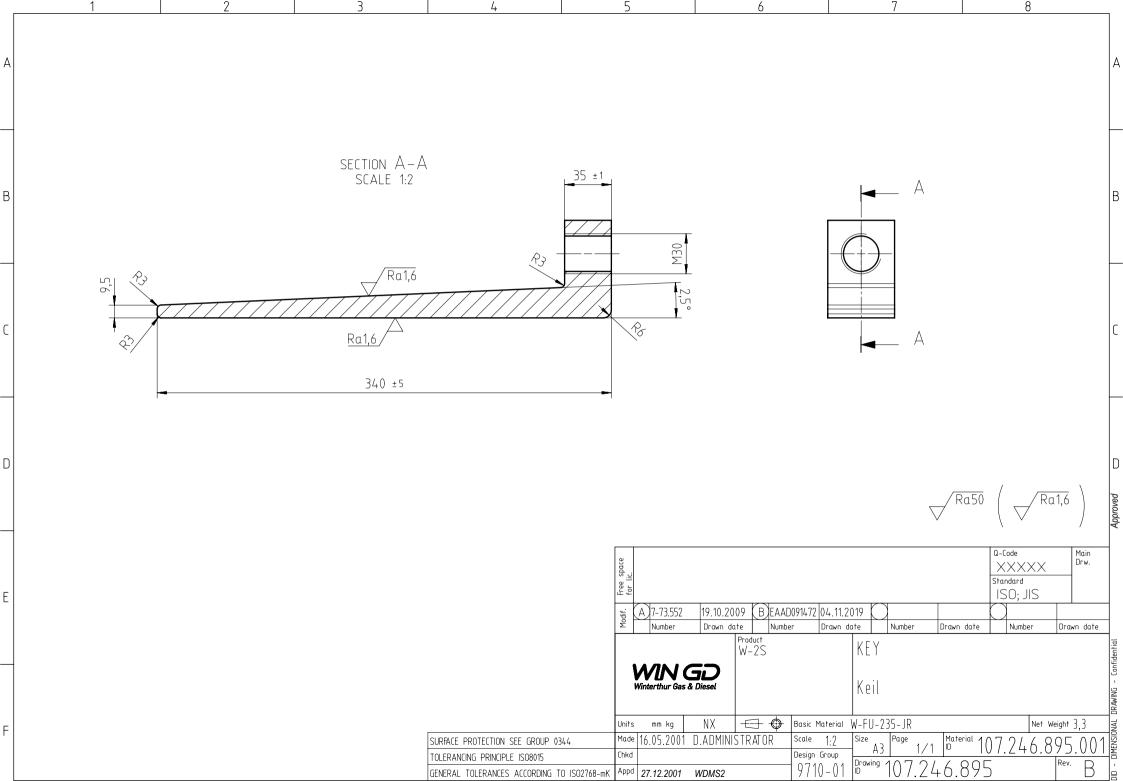


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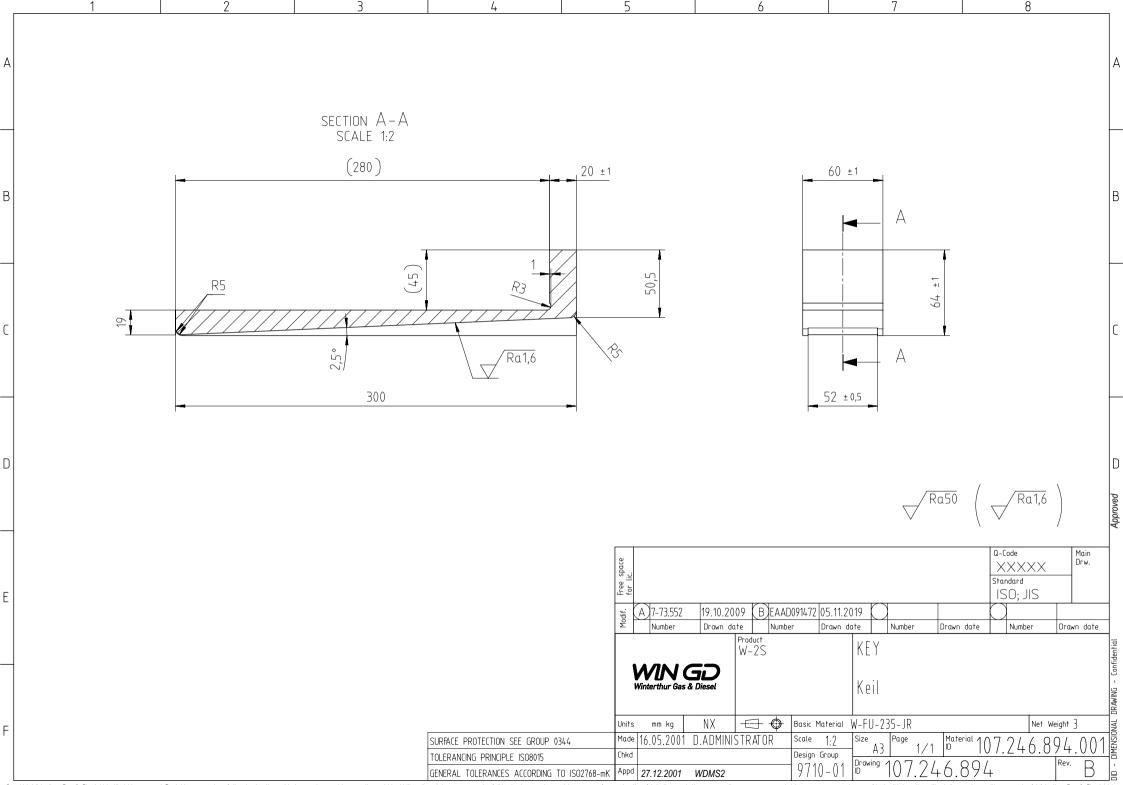
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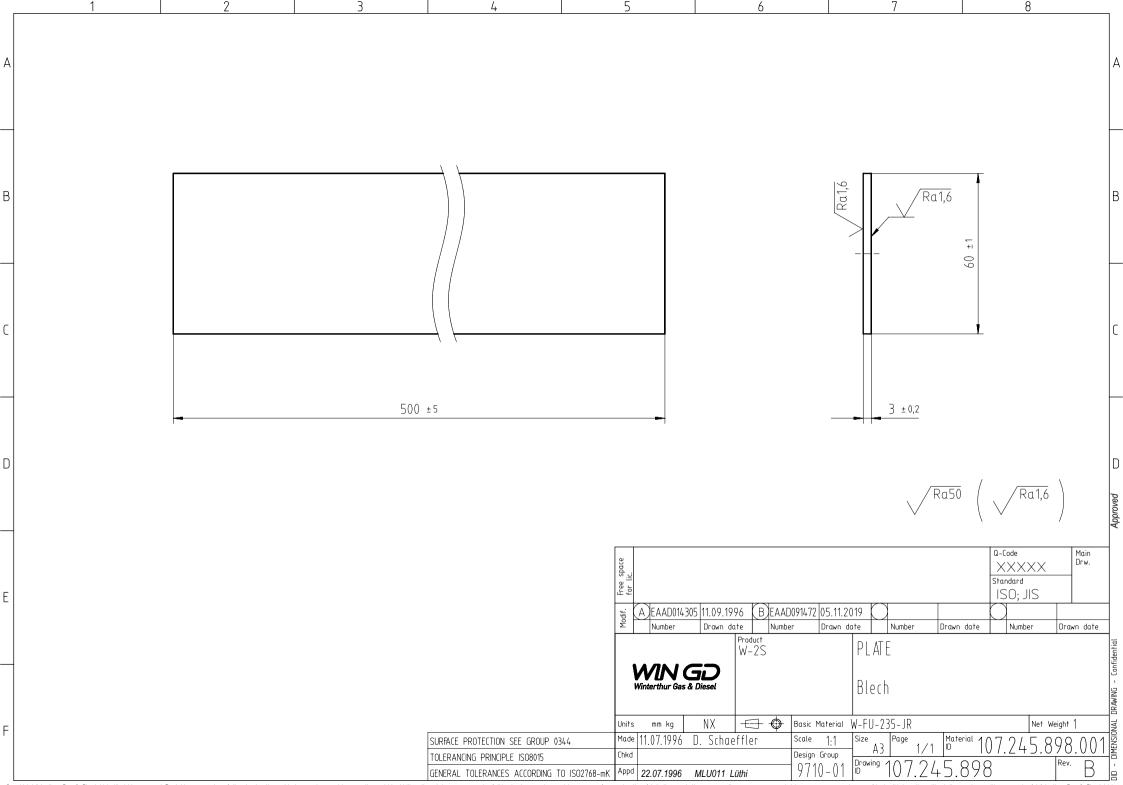




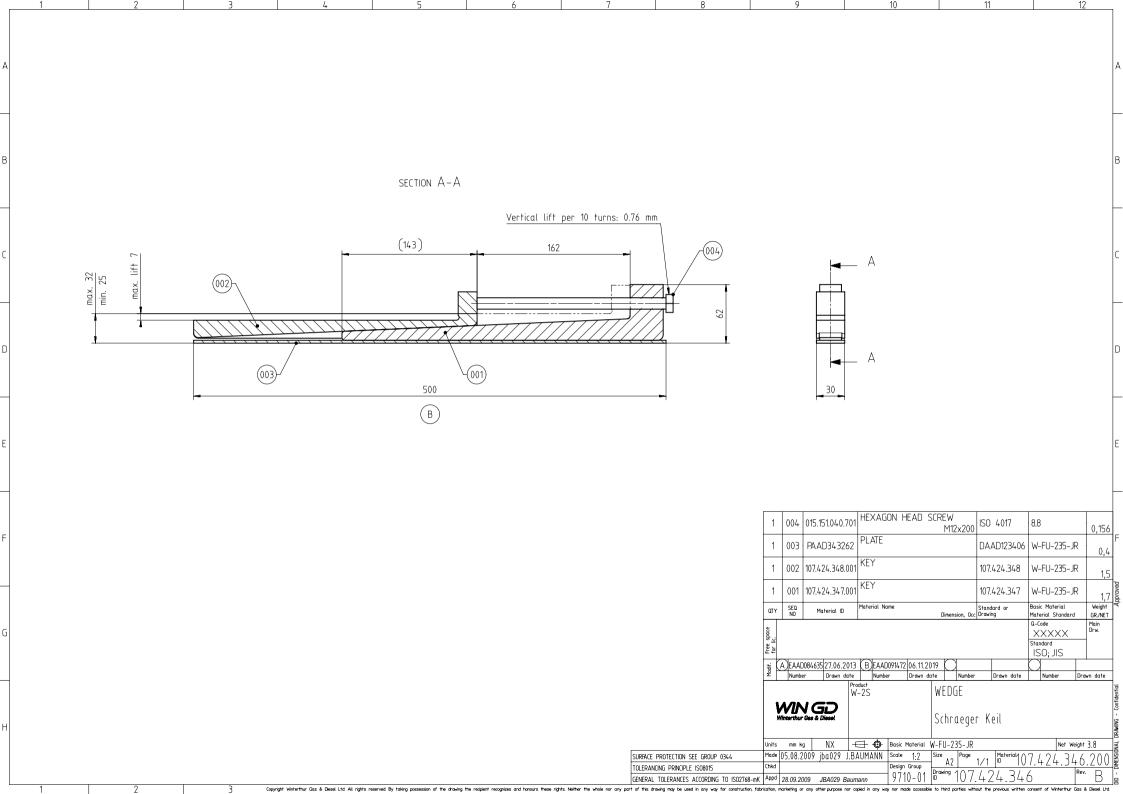
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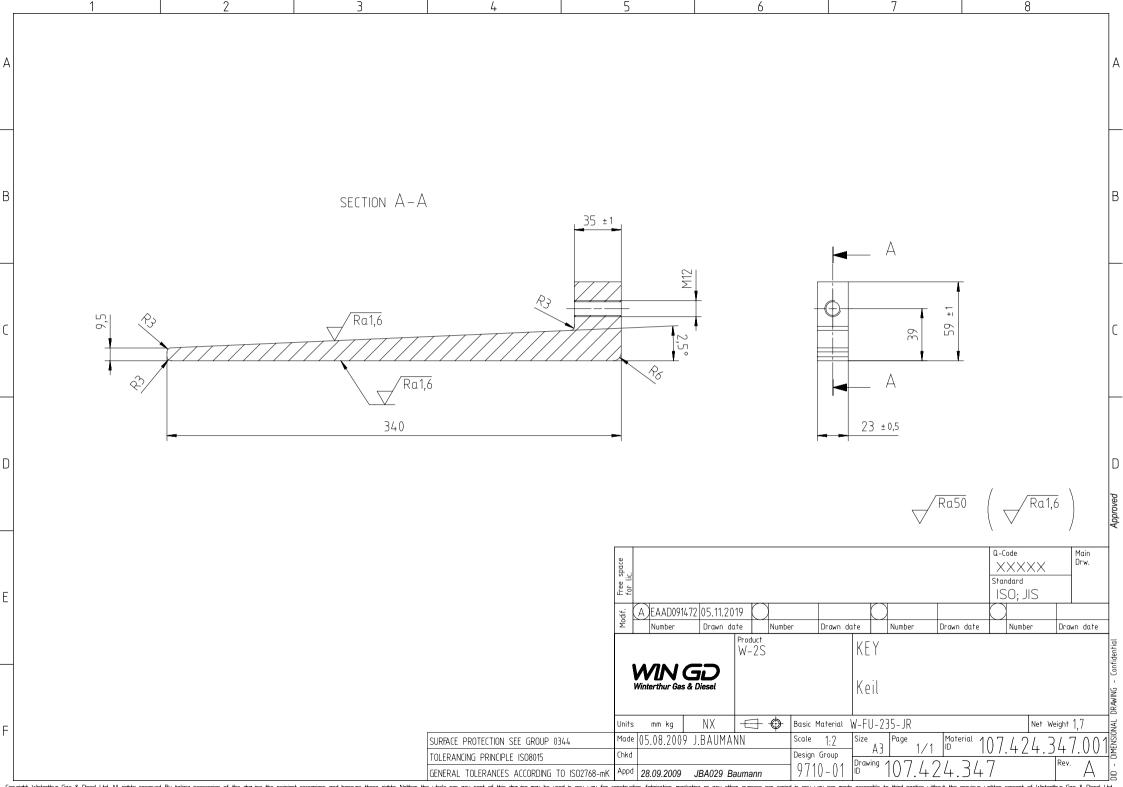


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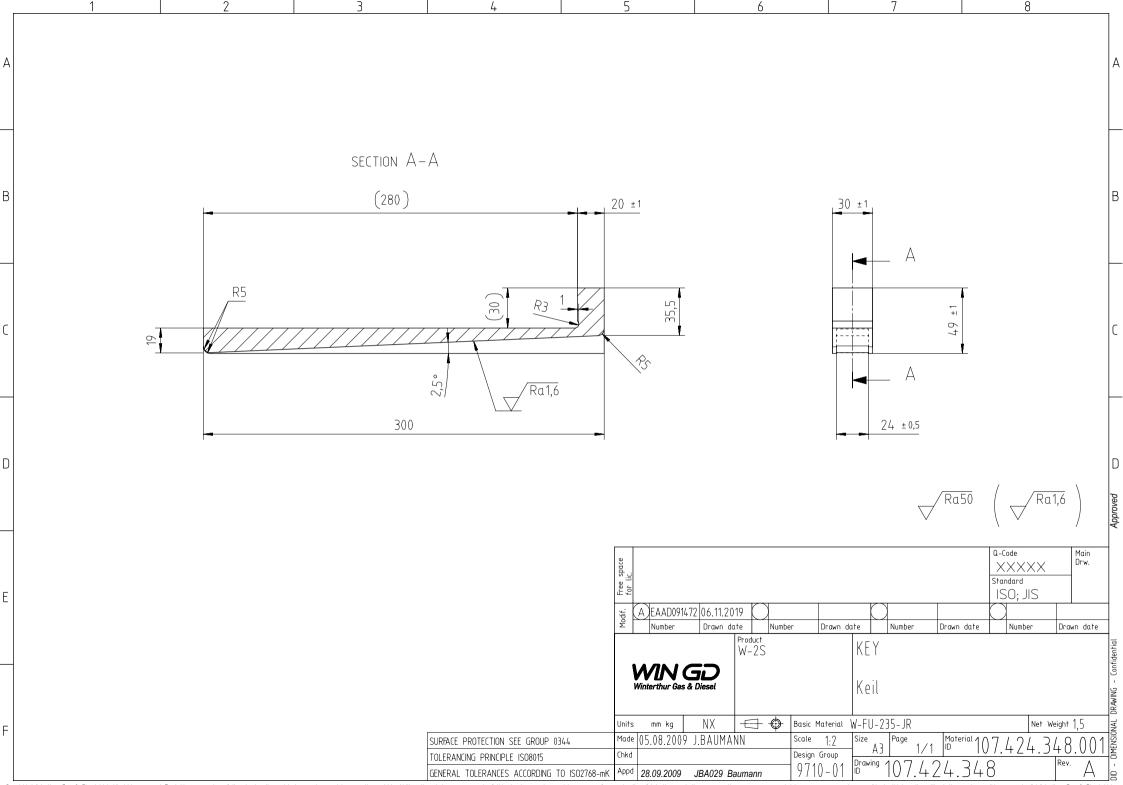


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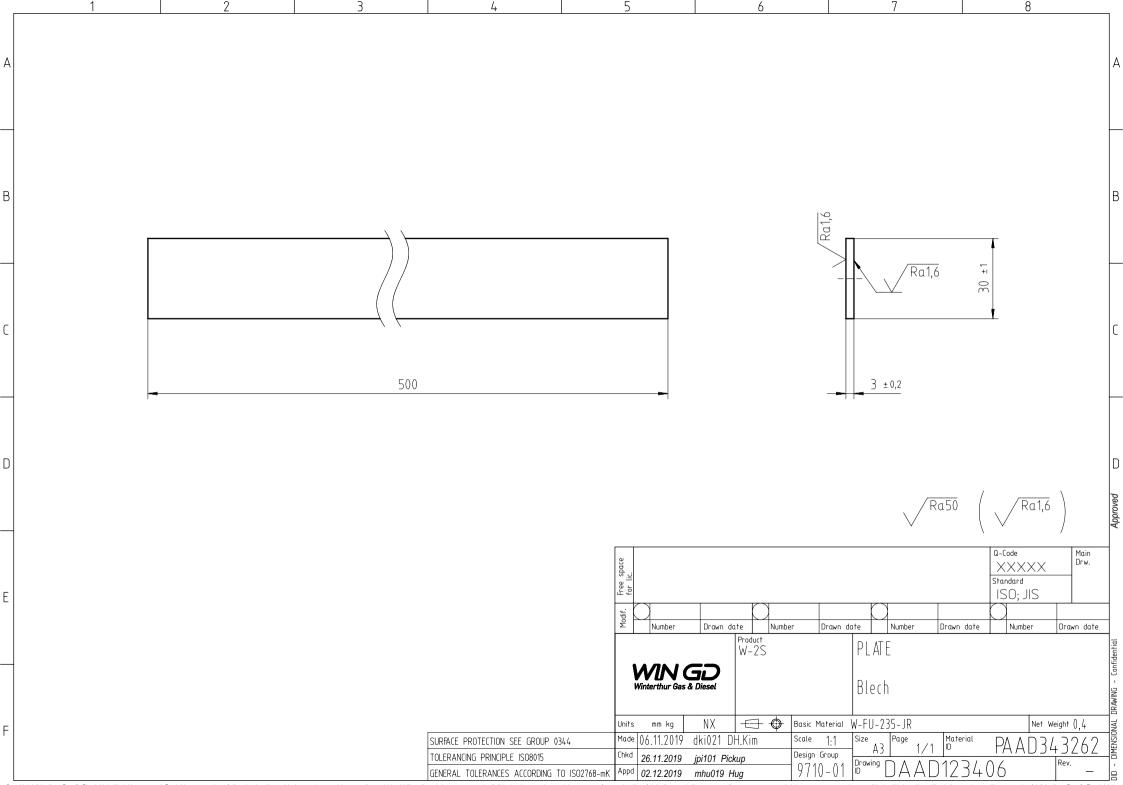




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MIDS – Tool Engine Alignment (DG9710-01) WinGD X52-S2.0/DF-S1.0/DF-S2.0/DF-A -S1.0/DF-M-S1.0

TRACK CHANGES

DATE	SUBJECT	DESCRIPTION
2022-05-05	DRAWING SET	First web upload
2023-04-04	PTAA056852 PTAA056853	5 cyl. execution - added

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