Download
"DXF file"

WITH EXHAUST WASTE GATE FOR LLT (OPTIONAL)

⊗ = Winkel kann zwischen 40°-70° gewaehlt werden nach Angaben der Werft (gezeichnet fuer 52,5°)
ANGLE CAN BE CHOSEN BETWEEN 40°-70°, ACCORDING SHIPYARD RECOMMENDATION (DRAWN FOR 52,5°)

*1) Optionelle Ausfuehrung (wenn verlangt)
OPTIONAL EXECUTION (IF REQUIRED)

*2) Standard Ausfuehrung
STANDARD EXECUTION
Vorschlag Endgueltige Position ist mit Werft zu bestimmen
PROPOSAL. FINAL POSITION TO BE DETERMINED IN ACCORDANCE WITH SHIPYARD

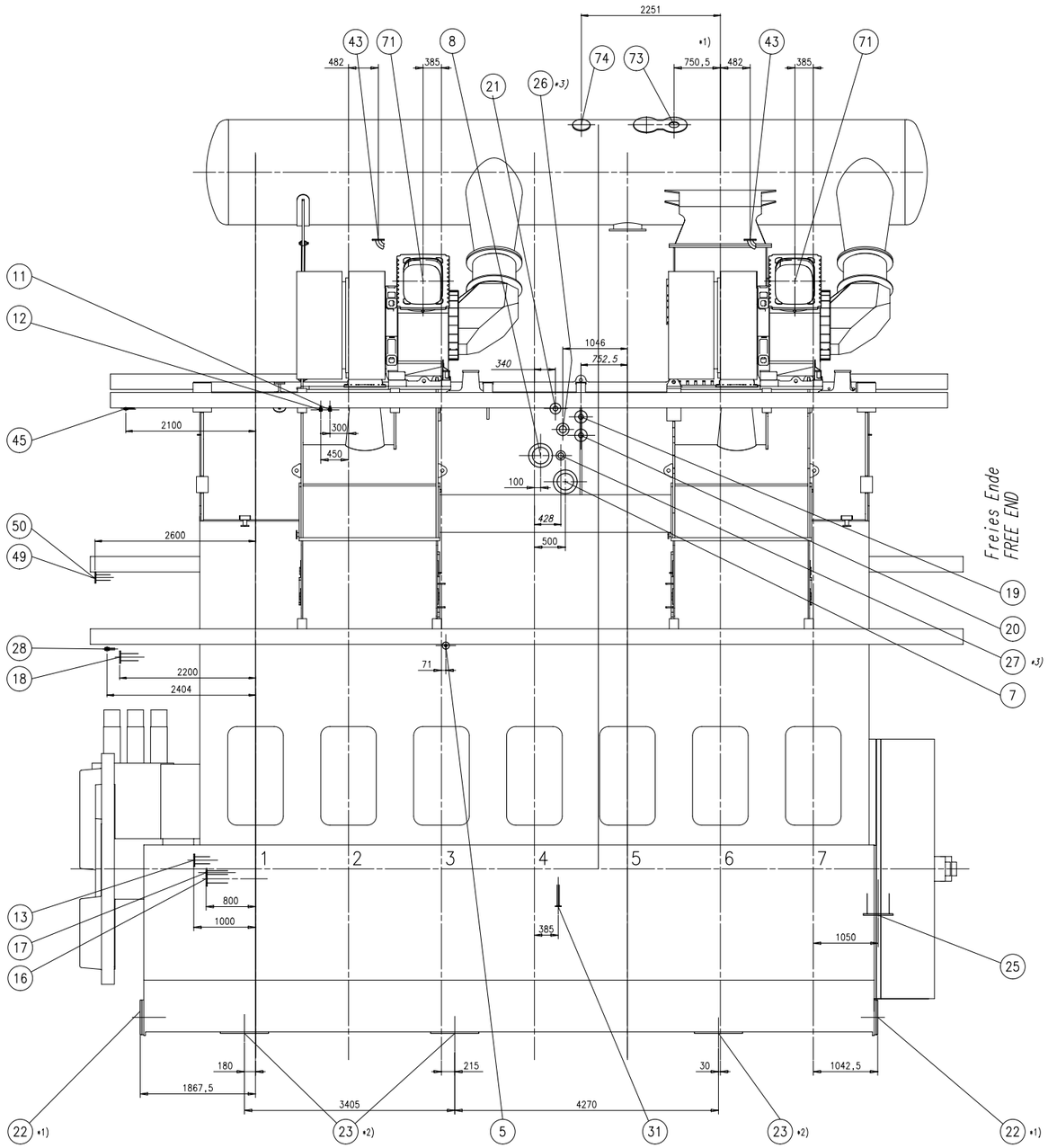
*3) Externale Ausfuehrung (wenn verlangt)
EXTERNAL EXECUTION (IF REQUIRED)

Alle Flanschanschluesse am Motor sind mit Gegenflanschen versehen (Blindflansch), ausgenommen der Anschluss fuer den Gasaustritt am Turbolader. Die Blindflansche sind nach dem betreffenden Rohrdurchmesser des Werftanschlusses aufzubohren.
THE PIPE CONNECTIONS ON THE ENGINE ARE SUPPLIED WITH MATING FLANGES (BLIND), WITH EXCEPTION OF THE TURBOCHARGER EXHAUST GAS OUTLET. BLIND FLANGES TO BE DRILLED TO MATCH PIPE DIA SUPPLIED BY THE SHIPYARD.

Die Gewinde-Anschluesse werden komplett geliefert
SCREWED CONNECTIONS ARE SUPPLIED COMPLETE

Gasaustritt-Stellung GAS OUTLET POSITION	X	Y
0°	3910	9425
15°	4099	9400
30°	4275	9327
45°	4426	9211

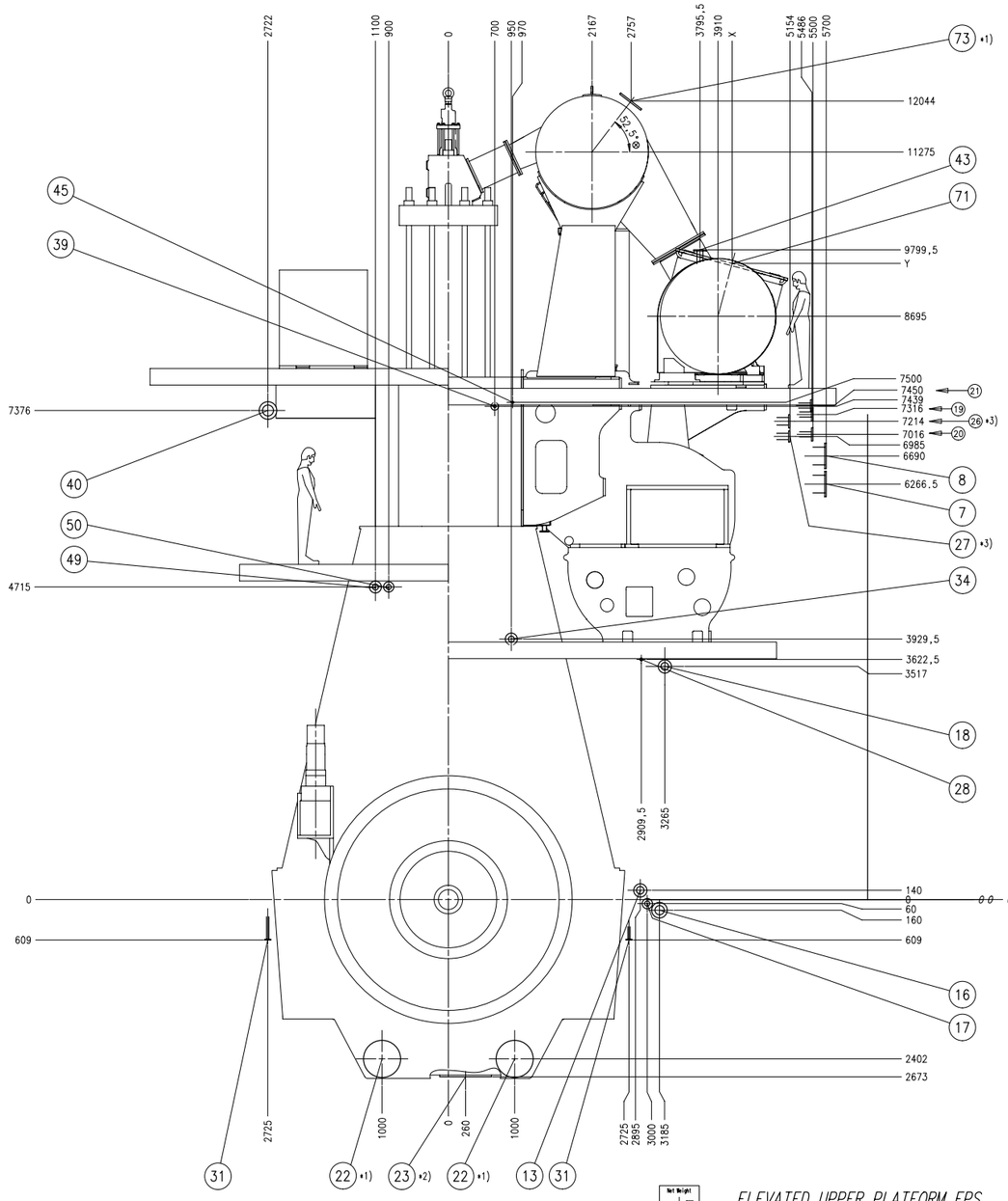
Abgasseite
EXHAUST SIDE



Antriebseite
DRIVING END

Freies Ende
FREE END

Antriebseite
DRIVING END



WASTE HEAT RECOVERY
(WITH SAFETY VALVE)

2xA175

ELEVATED UPPER PLATFORM FPS

Net Weight									
0.001									
Quantity 1	SEQ NO 001	Material ID 107.390.729.500	Material Name FLANGE DIMENSIONS	Dimension/Doc.Dimension	Standard or Drawing 107.390.729		Basic Material Material Standard	Weight CM_NET 0.001	Approved
Material ID PAA0117287	Free space for info						Q-Code XXXXX	Work Dwg.	
							Standard JIS	H	
Shelf	EAA0084481	27.02.2013	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date

WÄRTSILÄ

Product W7X82

PIPE CONNECTION PLAN
Rohranschlussplan

Units	mm kg	IDE	Basic Material	Net Weight
Made	29.10.2012	jwes03 Wegmann	Scale 1:30	Size A0	Page 1/3	Material ID
Chkd			Design Group 8020	Drawing ID DAAD036729	Rev. –
Appd	28.02.2013				

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

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*1) Optionelle Ausfuehrung (wenn verlangt)
OPTIONAL EXECUTION (IF REQUIRED)

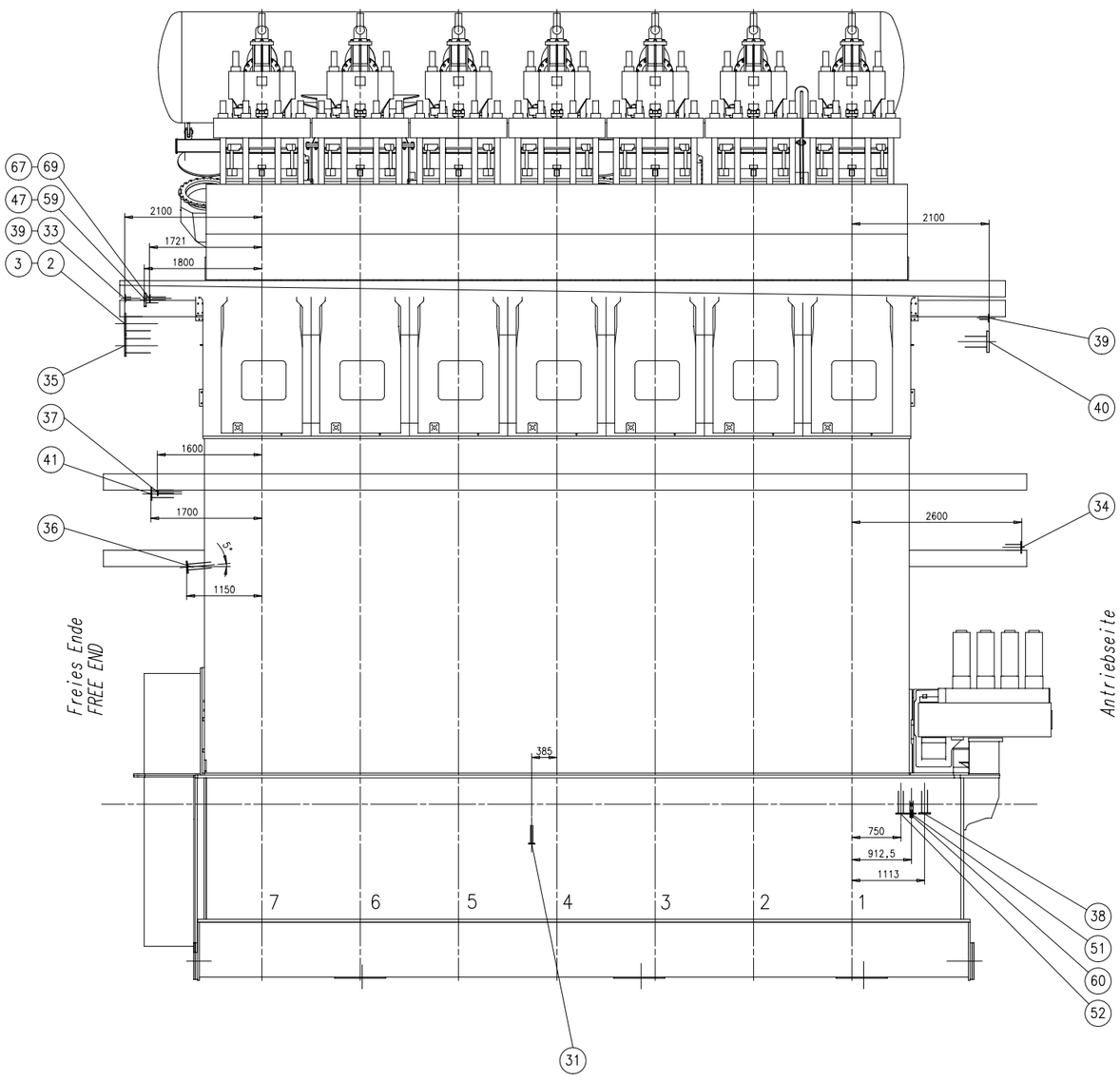
*2) Standard Ausfuehrung
STANDARD EXECUTION
Vorschlag Endgueltige Position ist mit Werft zu bestimmen
PROPOSAL. FINAL POSITION TO BE DETERMINED IN ACCORDANCE WITH SHIPYARD

*3) Externale Ausfuehrung (wenn verlangt)
EXTERNAL EXECUTION (IF REQUIRED)

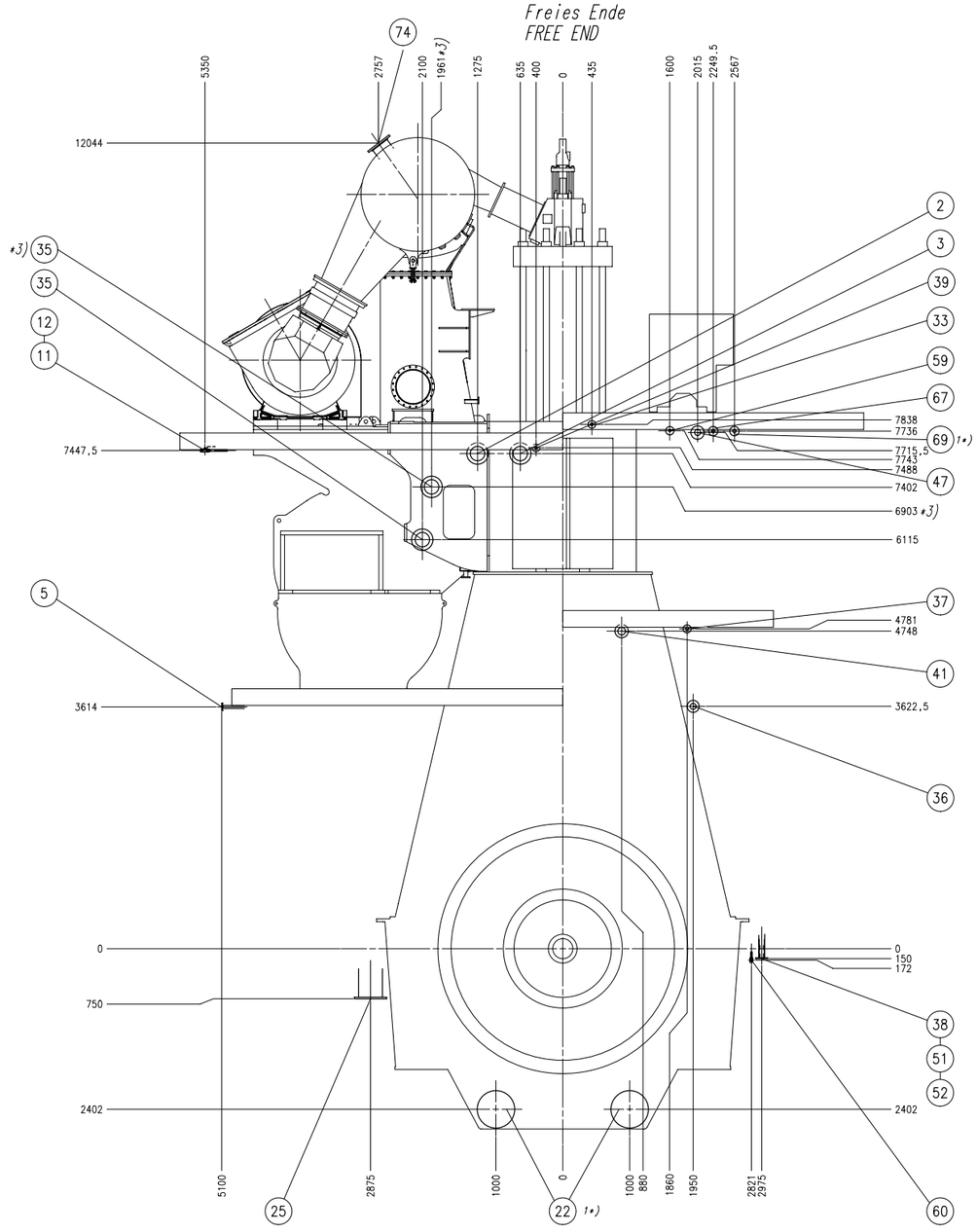
Alle Flanschanschluesse am Motor sind mit Gegenflanschen versehen (Blindflansch), ausgenommen der Anschluss fuer den Gasaustritt am Turbolader. Die Blindflansche sind nach dem betreffenden Rohrdurchmesser des Werftanschlusses aufzubohren.
THE PIPE CONNECTIONS ON THE ENGINE ARE SUPPLIED WITH MATING FLANGES (BLIND), WITH EXCEPTION OF THE TURBOCHARGER EXHAUST GAS OUTLET. BLIND FLANGES TO BE DRILLED TO MATCH PIPE DIA SUPPLIED BY THE SHIPYARD.

Die Gewinde-Anschluesse werden komplett geliefert
SCREWED CONNECTIONS ARE SUPPLIED COMPLETE

Brennstoffseite
FUEL SIDE



Freies Ende
FREE END



ELEVATED UPPER PLATFORM FPS

WASTE HEAT RECOVERY
(WITH SAFETY VALVE)

2xA175

Work free space for Lic.								O-Code XXXXX	Main Dre.
								Standard JIS	H
Work	EAD084481	27.02.2013							
	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date	

WÄRTSILÄ

Product W7X82

PIPE CONNECTION PLAN
Rohranschlussplan

Units	mm kg	1DE	Basic Material			Net Weight
Made	29.10.2012	jwex03 Wegmann	Scale 1:30	Size A0	Page 2/3	Material ID
Chkd			Design Group 8020	Drawing ID DAAD036729		Rev. —
Appd	28.02.2013					

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

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Approved
3DS - 2012/07/06, 08:48:54 - Confidential

Note	No.	Symbol	Bezeichnung / Description	DN / PN	Ko.Gr. KO.GR.	Freies Ende FREE END	Antriebseite DRIVING END	Abgasseite EXHAUST SIDE	Brennstoffseite FUEL SIDE
	1		Zylinderkuehlwasser Eintritt / CYLINDER COOLING WATER INLET	DN / PN	8301	Nicht benoetigt NOT USED			
	2		Zylinderkuehlwasser Eintritt / CYLINDER COOLING WATER INLET	DN 200 / PN 5	8305	X			
	3		Zylinderkuehlwasser Austritt / CYLINDER COOLING WATER OUTLET	DN 200 / PN 5	8310	X			
	4		Zylinderkuehlwasser Entlueftung Entlueftung / CYLINDER COOLING WATER VENTING VENTING	DN / PN	8310	Nicht benoetigt NOT USED			
	5		Zylinderkuehlwasser Entleerung Austritt / CYLINDER COOLING WATER DRAIN OUTLET	DN 32 / PN 5	8313			X	
	6		SLK Entleerung Austritt / SAC DRAIN OUTLET	DN / PN	8314	Nicht benoetigt NOT USED			
	7		SLK-NT-Kuehlwasser Eintritt / SAC-LT-COOLING WATER INLET	DN 250 / PN 5	8335			X	
	8		SLK-NT-Kuehlwasser Austritt / SAC-LT-COOLING WATER OUTLET	DN 250 / PN 5	8335			X	
	9		SLK-HT-Kuehlwasser Eintritt / SAC-HT-COOLING WATER INLET	DN / PN	8335	Nicht benoetigt NOT USED			
	10		SLK-HT-Kuehlwasser Austritt / SAC-HT-COOLING WATER OUTLET	DN / PN	8335	Nicht benoetigt NOT USED			
	11		Wasser fuer Reinigungsanlage TL und SLK Eintritt / WATER FOR CLEANING PLANT TC AND SAC INLET	DN 20 / PN 16	8338			X	
	12		Luft fuer Reinigungsanlage TL und SLK Eintritt / AIR FOR CLEANING PLANT TC AND SAC INLET	DN 20 / PN 16	8338			X	
	13		Oeliges Wasser vom Receiver Austritt / OILY WATER FROM RECEIVER OUTLET	DN 100 / PN 5	8352		X		
	14		Waschanlage TL Schmutzwasser Austritt / WASHING PLANT TC DIRTY WATER OUTLET	DN 65 / PN 5	8355	Nicht benoetigt NOT USED			
	15		Ablauf vom Wasserabscheider Austritt / WATER DRAIN FROM WATERSEPERATOR OUTLET	DN / PN	8356	Nicht benoetigt NOT USED			
	16		SLK Kondenswasser Austritt / SAC CONDENSATE WATER OUTLET	DN 125 / PN 5	8357			X	
	17		SLK Waschwasser Austritt / SAC WASHING WATER OUTLET	DN 65 / PN 5	8357			X	
	18		SLK Entlueftung Entlueftung / SAC VENTING VENTING	DN 100 / PN 5	8357		X		
	19		SLK Vorstufe Boiler-Speisewasser Eintritt / SAC PRE-STAGE BOILER FEED WATER INLET	DN 65 / PN 30	8335			X	
	20		SLK Vorstufe Boiler-Speisewasser Austritt / SAC PRE-STAGE BOILER FEED WATER OUTLET	DN 65 / PN 30	8335			X	
	21		Dampf-Sicherheitsventil Austritt / STEAM-SAFETY VALVE OUTLET	DN 65 / PN 10	8335			X	
*1)	22	siehe Detail SEE DETAIL	Oelablauf Grundplatte Horizontal / OIL DRAIN BEDPLATE HORIZONTAL	DN 350 / PN 5	1110	X	X		
*2)	23	siehe Detail SEE DETAIL	Oelablauf Grundplatte Vertikal / OIL DRAIN BEDPLATE VERTICAL	DN 600 / PN 5	1110	X DOWN	X DOWN		
	24								
	25		Hauptschmieroel Eintritt / MAIN LUBRICATING OIL INLET	DN 250 / PN 10	8406			X DOWN	

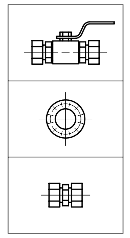
Note	No.	Symbol	Bezeichnung / Description	DN / PN	Ko.Gr. KO.GR.	Freies Ende FREE END	Antriebseite DRIVING END	Abgasseite EXHAUST SIDE	Brennstoffseite FUEL SIDE
*3)	26		Schmieroel Turbolader Eintritt / LUBRICATING OIL TURBOCHARGER INLET	DN 50 / PN 10	8430			X	
*3)	27		Schmieroel Turbolader Austritt / LUBRICATING OIL TURBOCHARGER OUTLET	DN 100 / PN 5	8431			X	
	28		Spueloel Automatikfilter Austritt / FLUSHING OIL AUTOMATIC FILTER OUTLET	DN 20 / PN 10	8445		X		
	29		Schmutzoel Ablauf Versorgungseinheit Austritt / DIRTY OIL DRAIN SUPPLY UNIT OUTLET	DN / PN	8452	Nicht benoetigt NOT USED			
	30		Schmieroel Kreuzkopf Eintritt / LUBRICATING OIL CROSSHEAD INLET	DN / PN	8455	Nicht benoetigt NOT USED			
	31		Leckagen vom Motor Austritt / DIRTY OIL LEAKAGE FROM ENGINE OUTLET	DN 25 / PN 5	8463			X	X
	32		Zylinder Schmieroel Eintritt / CYLINDER LUB. OIL INLET	DN / PN	8473	Nicht benoetigt NOT USED			
	33		Zylinder Schmieroel Eintritt / CYLINDER LUB. OIL INLET	DN 32 / PN 5	8475	X			
	34		Leckoel Antriebseite Austritt / LEAKAGE OIL DRIVING END OUTLET	DN 80 / PN 5	8482		X		
	35		Leckoel Freies Ende Austritt / LEAKAGE OIL FREE END OUTLET	DN 150 / PN 5	8483	X			
	36		Schmutzoel Kolbenunterseite Austritt / DIRTY OIL PISTON UNDERSIDE OUTLET	DN 80 / PN 5	8487	X			
	37		Leckoel Stopfbuechse Austritt / LEAKAGE OIL GLAND BOX OUTLET	DN 40 / PN 5	8488	X			
	38		Oelablaufltg. Versorgungseinheit Austritt / OIL PIPE DRAIN SUPPLY UNIT OUTLET	DN 80 / PN 5	8454				X DOWN
	39		Leckageablauf Zylinderblock Austritt / LEAKAGE DRAIN CYLINDER BLOCK OUTLET	DN 32 / PN 5	8462	X	X		
	40		Anlassluft Eintritt / STARTING AIR PIPE INLET	DN 150 / PN 30	8605		X		
	41		Entlueftung Kurbelgehaeuse Austritt / VENTING CRANKCASE OUTLET	DN 100 / PN 5	8608	X			
	42		Entlueftung Waste Gate Austritt / VENTING WASTE GATE OUTLET	DN / PN	8609	Nicht benoetigt NOT USED			
	43		Entlueftung Turbolader Austritt / VENTING TURBOCHARGER OUTLET	DN 65 / PN 5	8610			X UP	
	44		Entlueftung Zylinderkuehlwasser Austritt / VENTING CYLINDER COOLING WATER OUTLET	DN / PN	8611	Nicht benoetigt NOT USED			
	45		Steuerluftversorgung Eintritt / CONTROL AIR SUPPLY INLET	DN 15 / PN 10	8630		X		
	46		Steuerluftversorgung Eintritt / CONTROL AIR SUPPLY INLET	DN / PN	4605	Nicht benoetigt NOT USED			
	47		Oel Ablaufleitung Servosystem Austritt / OIL DRAIN PIPE SSERVO SYSTEM OUTLET	DN 80 / PN 16	8449	X			
	48								
	49		Brennstoff Eintritt / FUEL INLET	DN 80 / PN 16	8702		X		
	50		Brennstoffruecklauf Austritt / FUEL RETURN OUTLET	DN 65 / PN 16	8704		X		

Note	No.	Symbol	Bezeichnung / Description	DN / PN	Ko.Gr. KO.GR.	Freies Ende FREE END	Antriebseite DRIVING END	Abgasseite EXHAUST SIDE	Brennstoffseite FUEL SIDE
	51		Leckbrennstoff Rail Unit Austritt / FUEL LEAKAGE RAIL UNIT OUTLET	DN 40 / PN 5	8740				X DOWN
	52		Leckbrennstoff Einspritzventil Austritt / FUEL LEAKAGE INJECTION VALVE OUTLET	DN 65 / PN 5	8741				X DOWN
	53		Leckbrennstoff HD-Leitungen Austritt / FUEL LEAKAGE HP-PIPES OUTLET	DN / PN	8742	Nicht benoetigt NOT USED			
	54		Leckbrennstoff Einspritzpumpe Austritt / FUEL LEAKAGE INJECTION PUMP OUTLET	DN / PN	8743	Nicht benoetigt NOT USED			
	55		Leckbrennstoff Rail/Versorgungs Einheit Austritt / FUEL LEAKAGE RAIL/SUPPLY UNIT OUTLET	DN / PN	8744	**Nicht benoetigt NOT USED**			
	56		Leckbrennstoff Einspritzeinheit Austritt / FUEL LEAKAGE ICU OUTLET	DN / PN	8745	Nicht benoetigt NOT USED			
	57								
	58								
	59		Begleitheizung Brennstoff Eintritt / TRACE HEATING FUEL INLET	DN 25 / PN 16	8810	X			
	60		Begleitheizung Brennstoff Austritt / TRACE HEATING FUEL OUTLET	DN 20 / PN 16	8810				X DOWN
	61		Begleitheizung Brennstoff Eintritt / TRACE HEATING FUEL INLET	DN / PN	8812	Nicht benoetigt NOT USED			
	62		Begleitheizung Brennstoff Austritt / TRACE HEATING FUEL OUTLET	DN / PN	8812	Nicht benoetigt NOT USED			
	63		Begleitheizung Brennstoffzirkulation Eintritt / TRACE HEATING FUEL CIRCULATION INLET	DN / PN	8820	Nicht benoetigt NOT USED			
	64		Begleitheizung Brennstoffzirkulation Austritt / TRACE HEATING FUEL CIRCULATION OUTLET	DN / PN	8823	Nicht benoetigt NOT USED			
	65								
	66								
	67		Feuerloesch Anlage Zylinderblock Eintritt / FIRE EXTINGUISHING PLANT CYLINDER BLOCK INLET	DN 40 / PN 16	8830	X			
	68		Feuerloesch Anlage Rail Unit Eintritt / FIRE EXTINGUISHING PLANT RAIL UNIT INLET	DN / PN	8831	Nicht benoetigt NOT USED			
*1)	69		Feuerloesch Anlage Rail Unit Eintritt / FIRE EXTINGUISHING PLANT RAIL UNIT INLET	DN 40 / PN 16	8832	X			
	70								
	71	siehe Detail SEE DETAIL	Abgas Turbolader Austritt / EXHAUST GAS TURBOCHARGER OUTLET		6506 6509			X UP	
	72								
*1)	73		Abgas-Abblaseventil Austritt / EXHAUST WASTE GATE OUTLET	DN 200 / PN 10	8135			X	
	74		Waermerueckgewinnung Austritt / WASTE HEAT RECOVERY OUTLET	DN 150 / PN 10	8108			X UP	
	75								

*1) Optionelle Ausfuehrung (wenn verlangt)
OPTIONAL EXECUTION (IF REQUIRED)

*2) Standard Ausfuehrung
STANDARD EXECUTION
Vorschlag Endgueltige Position ist mit Werft zu bestimmen
PROPOSAL. FINAL POSITION TO BE DETERMINED IN ACCORDANCE WITH SHIPYARD

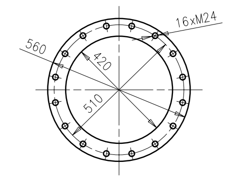
*3) Externale Ausfuehrung (wenn verlangt)
EXTERNAL EXECUTION (IF REQUIRED)



Abmasse der Flansche siehe Stückliste
FLANGE DIMENSION SEE PARTS LIST

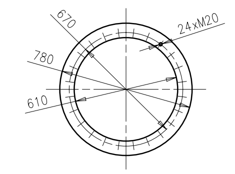
22 fuer horizontalen Oelablauf
FOR HORIZONTAL LUB. OIL DRAIN

1:10



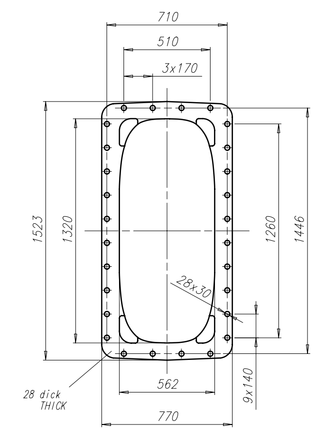
23 fuer vertikalen Oelablauf
FOR VERTICAL LUB. OIL DRAIN

1:15



71 Gas-Austritt vom Turbolader
GAS OUTLET FROM TURBOCHARGER

1:15



WASTE HEAT RECOVERY
(WITH SAFETY VALVE)

2xA175
ELEVATED UPPER PLATFORM FPS

Q-Code: XXXXX	Main Drw.	Standard: JIS	H
Modif.: – EAAD084481 27.02.2013			
WÄRTSILÄ	Product: W7X82	PIPE CONNECTION PLAN	Rohranschlussplan
Units: mm kg	IDE	Basic Material	Net Weight
Made: 29.10.2012 jwex03 Wegmann	Scale 1:1	Size A0	Page 3/3
Chkd	Design Group 8020	Material ID	
Appd: 28.02.2013	Drawing ID: DAAD036729	Rev. –	

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

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Download
"DXF file"

2xA170-L
2xA270-L

⊗ WITH EXHAUST WASTE GATE FOR LLT (OPTIONAL)

*1) Optionelle Ausfuehrung (wenn verlangt)
OPTIONAL EXECUTION (IF REQUIRED)

*2) Standard Ausfuehrung
STANDARD EXECUTION
Vorschlag Endgueltige Position ist mit Werft zu bestimmen
PROPOSAL: FINAL POSITION TO BE DETERMINED IN ACCORDANCE WITH SHIPYARD

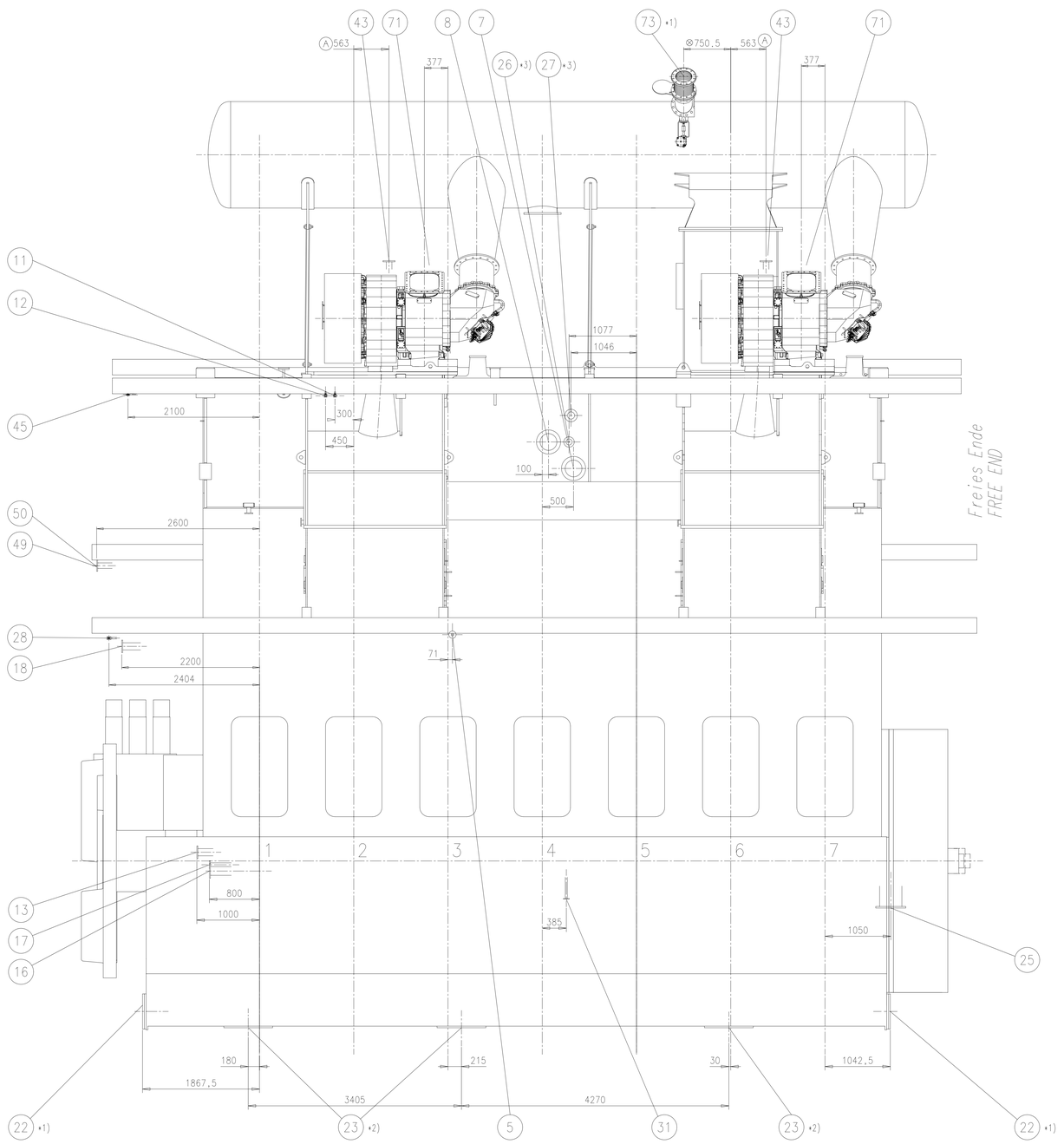
*3) Externale Ausfuehrung (wenn verlangt)
EXTERNAL EXECUTION (IF REQUIRED)

Alle Flanschanschluesse am Motor sind mit Gegenflanschen versehen (Blindflansch), ausgenommen der Anschluss fuer den Gasaustritt am Turbolader. Die Blindflansche sind nach dem betreffenden Rohrdurchmesser des Werftanschlusses aufzubohren.
THE PIPE CONNECTIONS ON THE ENGINE ARE SUPPLIED WITH MATING FLANGES (BLIND), WITH EXCEPTION OF THE TURBOCHARGER EXHAUST GAS OUTLET. BLIND FLANGES TO BE DRILLED TO MATCH PIPE DIA SUPPLIED BY THE SHIPYARD.

Die Gewinde-Anschluesse werden komplett geliefert
SCREWED CONNECTIONS ARE SUPPLIED COMPLETE

Gasaustritt-Stellung GAS OUTLET POSITION	X	Y
15°	3977	9247
30°	4124	9187
45°	4249	9091

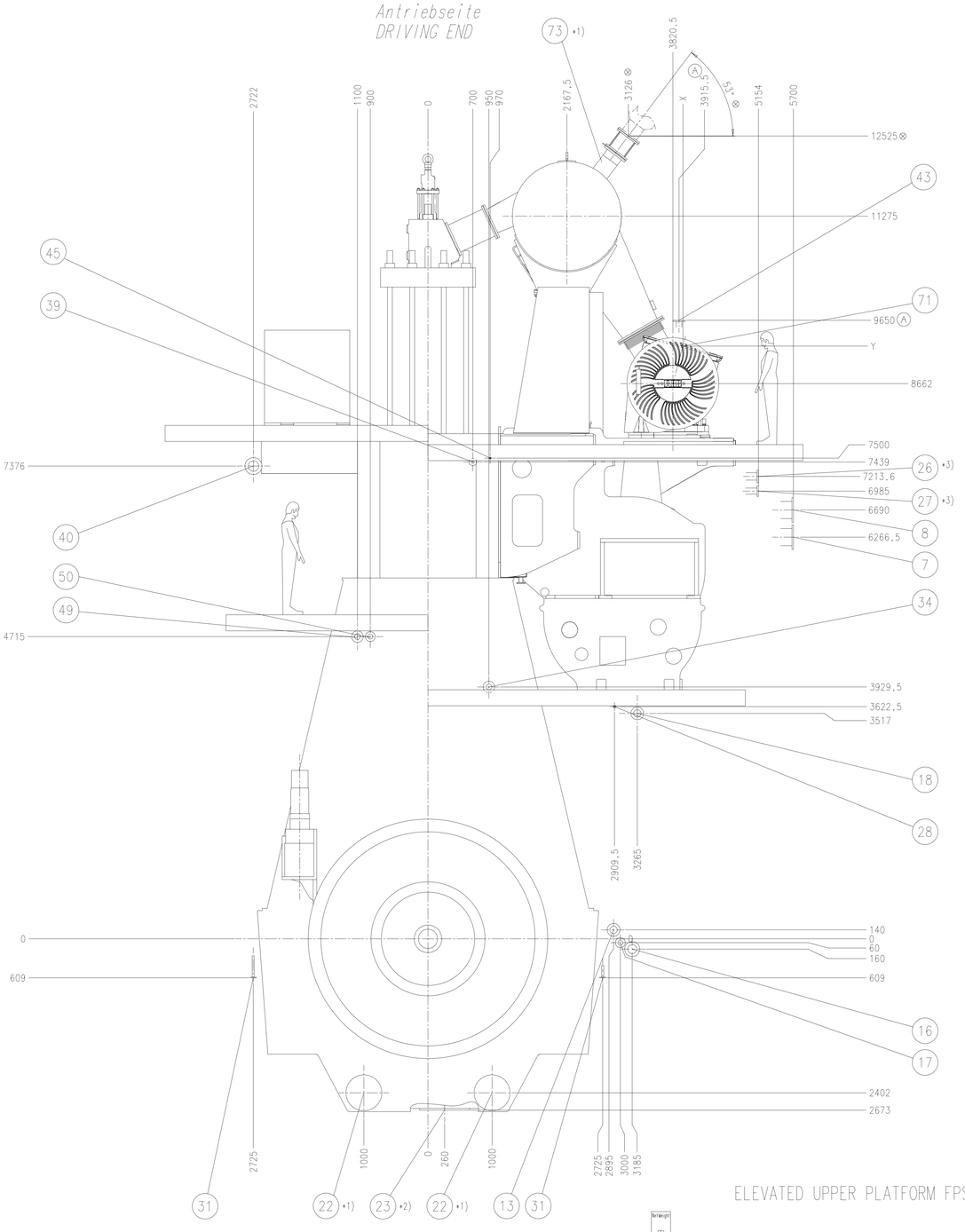
Abgasseite
EXHAUST SIDE



Antriebseite
DRIVING END

Freies Ende
FREE END

Antriebseite
DRIVING END



ELEVATED UPPER PLATFORM FPS

Netweight							
0.003							
1	001	107.390.729.500	FLANGE DIMENSIONS	107.390.729			0.001
Quantity PER ENGINE	SEQ NO	Material ID	Material Name Dimension, Occ	Standard or Drawing		Basic Material Material Standard	Weight GR/NET

PAA704633	Free Issues for																	G-Code XXXXX Standard MS	Main Dr. H
Materials	Mod	A	EAAD089737	22.01.2019															
		Number		Drawn date	Number		Drawn date	Number		Drawn date	Number		Drawn date						

WIN GD Winterthur Gas & Diesel

Product W7X82

PIPE CONNECTION PLAN

Rohranschlussplan

Units	mm kg	NX	Basic Material	Net Weight
SURFACE PROTECTION SEE GROUP 0344	Mode	23.06.2014 hda002 H.Daerre	Scale 1:30	Size A0 Page 1/3 Material ID
TOLERANCING PRINCIPLE ISO8015	Chkd	25.11.2014 ast044 Stephan	Design Group 8020	Drawing ID DAAD051586 Rev A
GENERAL TOLERANCES ACCORDING TO ISO2768-mK	Appd	25.11.2014 bha009 Haag		

Approved

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2xA170-L
2xA270-L

*1) *Optionelle Ausfuehrung (wenn verlangt)*
OPTIONAL EXECUTION (IF REQUIRED)

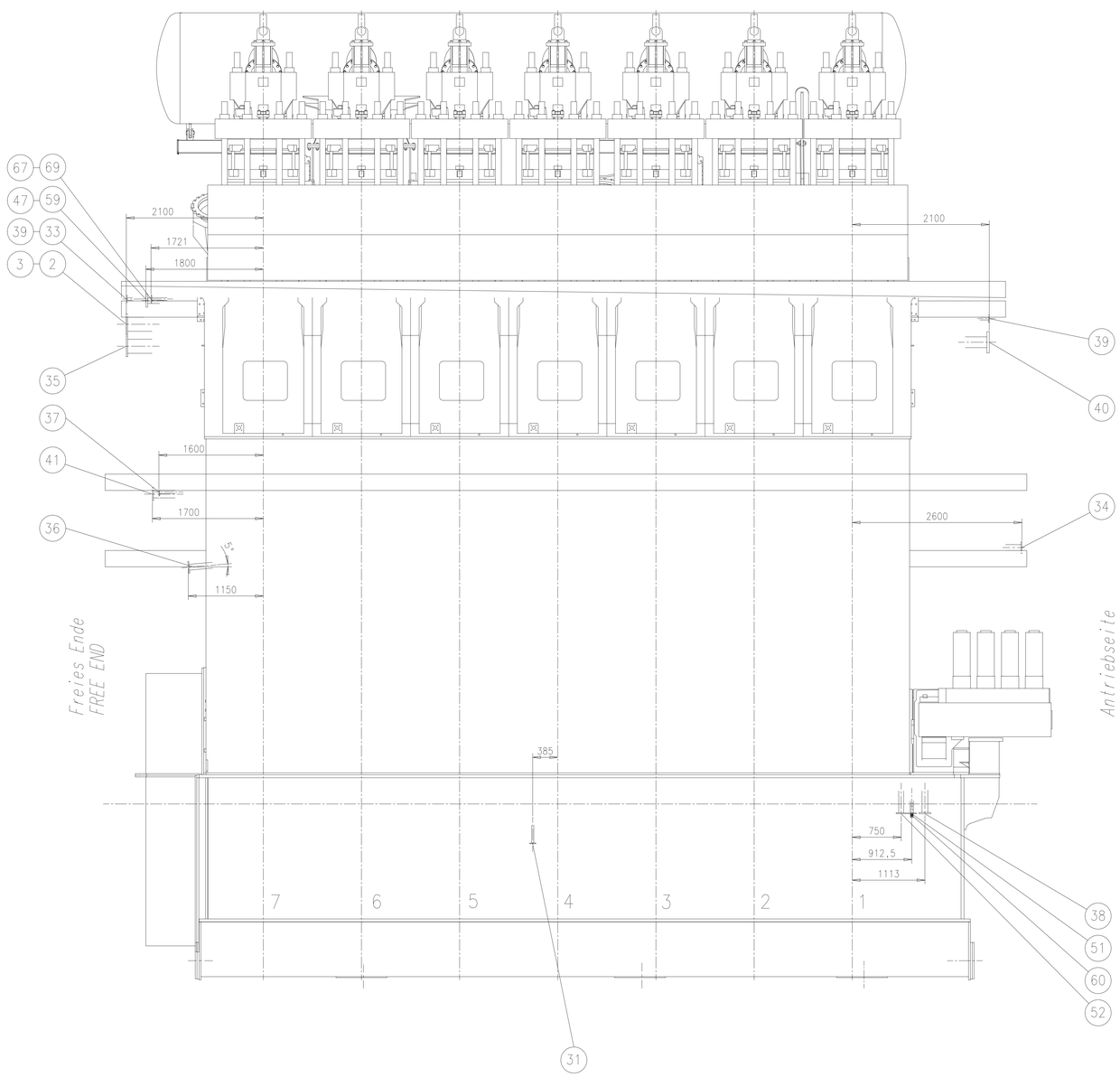
*2) *Standard Ausfuehrung*
STANDARD EXECUTION
Vorschlag Endgueltige Position ist mit Werft zu bestimmen
PROPOSAL. FINAL POSITION TO BE DETERMINED IN ACCORDANCE WITH SHIPYARD

*3) *Externale Ausfuehrung (wenn verlangt)*
EXTERNAL EXECUTION (IF REQUIRED)

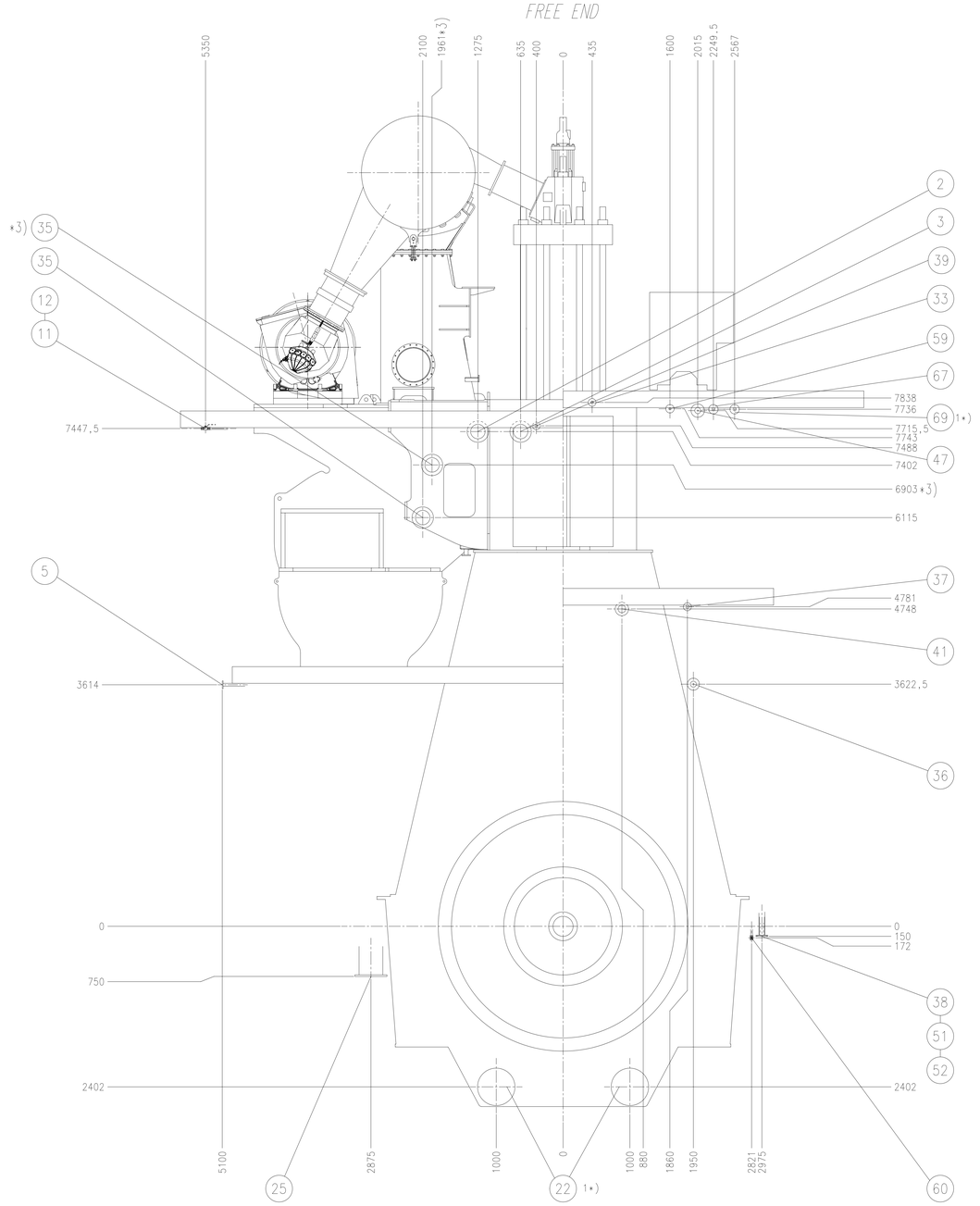
Alle Flanschanschluesse am Motor sind mit Gegenflanschen versehen (Blindflansch), ausgenommen der Anschluss fuer den Gasaustritt am Turbolader. Die Blindflansche sind nach dem betreffenden Rohrdurchmesser des Werftanschlusses aufzubohren.
THE PIPE CONNECTIONS ON THE ENGINE ARE SUPPLIED WITH MATING FLANGES (BLIND), WITH EXCEPTION OF THE TURBOCHARGER EXHAUST GAS OUTLET. BLIND FLANGES TO BE DRILLED TO MATCH PIPE DIA SUPPLIED BY THE SHIPYARD.

Die Gewinde-Anschluesse werden komplett geliefert
SCREWED CONNECTIONS ARE SUPPLIED COMPLETE

Brennstoffseite
FUEL SIDE



Freies Ende
FREE END



ELEVATED UPPER PLATFORM FPS

Modif.	Free states for ...								Q-Code XXXXX Standard MS	Main Drw. H	
	A	EAAD089737	22.01.2019								
	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date			

WIN GD Winterthur Gas & Diesel

Product W7X82

PIPE CONNECTION PLAN

Rohranschlussplan

Units	mm kg	NX	Basic Material	Net Weight
Mode	23.06.2014 hda002 H.Daerre		Scale 1:1	Size A0	Page 2/3	Material ID
Chkd	25.11.2014 ast044 Stephan		Design Group 8020	Drawing ID DAAD051586	Rev. A
Appd	25.11.2014 bha009 Haag				

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

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Approved
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Note	No.	Connection	Description	DN / PN	Ko.Gr. KO.GR.	Freies Ende FREE END	Antriebseite DRIVING END	Abgasseite EXHAUST SIDE	Brennstoffseite FUEL SIDE
	1		Zylinderkuehlwasser Eintritt / CYLINDER COOLING WATER INLET	DN / PN	8301	Nicht benoetigt NOT USED			
	2		Zylinderkuehlwasser Eintritt / CYLINDER COOLING WATER INLET	DN 200 / PN 5	8305	X			
	3		Zylinderkuehlwasser Austritt / CYLINDER COOLING WATER OUTLET	DN 200 / PN 5	8310	X			
	4		Zylinderkuehlwasser Entlueftung Entlueftung / CYLINDER COOLING WATER VENTING VENTING	DN / PN	8310	Nicht benoetigt NOT USED			
	5		Zylinderkuehlwasser Entleerung Austritt / CYLINDER COOLING WATER DRAIN OUTLET	DN 32 / PN 5	8313			X	
	6		SLK Entleerung Austritt / SAC DRAIN OUTLET	DN / PN	8314	Nicht benoetigt NOT USED			
	7		SLK-NT-Kuehlwasser Eintritt / SAC-LT-COOLING WATER INLET	DN 250 / PN 5	8335			X	
	8		SLK-NT-Kuehlwasser Austritt / SAC-LT-COOLING WATER OUTLET	DN 250 / PN 5	8335			X	
	9		SLK-HT-Kuehlwasser Eintritt / SAC-HT-COOLING WATER INLET	DN / PN	8335	Nicht benoetigt NOT USED			
	10		SLK-HT-Kuehlwasser Austritt / SAC-HT-COOLING WATER OUTLET	DN / PN	8335	Nicht benoetigt NOT USED			
	11		Wasser fuer Reinigungsanlage TL und SLK Eintritt / WATER FOR CLEANING PLANT TC AND SAC INLET	DN 20 / PN 16	8338			X	
	12		Luft fuer Reinigungsanlage TL und SLK Eintritt / AIR FOR CLEANING PLANT TC AND SAC INLET	DN 20 / PN 16	8338			X	
	13		Oeliges Wasser vom Receiver Austritt / OILY WATER FROM RECEIVER OUTLET	DN 100 / PN 5	8352		X		
	14		Waschanlage TL Schmutzwasser Austritt / WASHING PLANT TC DIRTY WATER OUTLET	DN 65 / PN 5	8355	Nicht benoetigt NOT USED			
	15		Ablauf vom Wasserabscheider Austritt / WATER DRAIN FROM WATERSEPERATOR OUTLET	DN / PN	8356	Nicht benoetigt NOT USED			
	16		SLK Kondenswasser Austritt / SAC CONDENSATE WATER OUTLET	DN 125 / PN 5	8357			X	
	17		SLK Waschwasser Austritt / SAC WASHING WATER OUTLET	DN 65 / PN 5	8357			X	
	18		SLK Entlueftung Entlueftung / SAC VENTING VENTING	DN 100 / PN 5	8357		X		
	19								
	20								
	21								
*1)	22	siehe Detail SEE DETAIL	Oelablauf Grundplatte Horizontal / OIL DRAIN BEDPLATE HORIZONTAL	DN 350 / PN 5	1110	X	X		
*2)	23	siehe Detail SEE DETAIL	Oelablauf Grundplatte Vertikal / OIL DRAIN BEDPLATE VERTICAL	DN 600 / PN 5	1110	X DOWN	X DOWN		
	24								
	25		Hauptschmieroel Eintritt / MAIN LUBRICATING OIL INLET	DN 250 / PN 10	8406			X DOWN	

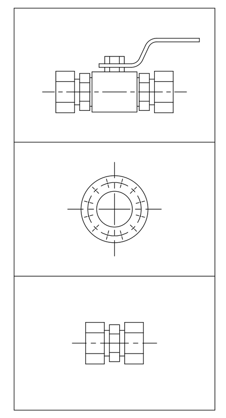
Note	No.	Connection	Description	DN / PN	Ko.Gr. KO.GR.	Freies Ende FREE END	Antriebseite DRIVING END	Abgasseite EXHAUST SIDE	Brennstoffseite FUEL SIDE
*3)	26		Schmieroel Turbolader Eintritt / LUBRICATING OIL TURBOCHARGER INLET	DN 50 / PN 10	8430			X	
*3)	27		Schmieroel Turbolader Austritt / LUBRICATING OIL TURBOCHARGER OUTLET	DN 100 / PN 5	8431			X	
	28		Spueloel Automatikfilter Austritt / FLUSHING OIL AUTOMATIC FILTER OUTLET	DN 20 / PN 10	8445		X		
	29		Schmutzoel Ablauf Versorgungseinheit Austritt / DIRTY OIL DRAIN SUPPLY UNIT OUTLET	DN / PN	8452	Nicht benoetigt NOT USED			
	30		Schmieroel Kreuzkopf Eintritt / LUBRICATING OIL CROSSHEAD INLET	DN / PN	8455	Nicht benoetigt NOT USED			
	31		Leckagen vom Motor Austritt / DIRTY OIL LEAKAGE FROM ENGINE OUTLET	DN 25 / PN 5	8463			X	X
	32		Zylinder Schmieroel Eintritt / CYLINDER LUB. OIL INLET	DN / PN	8473	Nicht benoetigt NOT USED			
	33		Zylinder Schmieroel Eintritt / CYLINDER LUB. OIL INLET	DN 32 / PN 5	8475	X			
	34		Leckoel Antriebseite Austritt / LEAKAGE OIL DRIVING END OUTLET	DN 80 / PN 5	8482		X		
	35		Leckoel Freies Ende Austritt / LEAKAGE OIL FREE END OUTLET	DN 150 / PN 5	8483	X			
	36		Schmutzoel Kolbenunterseite Austritt / DIRTY OIL PISTON UNDERSIDE OUTLET	DN 80 / PN 5	8487	X			
	37		Leckoel Stopfbuechse Austritt / LEAKAGE OIL GLAND BOX OUTLET	DN 40 / PN 5	8488	X			
	38		Oelablaufltg. Versorgungseinheit Austritt / OIL PIPE DRAIN SUPPLY UNIT OUTLET	DN 80 / PN 5	8454				X DOWN
	39		Leckageablauf Zylinderblock Austritt / LEAKAGE DRAIN CYLINDER BLOCK OUTLET	DN 32 / PN 5	8462	X	X		
	40		Anlassluft Eintritt / STARTING AIR PIPE INLET	DN 150 / PN 30	8605		X		
	41		Entlueftung Kurbelgehaeuse Austritt / VENTING CRANKCASE OUTLET	DN 100 / PN 5	8608	X			
	42		Entlueftung Waste Gate Austritt / VENTING WASTE GATE OUTLET	DN / PN	8609	Nicht benoetigt NOT USED			
	43		Entlueftung Turbolader Austritt / VENTING TURBOCHARGER OUTLET	DN 65 / PN 5	8610			X UP	
	44		Entlueftung Zylinderkuehlwasser Austritt / VENTING CYLINDER COOLING WATER OUTLET	DN / PN	8611	Nicht benoetigt NOT USED			
	45		Steuerluftversorgung Eintritt / CONTROL AIR SUPPLY INLET	DN 15 / PN 10	8630		X		
	46		Steuerluftversorgung Eintritt / CONTROL AIR SUPPLY INLET	DN / PN	4605	Nicht benoetigt NOT USED			
	47		Oel Ablaufleitung Servosystem Austritt / OIL DRAIN PIPE SSERVO SYSTEM OUTLET	DN 80 / PN 16	8449	X			
	48								
	49		Brennstoff Eintritt / FUEL INLET	DN 80 / PN 16	8702		X		
	50		Brennstoffruecklauf Austritt / FUEL RETURN OUTLET	DN 65 / PN 16	8704		X		

Note	No.	Connection	Description	DN / PN	Ko.Gr. KO.GR.	Freies Ende FREE END	Antriebseite DRIVING END	Abgasseite EXHAUST SIDE	Brennstoffseite FUEL SIDE
	51		Leckbrennstoff Rail Unit Austritt / FUEL LEAKAGE RAIL UNIT OUTLET	DN 40 / PN 5	8740				X DOWN
	52		Leckbrennstoff Einspritzventil Austritt / FUEL LEAKAGE INJECTION VALVE OUTLET	DN 65 / PN 5	8741				X DOWN
	53		Leckbrennstoff HD-Leitungen Austritt / FUEL LEAKAGE HP-PIPES OUTLET	DN / PN	8742	Nicht benoetigt NOT USED			
	54		Leckbrennstoff Einspritzpumpe Austritt / FUEL LEAKAGE INJECTION PUMP OUTLET	DN / PN	8743	Nicht benoetigt NOT USED			
	55		Leckbrennstoff Rail/Versorgungs Einheit Austritt / FUEL LEAKAGE RAIL/SUPPLY UNIT OUTLET	DN / PN	8744	Nicht benoetigt NOT USED			
	56		Leckbrennstoff Einspritzeinheit Austritt / FUEL LEAKAGE ICU OUTLET	DN / PN	8745	Nicht benoetigt NOT USED			
	57								
	58								
	59		Begleitheizung Brennstoff Eintritt / TRACE HEATING FUEL INLET	DN 25 / PN 16	8810	X			
	60		Begleitheizung Brennstoff Austritt / TRACE HEATING FUEL OUTLET	DN 20 / PN 16	8810				X DOWN
	61		Begleitheizung Brennstoff Eintritt / TRACE HEATING FUEL INLET	DN / PN	8812	Nicht benoetigt NOT USED			
	62		Begleitheizung Brennstoff Austritt / TRACE HEATING FUEL OUTLET	DN / PN	8812	Nicht benoetigt NOT USED			
	63		Begleitheizung Brennstoffzirkulation Eintritt / TRACE HEATING FUEL CIRCULATION INLET	DN / PN	8820	Nicht benoetigt NOT USED			
	64		Begleitheizung Brennstoffzirkulation Austritt / TRACE HEATING FUEL CIRCULATION OUTLET	DN / PN	8823	Nicht benoetigt NOT USED			
	65								
	66								
	67		Feuerloesch Anlage Zylinderblock Eintritt / FIRE EXTINGUISHING PLANT CYLINDER BLOCK INLET	DN 40 / PN 16	8830	X			
	68		Feuerloesch Anlage Rail Unit Eintritt / FIRE EXTINGUISHING PLANT RAIL UNIT INLET	DN / PN	8831	Nicht benoetigt NOT USED			
*1)	69		Feuerloesch Anlage Rail Unit Eintritt / FIRE EXTINGUISHING PLANT RAIL UNIT INLET	DN 40 / PN 16	8832	X			
	70								
	71	siehe Detail SEE DETAIL	Abgas Turbolader Austritt / EXHAUST GAS TURBOCHARGER OUTLET		6506 6509			X UP	
	72								
*1)	73		Abgas-Abblaseventil Austritt / EXHAUST WASTE GATE OUTLET	DN 200 / PN 10	8135			X	
	74								
	75								

*1) *Optionelle Ausfuehrung (wenn verlangt)*
OPTIONAL EXECUTION (IF REQUIRED)

*2) *Standard Ausfuehrung*
STANDARD EXECUTION
Vorschlag Endgueltige Position ist mit Werft zu bestimmen
PROPOSAL. FINAL POSITION TO BE DETERMINED IN ACCORDANCE WITH SHIPYARD

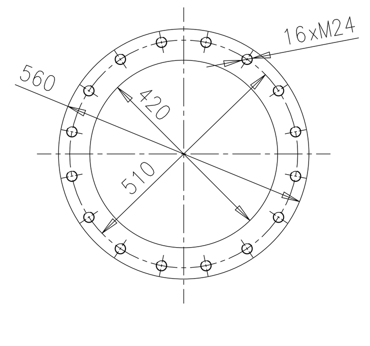
*3) *Externale Ausfuehrung (wenn verlangt)*
EXTERNAL EXECUTION (IF REQUIRED)



Abmasse der Flansche siehe Stueckliste
FLANGE DIMENSIONS SEE PARTS LIST

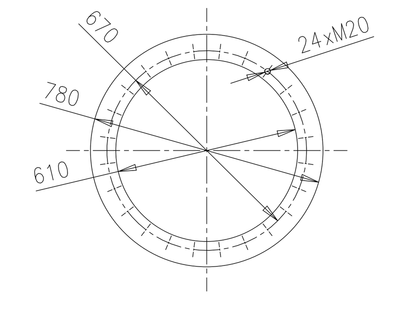
(22) *fuer horizontalen Oelablauf*
FOR HORIZONTAL LUB. OIL DRAIN

1:10



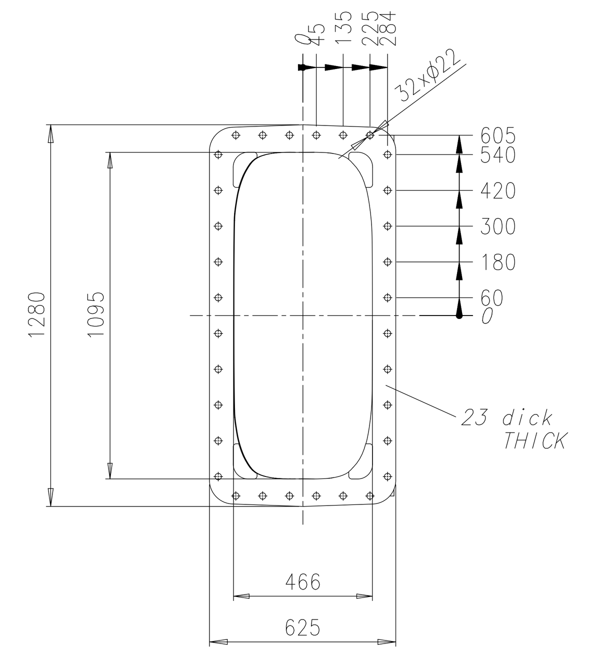
(23) *fuer vertikalen Oelablauf*
FOR VERTICAL LUB. OIL DRAIN

1:15



(71) *Gas-Austritt vom Turbolader*
GAS OUTLET FROM TURBOCHARGER

1:15



2xA170-L
2xA270-L

ELEVATED UPPER PLATFORM FPS

Free space for lic.		Q-Code: XXXXX; Standard: JIS	Main Drw.: H
Modif.	A EAAD089737 22.01.2019 (Number / Drawn date)		
WIN GD Winterthur Gas & Diesel	Product: W7X82	PIPE CONNECTION PLAN / Rohranschlussplan	
Units: mm kg	NX	Basic Material	Net Weight
Made: 23.06.2014 hdo002 H.Doerre	Scale: 1:1	Size: A0; Page: 3/3	Material ID
Chkd: 25.11.2014 ast044 Stephan	Design Group: 8020	Drawing ID: DAAD051586	Rev.: A
Appd: 25.11.2014 bha009 Haag			

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

Approved

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Download "DXF file"

2xA270-L

*1) *Optionelle Ausfuehrung (wenn verlangt)*
OPTIONAL EXECUTION (IF REQUIRED)

*2) *Standard Ausfuehrung*
STANDARD EXECUTION
Vorschlag Endgueltige Position ist mit Werft zu bestimmen
PROPOSAL. FINAL POSITION TO BE DETERMINED IN ACCORDANCE WITH SHIPYARD

*3) *Externale Ausfuehrung (wenn verlangt)*
EXTERNAL EXECUTION (IF REQUIRED)

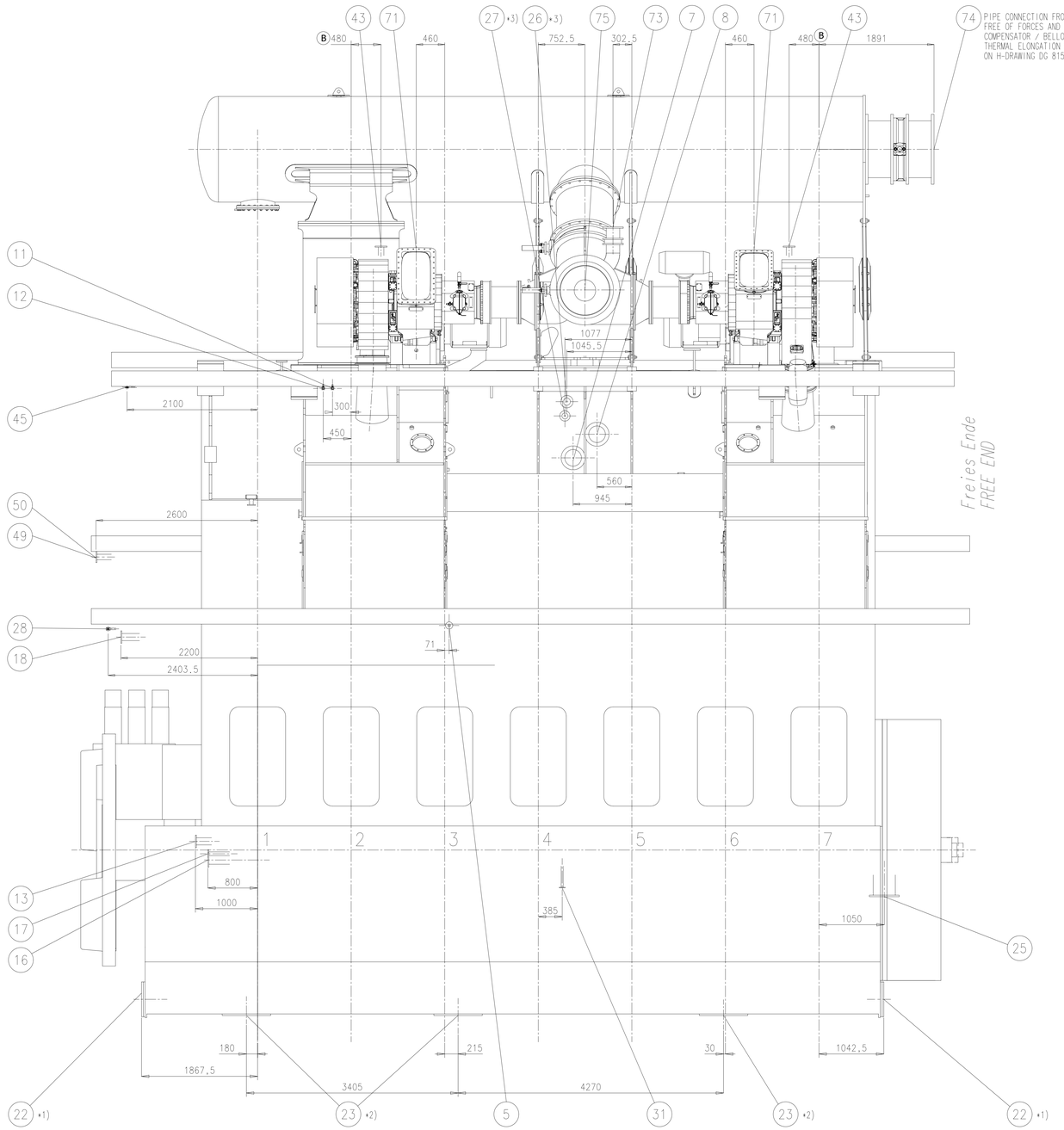
Alle Flanschanschluesse am Motor sind mit Gegenflanschen versehen (Blindflansch), ausgenommen der Anschluss fuer den Gasaustritt am Turbolader. Die Blindflansche sind nach dem betreffenden Rohrdurchmesser des Werftanschlusses aufzubohren.
THE PIPE CONNECTIONS ON THE ENGINE ARE SUPPLIED WITH MATING FLANGES (BLIND), WITH EXCEPTION OF THE TURBOCHARGER EXHAUST GAS OUTLET. BLIND FLANGES TO BE DRILLED TO MATCH PIPE DIA SUPPLIED BY THE SHIPYARD.

Die Gewinde-Anschluesse werden komplett geliefert
SCREWED CONNECTIONS ARE SUPPLIED COMPLETE

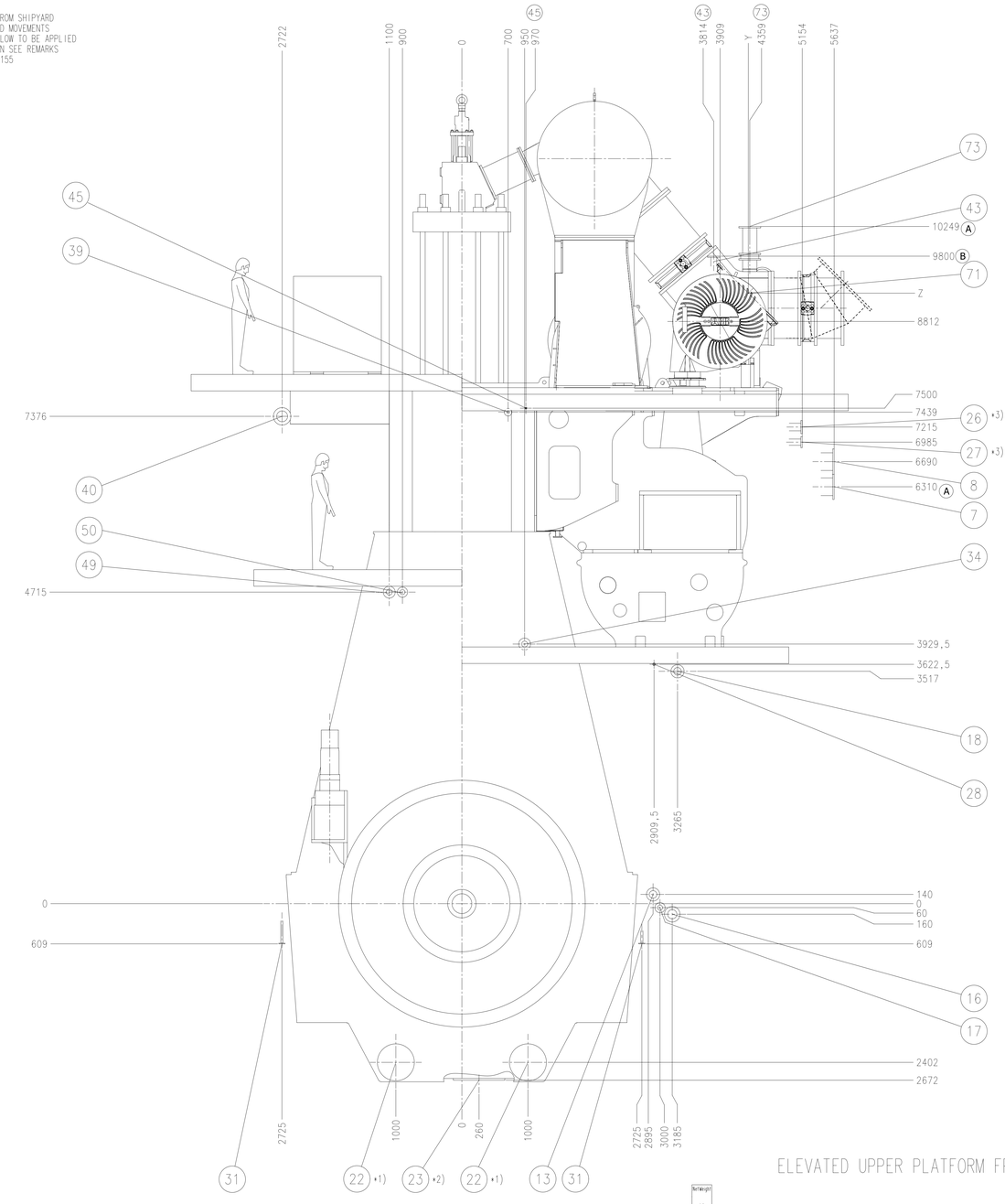
DIMENSIONS FOR REFERENCE ONLY. TECHNICAL MODIFICATIONS RESERVED. LATER ADAPTATIONS ARE POSSIBLE BASED ON PROJECT REQUIREMENTS AND RELATED DETAIL DESIGN.
THIS PIPE CONNECTION PLAN MAY NOT BE USED FOR FINAL DESIGN!

Gasaustritt-Stellung GAS OUTLET POSITION	Y	Z
0°	3909	9418
15°	4066	9397
30°	4212	9337
45°	4338	9241

Abgasseite
EXHAUST SIDE



Antriebseite
DRIVING END



ELEVATED UPPER PLATFORM FPS

Netweight								
0,003								
1	001	107.390.729.500	FLANGE DIMENSIONS		107.390.729			0,001
Quantity PER ENGINE	SEQ NO	Material ID	Material Name / Dimension, Occ		Standard or Drawing		Basic Material Material Standard	Weight GR.NET

Material	Part Number Ref. Number	G-Code XXXXX	Standard JIS	Main Drw. H
PAAD077826	A EAAD089004 08.02.2018	B EAAD089737 22.01.2019		
	Number / Drawn date	Number / Drawn date	Number / Drawn date	Number / Drawn date

WIN GD Winterthur Gas & Diesel

Product W7X82

PIPE CONNECTION PLAN
HP SCR
Rohranschlussplan
HP SCR

Units	mm kg	NX	Basic Material	Net Weight
SURFACE PROTECTION SEE GROUP 0344	Made	24.10.2017 sth017 Thalmann	Scale 1:30	Size A0 / Page 1/3 / Material B
TOLERANCING PRINCIPLE ISO8015	Chkd	10.11.2017 uba001 Balsiger	Design Group 8020	
GENERAL TOLERANCES ACCORDING TO ISO7768-mK	Appd	13.11.2017 mda006 Dacic	Drawing ID DAAD093682	Rev. B

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2xA270-L

*1) *Optionelle Ausfuehrung (wenn verlangt)*
OPTIONAL EXECUTION (IF REQUIRED)

*2) *Standard Ausfuehrung*
STANDARD EXECUTION
Vorschlag Endgueltige Position ist mit Werft zu bestimmen
PROPOSAL. FINAL POSITION TO BE DETERMINED IN ACCORDANCE WITH SHIPYARD

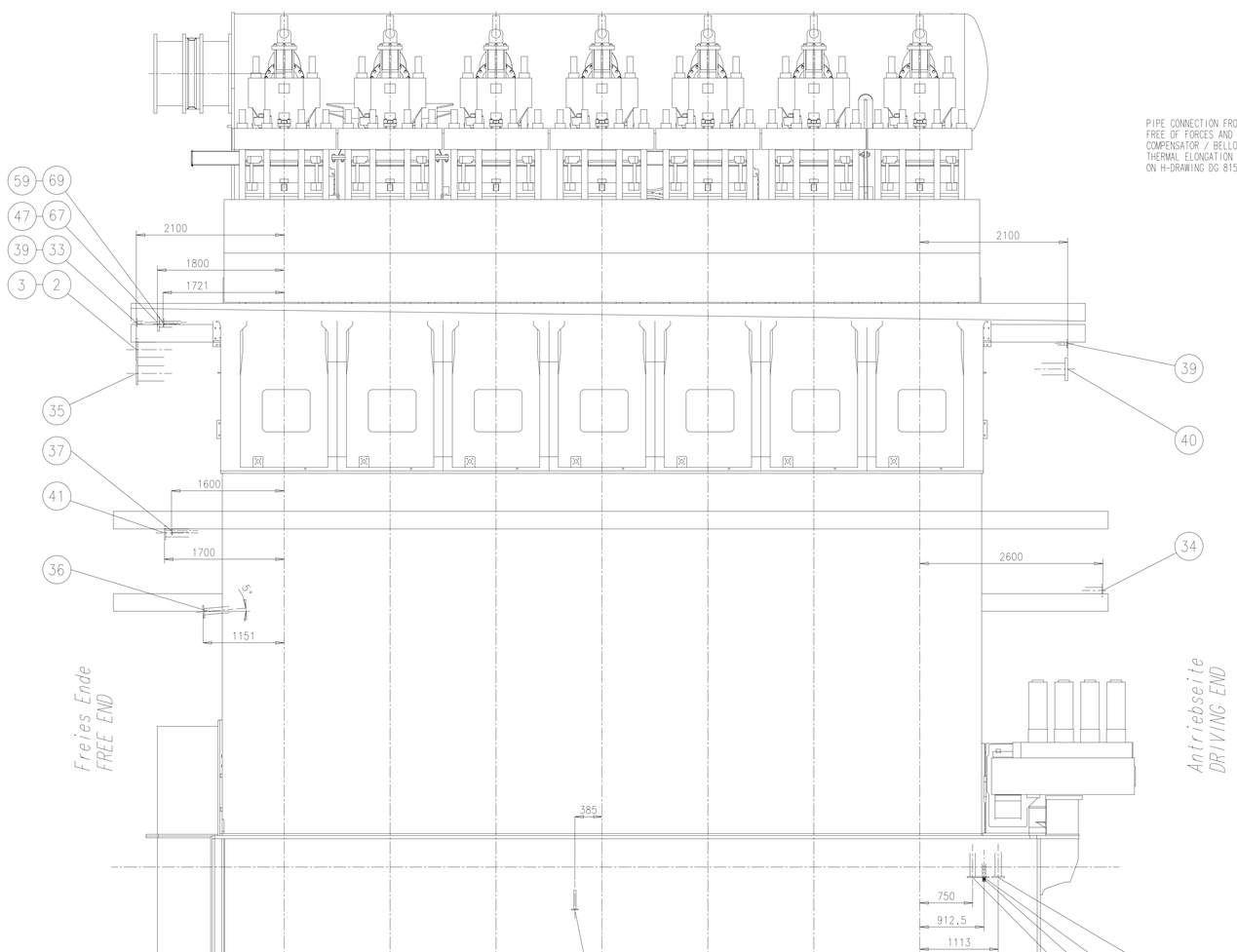
*3) *Externale Ausfuehrung (wenn verlangt)*
EXTERNAL EXECUTION (IF REQUIRED)

Alle Flanschanschluesse am Motor sind mit Gegenflanschen versehen (Blindflansch), ausgenommen der Anschluss fuer den Gasaustritt am Turbolader. Die Blindflansche sind nach dem betreffenden Rohrdurchmesser des Werftanschlusses aufzubohren.
THE PIPE CONNECTIONS ON THE ENGINE ARE SUPPLIED WITH MATING FLANGES (BLIND), WITH EXCEPTION OF THE TURBOCHARGER EXHAUST GAS OUTLET. BLIND FLANGES TO BE DRILLED TO MATCH PIPE DIA SUPPLIED BY THE SHIPYARD.

Die Gewinde-Anschluesse werden komplett geliefert
SCREWED CONNECTIONS ARE SUPPLIED COMPLETE

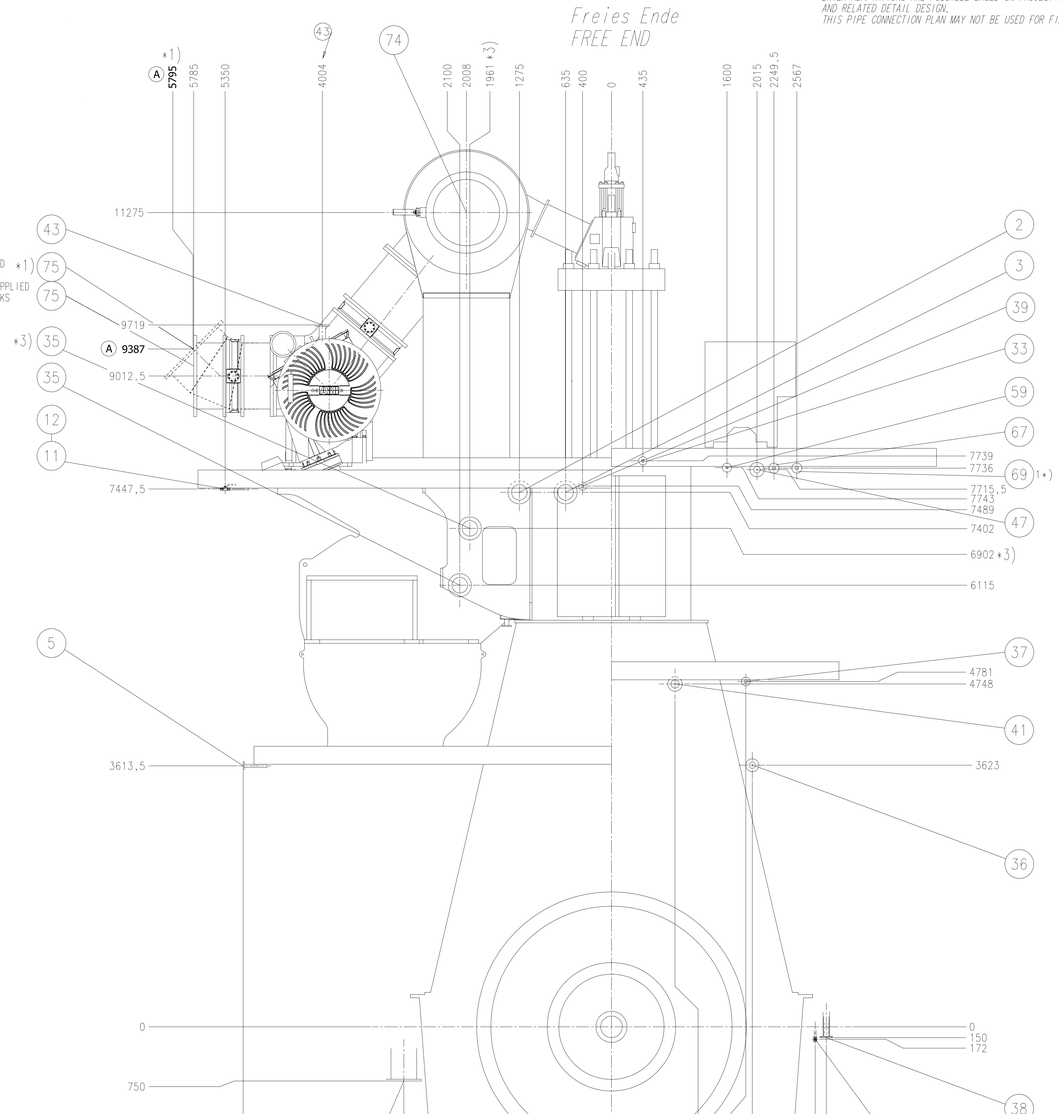
DIMENSIONS FOR REFERENCE ONLY. TECHNICAL MODIFICATIONS RESERVED. LATER ADAPTATIONS ARE POSSIBLE BASED ON PROJECT REQUIREMENTS AND RELATED DETAIL DESIGN.
THIS PIPE CONNECTION PLAN MAY NOT BE USED FOR FINAL DESIGN!

Brennstoffseite
FUEL SIDE



PIPE CONNECTION FROM SHIPYARD FREE OF FORCES AND MOVEMENTS COMPENSATOR / BELLOW TO BE APPLIED. THERMAL ELONGATION SEE REMARKS ON H-DRAWING DG 8155

Freies Ende
FREE END



ELEVATED UPPER PLATFORM FPS

Next	Free states for ...								Q-Code XXXXX	Main Drw. H
									Standard #S	
	A	EAAD089004	08.02.2018	B	EAAD089737	22.01.2019				
		Number	Drawn date		Number	Drawn date	Number	Drawn date	Number	Drawn date

WIN GD Winterthur Gas & Diesel

Product W7X82

PIPE CONNECTION PLAN
HP SCR

Rohranschlussplan
HP SCR

Units	mm kg	NX	Basic Material	Net Weight

Mode	24.10.2017	sth017 Thalmann	Scale 1:30	Size A0	Page 2/3	Material 10	
Chkd	10.11.2017	uba001 Balsiger	Design Group 8020	Drawing ID DAAD093682		Rev B	
Appd	13.11.2017	mda006 Dacic					

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

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Nr.		Bezeichnung / Description	DN / PN	Ko.Gr. KO.GR.	Freies Ende FREE END	Antriebseite DRIVING END	Abgasseite EXHAUST SIDE	Brennstoffseite FUEL SIDE
1		Zylinderkuehlwasser Eintritt / CYLINDER COOLING WATER INLET	DN / PN	8301	Nicht benoetigt NOT USED			
2		Zylinderkuehlwasser Eintritt / CYLINDER COOLING WATER INLET	DN 200 / PN 5	8305	X			X
3		Zylinderkuehlwasser Austritt / CYLINDER COOLING WATER OUTLET	DN 200 / PN 5	8310	X			X
4		Zylinderkuehlwasser Entlueftung Entlueftung / CYLINDER COOLING WATER VENTING VENTING	DN / PN	8310	Nicht benoetigt NOT USED			
5		Zylinderkuehlwasser Entleerung Austritt / CYLINDER COOLING WATER DRAIN OUTLET	DN 32 / PN 5	8313	X		X	
6		SLK Entleerung Austritt / SAC DRAIN OUTLET	DN / PN	8314	Nicht benoetigt NOT USED			
7		SLK-NT-Kuehlwasser Eintritt / SAC-LT-COOLING WATER INLET	DN 300 / PN 5	8335		X	X	
8		SLK-NT-Kuehlwasser Austritt / SAC-LT-COOLING WATER OUTLET	DN 300 / PN 5	8335		X	X	
9		SLK-HT-Kuehlwasser Eintritt / SAC-HT-COOLING WATER INLET	DN / PN	8335	Nicht benoetigt NOT USED			
10		SLK-HT-Kuehlwasser Austritt / SAC-HT-COOLING WATER OUTLET	DN / PN	8335	Nicht benoetigt NOT USED			
11		Wasser fuer Reinigungsanlage TL und SLK Eintritt / WATER FOR CLEANING PLANT TC AND SAC INLET	DN 20 / PN 16	8338	X		X	
12		Luft fuer Reinigungsanlage TL und SLK Eintritt / AIR FOR CLEANING PLANT TC AND SAC INLET	DN 20 / PN 16	8338	X		X	
13		Oeliges Wasser vom Receiver Austritt / OILY WATER FROM RECEIVER OUTLET	DN 100 / PN 5	8352		X	X	
14		Waschanlage TL Schmutzwasser Austritt / WASHING PLANT TC DIRTY WATER OUTLET	DN / PN	8355	Nicht benoetigt NOT USED			
15		Ablauf vom Wasserabscheider Austritt / WATER DRAIN FROM WATERSEPERATOR OUTLET	DN / PN	8356	Nicht benoetigt NOT USED			
16		SLK Kondenswasser Austritt / SAC CONDENSATE WATER OUTLET	DN 125 / PN 5	8357		X	X	
17		SLK Waschwasser Austritt / SAC WASHING WATER OUTLET	DN 65 / PN 5	8357		X	X	
18		SLK Entlueftung Entlueftung / SAC VENTING VENTING	DN 100 / PN 5	8357		X	X	
19								
20								
21								
*1) 22	siehe Detail SEE DETAIL	Oelablauf Grundplatte Horizontal / OIL DRAIN BEDPLATE HORIZONTAL	DN 350 / PN 5	1110	X	X		
*2) 23	siehe Detail SEE DETAIL	Oelablauf Grundplatte Vertikal / OIL DRAIN BEDPLATE VERTICAL	DN 600 / PN 5	1110	X DOWN	X DOWN		
24								
25		Hauptschmieroel Eintritt / MAIN LUBRICATING OIL INLET	DN 250 / PN 10	8406	X DOWN		X DOWN	

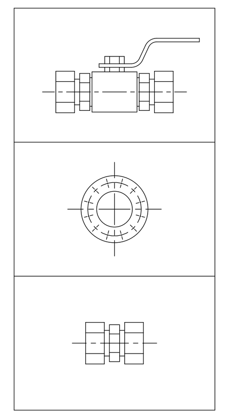
Nr.		Bezeichnung / Description	DN / PN	Ko.Gr. KO.GR.	Freies Ende FREE END	Antriebseite DRIVING END	Abgasseite EXHAUST SIDE	Brennstoffseite FUEL SIDE
*3) 26		Schmieroel Turbolader Eintritt / LUBRICATING OIL TURBOCHARGER INLET	DN 50 / PN 10	8430		X	X	
*3) 27		Schmieroel Turbolader Austritt / LUBRICATING OIL TURBOCHARGER OUTLET	DN 100 / PN 5	8431		X	X	
28		Spueloel Automatikfilter Austritt / FLUSHING OIL AUTOMATIC FILTER OUTLET	DN 20 / PN 10	8445		X	X	
29		Schmutzoel Ablauf Versorgungseinheit Austritt / DIRTY OIL DRAIN SUPPLY UNIT OUTLET	DN / PN	8452	Nicht benoetigt NOT USED			
30		Schmieroel Kreuzkopf Eintritt / LUBRICATING OIL CROSSHEAD INLET	DN / PN	8455	Nicht benoetigt NOT USED			
31		Leckagen vom Motor Austritt / DIRTY OIL LEAKAGE FROM ENGINE OUTLET	DN 25 / PN 5	8463		X	X	X
32		Zylinder Schmieroel Eintritt / CYLINDER LUB. OIL INLET	DN / PN	8473	Nicht benoetigt NOT USED			
33		Zylinder Schmieroel Eintritt / CYLINDER LUB. OIL INLET	DN 32 / PN 5	8475	X			X
34		Leckoel Antriebseite Austritt / LEAKAGE OIL DRIVING END OUTLET	DN 80 / PN 5	8482		X		X
35		Leckoel Freies Ende Austritt / LEAKAGE OIL FREE END OUTLET	DN 150 / PN 5	8483	X			X
36		Schmutzoel Kolbenunterseite Austritt / DIRTY OIL PISTON UNDERSIDE OUTLET	DN 80 / PN 5	8487	X			X
37		Leckoel Stopfbuechse Austritt / LEAKAGE OIL GLAND BOX OUTLET	DN 40 / PN 5	8488	X			X
38		Oelablaufltg. Versorgungseinheit Austritt / OIL PIPE DRAIN SUPPLY UNIT OUTLET	DN 80 / PN 5	8454	X DOWN			X DOWN
39		Leckageablauf Zylinderblock Austritt / LEAKAGE DRAIN CYLINDER BLOCK OUTLET	DN 32 / PN 5	8462	X	X		X
40		Anlassluft Eintritt / STARTING AIR PIPE INLET	DN 150 / PN 30	8605		X		X
41		Entlueftung Kurbelgehaeuse Austritt / VENTING CRANKCASE OUTLET	DN 100 / PN 5	8608	X			X
42		Entlueftung Waste Gate Austritt / VENTING WASTE GATE OUTLET	DN / PN	8609	Nicht benoetigt NOT USED			
43		Entlueftung Turbolader Austritt / VENTING TURBOCHARGER OUTLET	DN 65 / PN 5	8610		X UP	X UP	
44		Entlueftung Zylinderkuehlwasser Austritt / VENTING CYLINDER COOLING WATER OUTLET	DN / PN	8611	Nicht benoetigt NOT USED			
45		Steuerluftversorgung Eintritt / CONTROL AIR SUPPLY INLET	DN 15 / PN 10	8630		X	X	
46		Steuerluftversorgung Eintritt / CONTROL AIR SUPPLY INLET	DN / PN	4605	Nicht benoetigt NOT USED			
47		Oel Ablaufleitung Servosystem Austritt / OIL DRAIN PIPE SSERVO SYSTEM OUTLET	DN 80 / PN 16	8449	X			X
48								
49		Brennstoff Eintritt / FUEL INLET	DN 80 / PN 16	8702		X	X	
50		Brennstoffruecklauf Austritt / FUEL RETURN OUTLET	DN 65 / PN 16	8704		X	X	

Nr.		Bezeichnung / Description	DN / PN	Ko.Gr. KO.GR.	Freies Ende FREE END	Antriebseite DRIVING END	Abgasseite EXHAUST SIDE	Brennstoffseite FUEL SIDE
51		Leckbrennstoff Rail Unit Austritt / FUEL LEAKAGE RAIL UNIT OUTLET	DN 40 / PN 5	8740	X DOWN			X DOWN
52		Leckbrennstoff Einspritzventil Austritt / FUEL LEAKAGE INJECTION VALVE OUTLET	DN 65 / PN 5	8741	X DOWN			X DOWN
53		Leckbrennstoff HD-Leitungen Austritt / FUEL LEAKAGE HP-PIPES OUTLET	DN / PN	8742	Nicht benoetigt NOT USED			
54		Leckbrennstoff Einspritzpumpe Austritt / FUEL LEAKAGE INJECTION PUMP OUTLET	DN / PN	8743	Nicht benoetigt NOT USED			
55		Leckbrennstoff Rail/Versorgungs Einheit Austritt / FUEL LEAKAGE RAIL/SUPPLY UNIT OUTLET	DN / PN	8744	Nicht benoetigt NOT USED			
56		Leckbrennstoff Einspritzeinheit Austritt / FUEL LEAKAGE ICU OUTLET	DN / PN	8745	Nicht benoetigt NOT USED			
57								
58								
59		Begleitheizung Brennstoff Eintritt / TRACE HEATING FUEL INLET	DN 25 / PN 16	8810	X			X
60		Begleitheizung Brennstoff Austritt / TRACE HEATING FUEL OUTLET	DN 20 / PN 16	8810	X DOWN			X DOWN
61		Begleitheizung Brennstoff Eintritt / TRACE HEATING FUEL INLET	DN / PN	8812	Nicht benoetigt NOT USED			
62		Begleitheizung Brennstoff Austritt / TRACE HEATING FUEL OUTLET	DN / PN	8812	Nicht benoetigt NOT USED			
63		Begleitheizung Brennstoffzirkulation Eintritt / TRACE HEATING FUEL CIRCULATION INLET	DN / PN	8820	Nicht benoetigt NOT USED			
64		Begleitheizung Brennstoffzirkulation Austritt / TRACE HEATING FUEL CIRCULATION OUTLET	DN / PN	8823	Nicht benoetigt NOT USED			
65								
66								
67		Feuerloesch Anlage Zylinderblock Eintritt / FIRE EXTINGUISHING PLANT CYLINDER BLOCK INLET	DN 40 / PN 16	8830	X			X
68		Feuerloesch Anlage Rail Unit Eintritt / FIRE EXTINGUISHING PLANT RAIL UNIT INLET	DN / PN	8831	Nicht benoetigt NOT USED			
*1) 69		Feuerloesch Anlage Rail Unit Eintritt / FIRE EXTINGUISHING PLANT RAIL UNIT INLET	DN 40 / PN 16	8832	Nicht benoetigt NOT USED			
70								
71	siehe Detail SEE DETAIL	Abgas Turbolader Austritt / EXHAUST GAS TURBOCHARGER OUTLET		6506 6509		X UP	X UP	
72								
73		Abgas-Abblaseventil Austritt / EXHAUST WASTE GATE OUTLET	DN 200 / PN 10	8135	X	X	X	
74	siehe Detail SEE DETAIL	Abgassammelleitung Austritt / EXHAUST MANIFOLD OUTLET	DN 900 / PN 10	8155	X		X	
75	siehe Detail SEE DETAIL	Abgassammelleitung Eintritt / EXHAUST MANIFOLD INLET	DN 900 / PN 10	8155		X	X	

*1) *Optionelle Ausfuehrung (wenn verlangt)*
OPTIONAL EXECUTION (IF REQUIRED)

*2) *Standard Ausfuehrung*
STANDARD EXECUTION
Vorschlag Endgueltige Position ist mit Werft zu bestimmen
PROPOSAL. FINAL POSITION TO BE DETERMINED IN ACCORDANCE WITH SHIPYARD

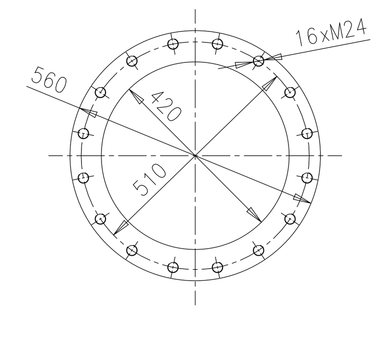
*3) *Externale Ausfuehrung (wenn verlangt)*
EXTERNAL EXECUTION (IF REQUIRED)



Abmasse der Flansche siehe Stueckliste
FLANGE DIMENSIONS SEE PARTS LIST

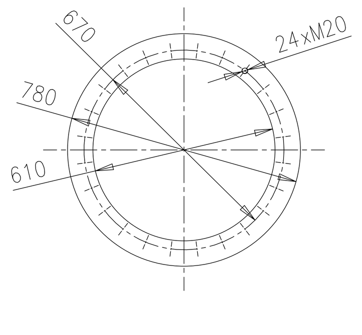
(22) *fuer horizontalen Oelablauf*
FOR HORIZONTAL LUB. OIL DRAIN

1:10



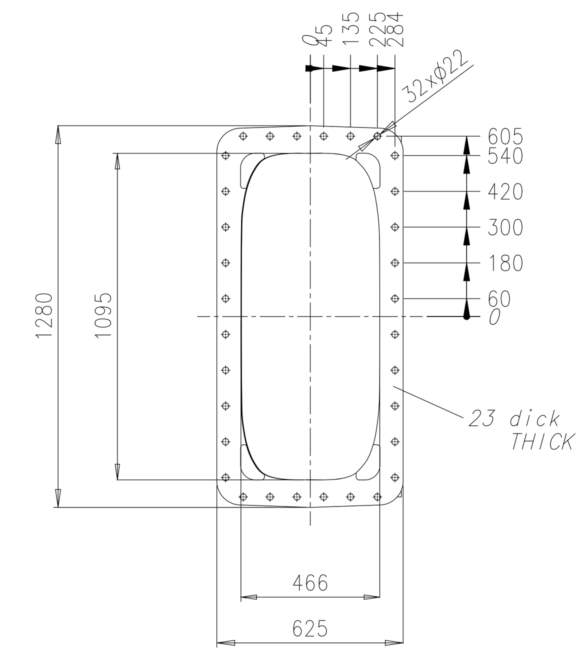
(23) *fuer vertikalen Oelablauf*
FOR VERTICAL LUB. OIL DRAIN

1:15

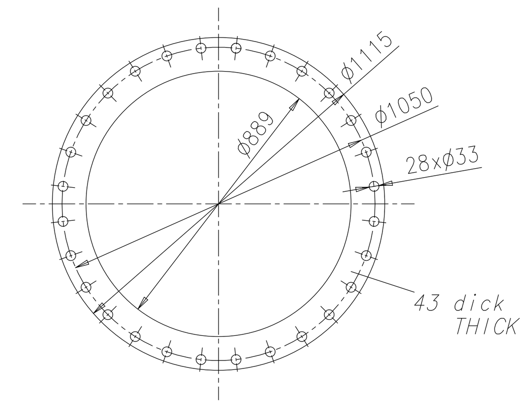


(71) *Gas-Austritt vom Turbolader*
GAS OUTLET FROM TURBOCHARGER

1:15



(74)–(75) *Gas-Austritt der Abgassammelleitung*
GAS OUTLET FROM EXHAUST MANIFOLD



2xA270-L
ELEVATED UPPER PLATFORM FPS

Q-Code: XXXXX	Standard: JIS	Main Drw.: H	
Modif.	A EAAD089004 08.02.2018	B EAAD089737 22.01.2019	
WIN GD Winterthur Gas & Diesel	Product W7X82	PIPE CONNECTION PLAN HP SCR / Rohranschlussplan HP SCR	
Units mm kg	NX	Basic Material	Net Weight
Made 24.10.2017 sth017 Thalmann	Scale 1:30	Size A0	Page 3/3
Chkd 10.11.2017 uba001 Balsiger	Design Group 8020	Material ID	
Appd 13.11.2017 mda006 Dacic	Drawing ID DAAD093682	Rev. B	

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

Approved

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"DXF file"

WITH EXHAUST WASTE GATE FOR LLT (OPTIONAL)

⊗ = Winkel kann zwischen 40°-70° gewaehlt werden noch Angaben der Werft (gezeichnet fuer 52,5°)
ANGLE CAN BE CHOSEN BETWEEN 40°-70°, ACCORDING SHIPYARD RECOMMONDATION (DRAWN FOR 52,5°)

2xA175

*1) Optionelle Ausfuehrung (wenn verlangt)
OPTIONAL EXECUTION (IF REQUIRED)

*2) Standard Ausfuehrung
STANDARD EXECUTION
Vorschlag Endgueltige Position ist mit Werft zu bestimmen
PROPOSAL. FINAL POSITION TO BE DETERMINED IN ACCORDANCE WITH SHIPYARD

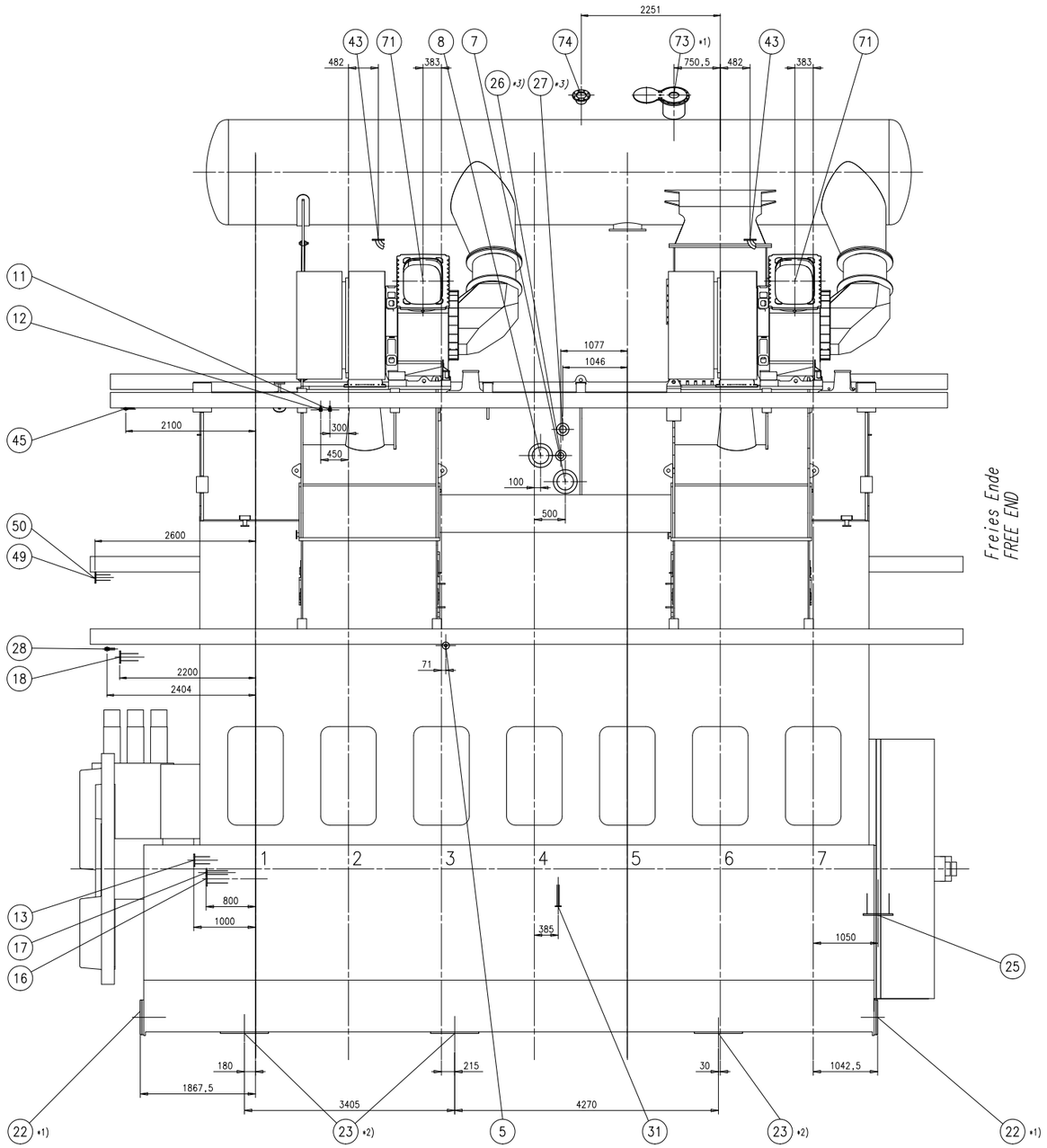
*3) Externale Ausfuehrung (wenn verlangt)
EXTERNAL EXECUTION (IF REQUIRED)

Alle Flanschanschluesse am Motor sind mit Gegenflanschen versehen (Blindflansch), ausgenommen der Anschluss fuer den Gasaustritt am Turbolader. Die Blindflansche sind nach dem betreffenden Rohrdurchmesser des Werftanschlusses aufzubohren.
THE PIPE CONNECTIONS ON THE ENGINE ARE SUPPLIED WITH MATING FLANGES (BLIND), WITH EXCEPTION OF THE TURBOCHARGER EXHAUST GAS OUTLET. BLIND FLANGES TO BE DRILLED TO MATCH PIPE DIA SUPPLIED BY THE SHIPYARD.

Die Gewinde-Anschluesse werden komplett geliefert
SCREWED CONNECTIONS ARE SUPPLIED COMPLETE

Gasaustritt-Stellung GAS OUTLET POSITION	X	Y
0°	3910	9425
15°	4099	9400
30°	4275	9327
45°	4426	9211

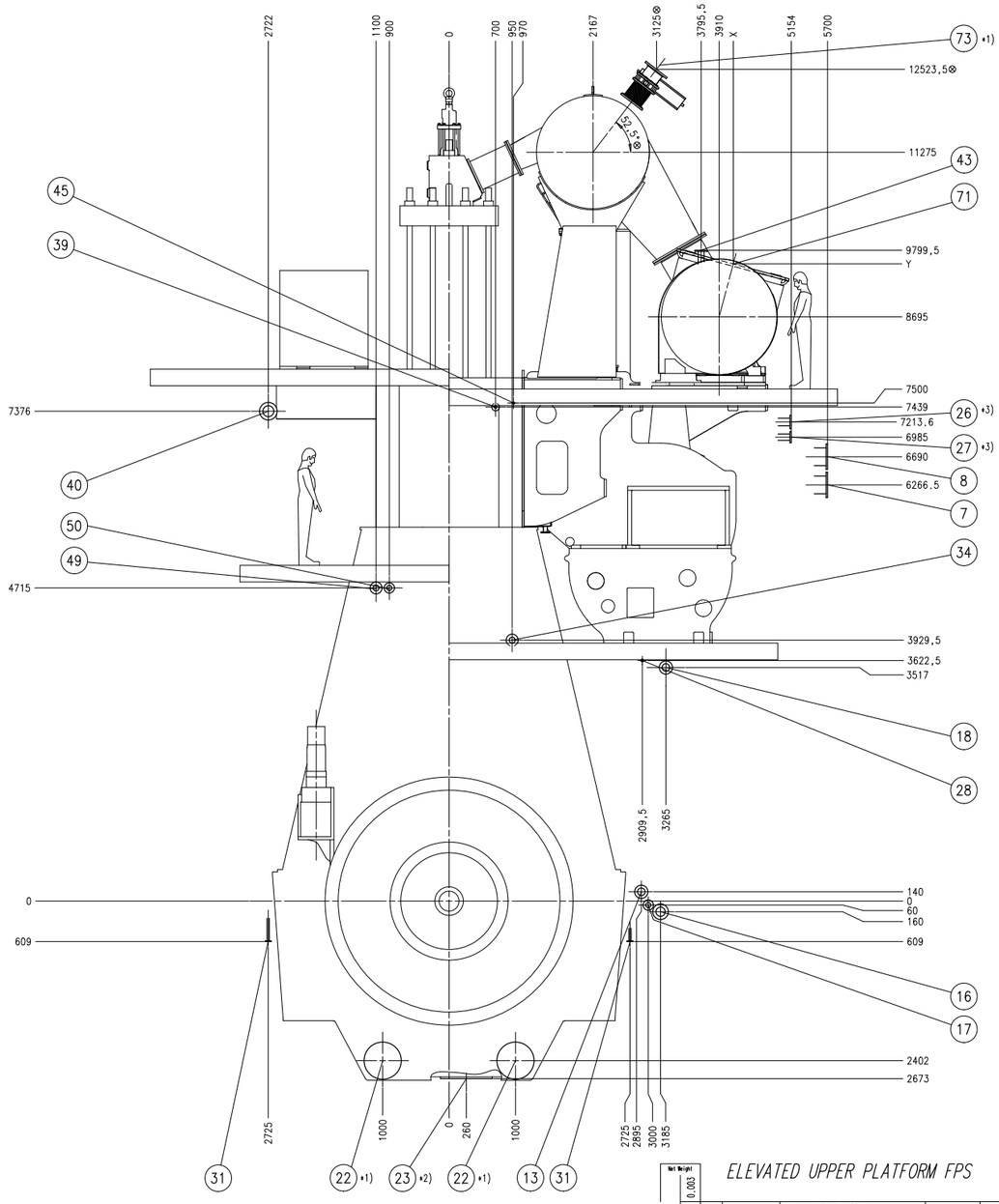
Abgasseite
EXHAUST SIDE



Antriebseite
DRIVING END

Freies Ende
FREE END

Antriebseite
DRIVING END



ELEVATED UPPER PLATFORM FPS

Net Weight							
	0.003						
1	002	107.386.739.202	PIPING SPECIFICATIONS		107.386.739		0.002
1	001	107.390.729.500	FLANGE DIMENSIONS		107.390.729		0.001
Quantity PER ENGINE	SEQ NO	Material ID	Material Name	Dimension/Occ.Dimension	Standard or Drawing	Basic Material Material Standard	Weight GR./NET

Material ID: PAAD103804 (free space for Lic.)
O-Code XXXXX | Main Dra. H
Standard JIS
Work: EAAD084243 19.11.2012

Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date

WÄRTSILÄ

Product W7X82

PIPE CONNECTION PLAN
Rohranschlussplan

Units mm kg | 1DE | Basic Material | Net Weight

SURFACE PROTECTION SEE GROUP 0344	Made	29.10.2012 jwvz03 Weymann	Scale 1:30	Size A0	Material ID
TOLERANCING PRINCIPLE ISO8015	Chkd	13.12.2012 awu004 Wuerms	Design Group 8020	Page 1/3	
GENERAL TOLERANCES ACCORDING TO ISO2768-mK	Appd	13.12.2012 bha009 Haag	Drawing ID DAAD032665		Rev. —

ID - REVISION DRAWING - Internal

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2xA175

*1) Optionelle Ausfuehrung (wenn verlangt)
OPTIONAL EXECUTION (IF REQUIRED)

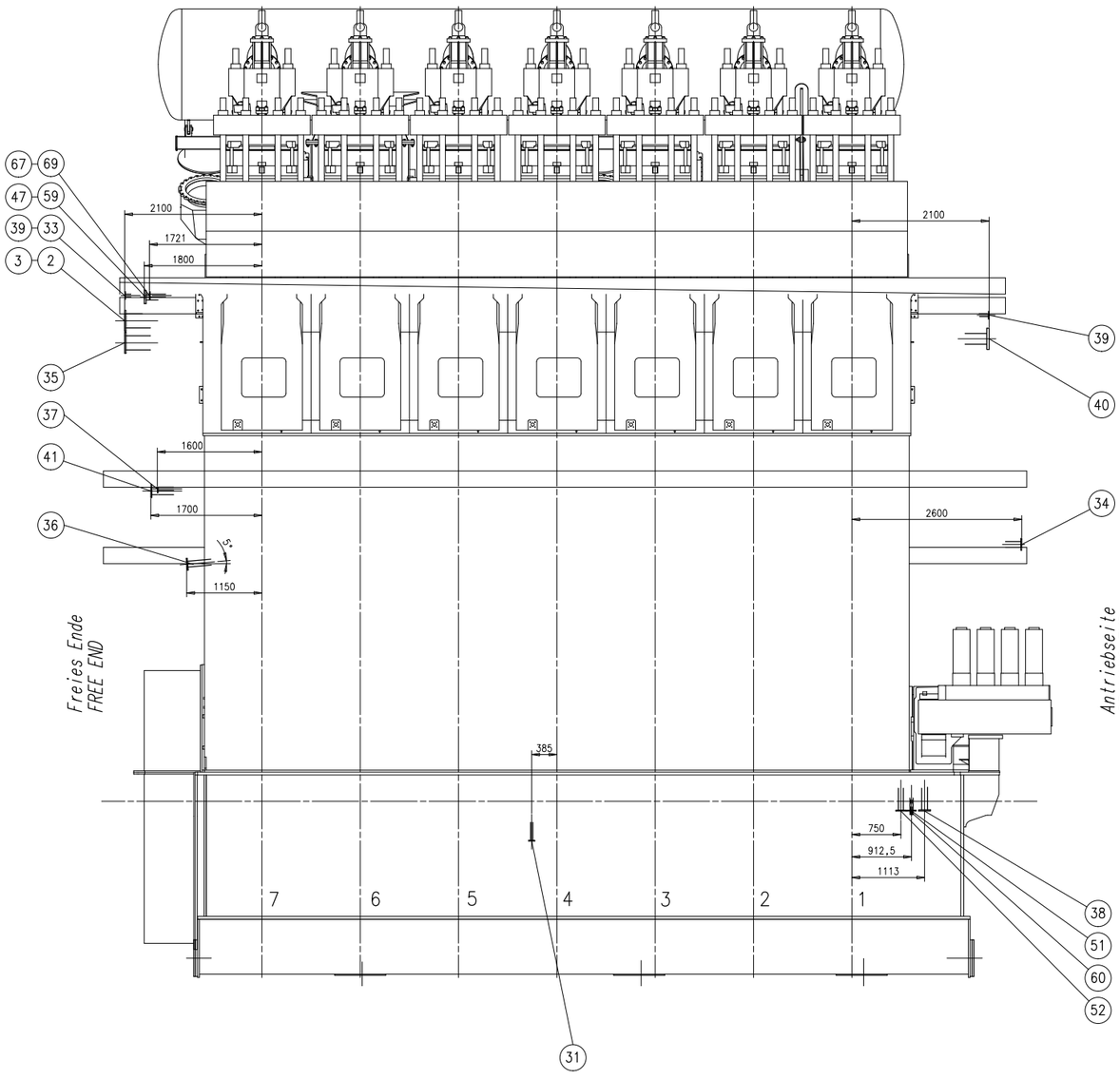
*2) Standard Ausfuehrung
STANDARD EXECUTION
Vorschlag Endgueltige Position ist mit Werft zu bestimmen
PROPOSAL. FINAL POSITION TO BE DETERMINED IN ACCORDANCE WITH SHIPYARD

*3) Externale Ausfuehrung (wenn verlangt)
EXTERNAL EXECUTION (IF REQUIRED)

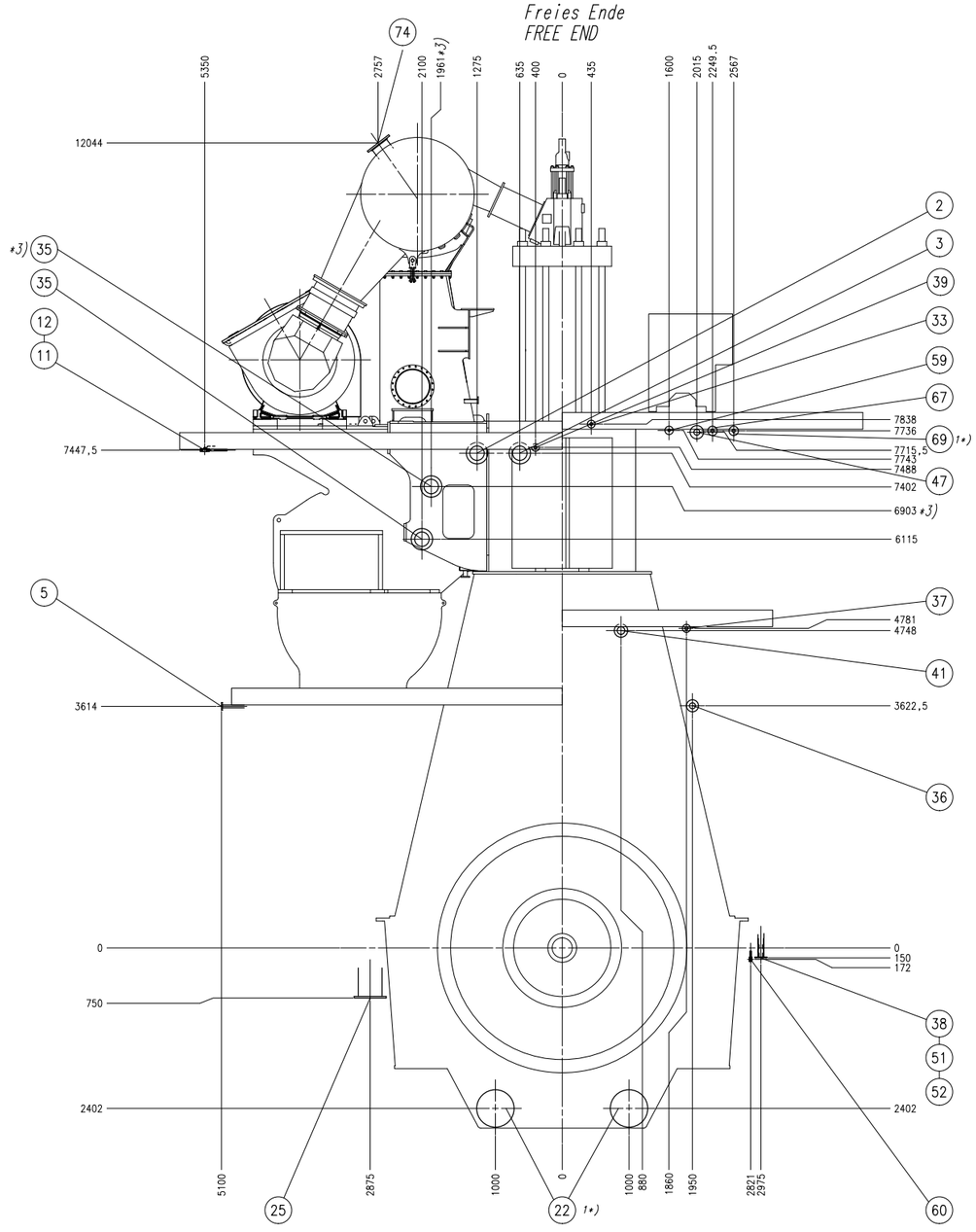
Alle Flanschanschluesse am Motor sind mit Gegenflanschen versehen (Blindflansch), ausgenommen der Anschluss fuer den Gasaustritt am Turbolader. Die Blindflansche sind nach dem betreffenden Rohrdurchmesser des Werftanschlusses aufzubohren.
THE PIPE CONNECTIONS ON THE ENGINE ARE SUPPLIED WITH MATING FLANGES (BLIND), WITH EXCEPTION OF THE TURBOCHARGER EXHAUST GAS OUTLET. BLIND FLANGES TO BE DRILLED TO MATCH PIPE DIA SUPPLIED BY THE SHIPYARD.

Die Gewinde-Anschluesse werden komplett geliefert
SCREWED CONNECTIONS ARE SUPPLIED COMPLETE

Brennstoffseite
FUEL SIDE



Freies Ende
FREE END



ELEVATED UPPER PLATFORM FPS

Mod. free space for Ltr.										D-Code XXXXX	Main Dra.
										Standard JIS	H
Mod.	EAD084243	19.11.2012									
	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date	

WÄRTSILÄ

Product W7X82

PIPE CONNECTION PLAN

Rohranschlussplan

Units	mm kg	1DE	Basic Material			Net Weight	
Made	29.10.2012 jwvz03 Weymann		Scale 1:30	Size A0	Page 2/3	Material ID	
Chkd	13.12.2012 awu004 Wuerms		Design Group 8020	Drawing ID DAAD032665		Rev. —	
Appd	13.12.2012 bha009 Haag						

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

UP - REVISION DRAWING - Internal

Approved

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Note	No.	Connection	Description	DN / PN	Ko.Gr. KO.GR.	Freies Ende FREE END	Antriebseite DRIVING END	Abgasseite EXHAUST SIDE	Brennstoffseite FUEL SIDE
	1		Zylinderkuehlwasser Eintritt / CYLINDER COOLING WATER INLET	DN / PN	8301	Nicht benoetigt NOT USED			
	2		Zylinderkuehlwasser Eintritt / CYLINDER COOLING WATER INLET	DN 200 / PN 5	8305	X			
	3		Zylinderkuehlwasser Austritt / CYLINDER COOLING WATER OUTLET	DN 200 / PN 5	8310	X			
	4		Zylinderkuehlwasser Entlueftung Entlueftung / CYLINDER COOLING WATER VENTING VENTING	DN / PN	8310	Nicht benoetigt NOT USED			
	5		Zylinderkuehlwasser Entleerung Austritt / CYLINDER COOLING WATER DRAIN OUTLET	DN 32 / PN 5	8313			X	
	6		SLK Entleerung Austritt / SAC DRAIN OUTLET	DN / PN	8314	Nicht benoetigt NOT USED			
	7		SLK-NT-Kuehlwasser Eintritt / SAC-LT-COOLING WATER INLET	DN 250 / PN 5	8335			X	
	8		SLK-NT-Kuehlwasser Austritt / SAC-LT-COOLING WATER OUTLET	DN 250 / PN 5	8335			X	
	9		SLK-HT-Kuehlwasser Eintritt / SAC-HT-COOLING WATER INLET	DN / PN	8335	Nicht benoetigt NOT USED			
	10		SLK-HT-Kuehlwasser Austritt / SAC-HT-COOLING WATER OUTLET	DN / PN	8335	Nicht benoetigt NOT USED			
	11		Wasser fuer Reinigungsanlage TL und SLK Eintritt / WATER FOR CLEANING PLANT TC AND SAC INLET	DN 20 / PN 16	8338			X	
	12		Luft fuer Reinigungsanlage TL und SLK Eintritt / AIR FOR CLEANING PLANT TC AND SAC INLET	DN 20 / PN 16	8338			X	
	13		Oeliges Wasser vom Receiver Austritt / OILY WATER FROM RECEIVER OUTLET	DN 100 / PN 5	8352		X		
	14		Waschanlage TL Schmutzwasser Austritt / WASHING PLANT TC DIRTY WATER OUTLET	DN 65 / PN 5	8355	Nicht benoetigt NOT USED			
	15		Ablauf vom Wasserabscheider Austritt / WATER DRAIN FROM WATERSEPERATOR OUTLET	DN / PN	8356	Nicht benoetigt NOT USED			
	16		SLK Kondenswasser Austritt / SAC CONDENSATE WATER OUTLET	DN 125 / PN 5	8357			X	
	17		SLK Waschwasser Austritt / SAC WASHING WATER OUTLET	DN 65 / PN 5	8357			X	
	18		SLK Entlueftung Entlueftung / SAC VENTING VENTING	DN 100 / PN 5	8357		X		
	19								
	20								
	21								
*1)	22	siehe Detail SEE DETAIL	Oelablauf Grundplatte Horizontal / OIL DRAIN BEDPLATE HORIZONTAL	DN 350 / PN 5	1110	X	X		
*2)	23	siehe Detail SEE DETAIL	Oelablauf Grundplatte Vertikal / OIL DRAIN BEDPLATE VERTICAL	DN 600 / PN 5	1110	X DOWN	X DOWN		
	24								
	25		Hauptschmieroel Eintritt / MAIN LUBRICATING OIL INLET	DN 250 / PN 10	8406			X DOWN	
*3)	26		Schmieroel Turbolader Eintritt / LUBRICATING OIL TURBOCHARGER INLET	DN 50 / PN 10	8430			X	
*3)	27		Schmieroel Turbolader Austritt / LUBRICATING OIL TURBOCHARGER OUTLET	DN 100 / PN 5	8431			X	
	28		Spueloel Automatikfilter Austritt / FLUSHING OIL AUTOMATIC FILTER OUTLET	DN 20 / PN 10	8445		X		
	29		Schmutzoel Ablauf Versorgungseinheit Austritt / DIRTY OIL DRAIN SUPPLY UNIT OUTLET	DN / PN	8452	Nicht benoetigt NOT USED			
	30		Schmieroel Kreuzkopf Eintritt / LUBRICATING OIL CROSSHEAD INLET	DN / PN	8455	Nicht benoetigt NOT USED			
	31		Leckagen vom Motor Austritt / DIRTY OIL LEAKAGE FROM ENGINE OUTLET	DN 25 / PN 5	8463			X	X
	32		Zylinder Schmieroel Eintritt / CYLINDER LUB. OIL INLET	DN / PN	8473	Nicht benoetigt NOT USED			
	33		Zylinder Schmieroel Eintritt / CYLINDER LUB. OIL INLET	DN 32 / PN 5	8475	X			
	34		Leckoel Antriebseite Austritt / LEAKAGE OIL DRIVING END OUTLET	DN 80 / PN 5	8482		X		
	35		Leckoel Freies Ende Austritt / LEAKAGE OIL FREE END OUTLET	DN 150 / PN 5	8483	X			
	36		Schmutzoel Kolbenunterseite Austritt / DIRTY OIL PISTON UNDERSIDE OUTLET	DN 80 / PN 5	8487	X			
	37		Leckoel Stopfbuechse Austritt / LEAKAGE OIL GLAND BOX OUTLET	DN 40 / PN 5	8488	X			
	38		Oelablaufltg. Versorgungseinheit Austritt / OIL PIPE DRAIN SUPPLY UNIT OUTLET	DN 80 / PN 5	8454				X DOWN
	39		Leckageablauf Zylinderblock Austritt / LEAKAGE DRAIN CYLINDER BLOCK OUTLET	DN 32 / PN 5	8462	X	X		
	40		Anlassluft Eintritt / STARTING AIR PIPE INLET	DN 150 / PN 30	8605		X		
	41		Entlueftung Kurbelgehaeuse Austritt / VENTING CRANKCASE OUTLET	DN 100 / PN 5	8608	X			
	42		Entlueftung Waste Gate Austritt / VENTING WASTE GATE OUTLET	DN / PN	8609	Nicht benoetigt NOT USED			
	43		Entlueftung Turbolader Austritt / VENTING TURBOCHARGER OUTLET	DN 65 / PN 5	8610			X UP	
	44		Entlueftung Zylinderkuehlwasser Austritt / VENTING CYLINDER COOLING WATER OUTLET	DN / PN	8611	Nicht benoetigt NOT USED			
	45		Steuerluftversorgung Eintritt / CONTROL AIR SUPPLY INLET	DN 15 / PN 10	8630		X		
	46		Steuerluftversorgung Eintritt / CONTROL AIR SUPPLY INLET	DN / PN	4605	Nicht benoetigt NOT USED			
	47		Oel Ablaufleitung Servosystem Austritt / OIL DRAIN PIPE SSERVO SYSTEM OUTLET	DN 80 / PN 16	8449	X			
	48								
	49		Brennstoff Eintritt / FUEL INLET	DN 80 / PN 16	8702		X		
	50		Brennstoffruecklauf Austritt / FUEL RETURN OUTLET	DN 65 / PN 16	8704		X		
	51		Leckbrennstoff Rail Unit Austritt / FUEL LEAKAGE RAIL UNIT OUTLET	DN 40 / PN 5	8740				X DOWN
	52		Leckbrennstoff Einspritzventil Austritt / FUEL LEAKAGE INJECTION VALVE OUTLET	DN 65 / PN 5	8741				X DOWN
	53		Leckbrennstoff HD-Leitungen Austritt / FUEL LEAKAGE HP-PIPES OUTLET	DN / PN	8742	Nicht benoetigt NOT USED			
	54		Leckbrennstoff Einspritzpumpe Austritt / FUEL LEAKAGE INJECTION PUMP OUTLET	DN / PN	8743	Nicht benoetigt NOT USED			
	55		Leckbrennstoff Rail/Versorgungs Einheit Austritt / FUEL LEAKAGE RAIL/SUPPLY UNIT OUTLET	DN / PN	8744	**Nicht benoetigt NOT USED**			
	56		Leckbrennstoff Einspritzeinheit Austritt / FUEL LEAKAGE ICU OUTLET	DN / PN	8745	Nicht benoetigt NOT USED			
	57								
	58								
	59		Begleitheizung Brennstoff Eintritt / TRACE HEATING FUEL INLET	DN 25 / PN 16	8810	X			
	60		Begleitheizung Brennstoff Austritt / TRACE HEATING FUEL OUTLET	DN 20 / PN 16	8810				X DOWN
	61		Begleitheizung Brennstoff Eintritt / TRACE HEATING FUEL INLET	DN / PN	8812	Nicht benoetigt NOT USED			
	62		Begleitheizung Brennstoff Austritt / TRACE HEATING FUEL OUTLET	DN / PN	8812	Nicht benoetigt NOT USED			
	63		Begleitheizung Brennstoffzirkulation Eintritt / TRACE HEATING FUEL CIRCULATION INLET	DN / PN	8820	Nicht benoetigt NOT USED			
	64		Begleitheizung Brennstoffzirkulation Austritt / TRACE HEATING FUEL CIRCULATION OUTLET	DN / PN	8823	Nicht benoetigt NOT USED			
	65								
	66								
	67		Feuerloesch Anlage Zylinderblock Eintritt / FIRE EXTINGUISHING PLANT CYLINDER BLOCK INLET	DN 40 / PN 16	8830	X			
	68		Feuerloesch Anlage Rail Unit Eintritt / FIRE EXTINGUISHING PLANT RAIL UNIT INLET	DN / PN	8831	Nicht benoetigt NOT USED			
*1)	69		Feuerloesch Anlage Rail Unit Eintritt / FIRE EXTINGUISHING PLANT RAIL UNIT INLET	DN 40 / PN 16	8832	X			
	70								
	71	siehe Detail SEE DETAIL	Abgas Turbolader Austritt / EXHAUST GAS TURBOCHARGER OUTLET		6506 6509			X UP	
	72								
*1)	73		Abgas-Abblaseventil Austritt / EXHAUST WASTE GATE OUTLET	DN 200 / PN 10	8135			X	
	74		Waermerueckgewinnung Austritt / WASTE HEAT RECOVERY OUTLET	DN 150 / PN 10	8108			X UP	
	75								

*1) *Optionelle Ausfuehrung (wenn verlangt)*
OPTIONAL EXECUTION (IF REQUIRED)

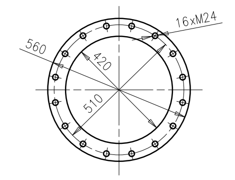
*2) *Standard Ausfuehrung*
STANDARD EXECUTION
Vorschlag Endgueltige Position ist mit Werft zu bestimmen
PROPOSAL. FINAL POSITION TO BE DETERMINED IN ACCORDANCE WITH SHIPYARD

*3) *Externale Ausfuehrung (wenn verlangt)*
EXTERNAL EXECUTION (IF REQUIRED)

Abmasse der Flansche siehe 4-107.390.729

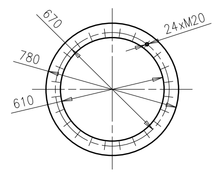
22 *fuer horizontalen Oelablauf*
FOR HORIZONTAL LUB. OIL DRAIN

1:10



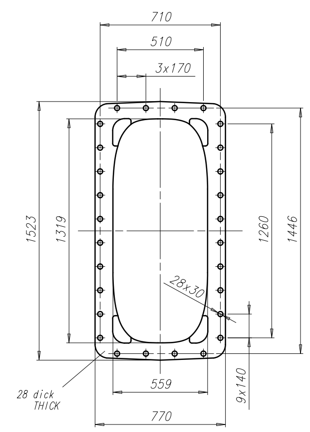
23 *fuer vertikalen Oelablauf*
FOR VERTICAL LUB. OIL DRAIN

1:15



71 *Gas-Austritt vom Turbolader*
GAS OUTLET FROM TURBOCHARGER

1:15



2xA175
ELEVATED UPPER PLATFORM FPS

Q-Code	XXXXX
Main Drw.	H
Standard	JIS
Modif.	– EAAD084243 19.11.2012
Product	W7X82
Title	PIPE CONNECTION PLAN / Rohranschlussplan
Units	mm kg IDE
Made	29.10.2012 jwex03 Wegmann
Chkd	13.12.2012 awu004 Wuerms
Appd	13.12.2012 bha009 Haag
Scale	1:30
Size	A0
Page	3/3
Design Group	8020
Drawing ID	DAAD032665
Rev.	–

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

WÄRTSILÄ

LD - INSTALLATION DRAWING - Internal

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2x MET66MB

INTERNAL OIL SYSTEM

WITH EXHAUST WASTE GATE FOR LLT (OPTIONAL)

⊗ = Winkel kann zwischen 40°-70° gewaehlt werden
nach Angaben der Werft (gezeichnet fuer 52,5°)
ANGLE CAN BE CHOSEN BETWEEN 40°-70°, ACCORDING
SHIPYARD RECOMMONDATION (DRAWN FOR 52,5°)

DIMENSIONS FOR REFERENCE ONLY.
TECHNICAL MODIFICATIONS RESERVED.
LATER ADAPTATIONS ARE POSSIBLE BASED ON
PROJECT REQUIREMENTS AND RELATED DETAIL DESIGN.
THIS PIPE CONNECTION PLAN MAY NOT BE USED FOR
FINAL DESIGN!

*1) Optionale Ausfuehrung (wenn verlangt)
OPTIONAL EXECUTION (IF REQUIRED)

*2) Standard Ausfuehrung
STANDARD EXECUTION
Vorschlag Endgueltige Position ist
mit Werft zu bestimmen
PROPOSAL. FINAL POSITION TO BE DETERMINED
IN ACCORDANCE WITH SHIPYARD

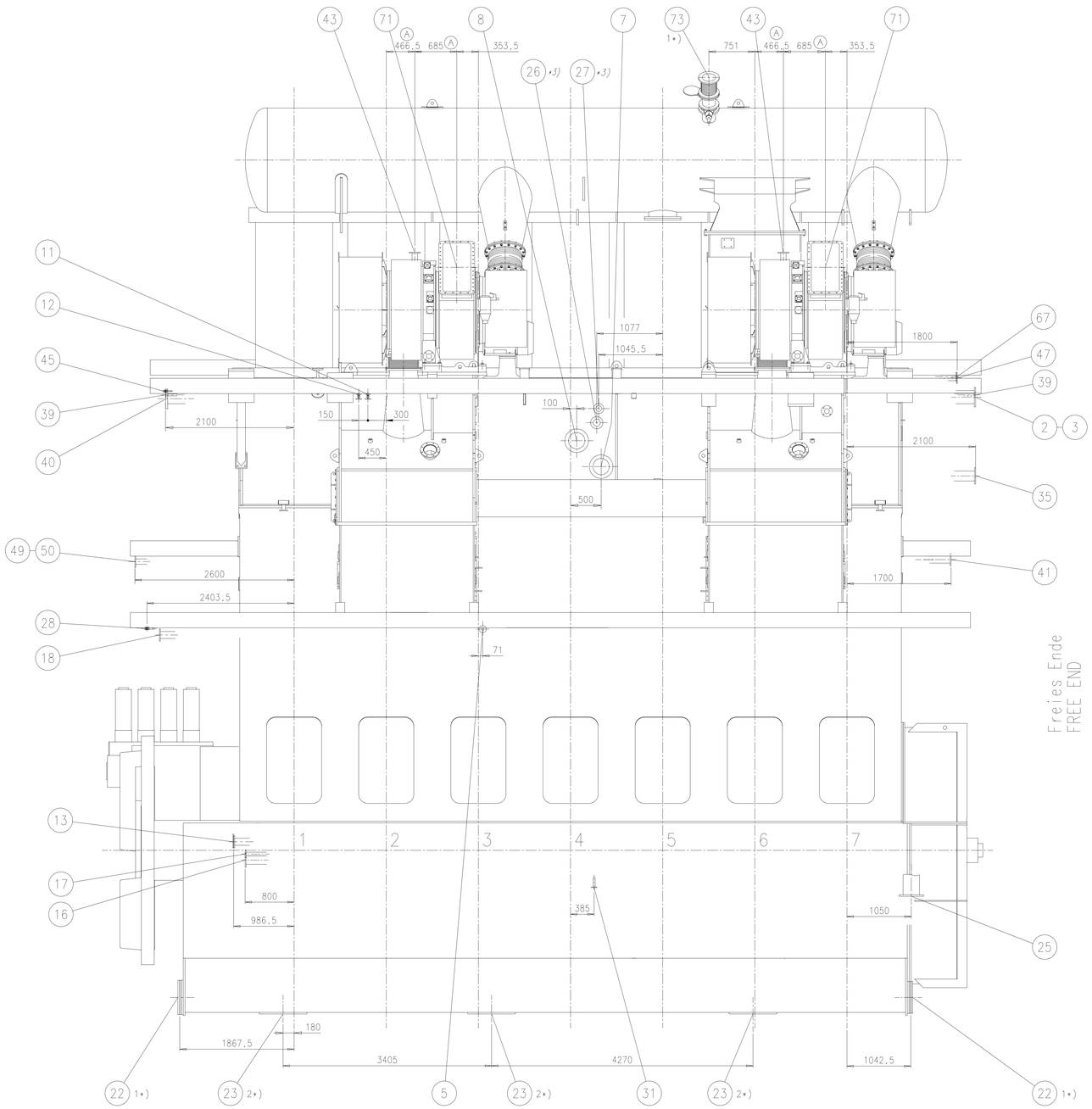
*3) Externe Ausfuehrung (wenn verlangt)
EXTERNAL EXECUTION (IF REQUIRED)

Alle Flanschanschluesse am Motor sind mit Gegenflanschen versehen (Blindflansch), ausgenommen der Anschluss fuer den Gasaustritt am Turbolader. Die Blindflansche sind nach dem betreffenden Rohrdurchmesser des Werftanschlusses aufzubohren.
THE PIPE CONNECTIONS ON THE ENGINE ARE SUPPLIED WITH MATING FLANGES (BLIND), WITH EXCEPTION OF THE TURBOCHARGER EXHAUST GAS OUTLET. BLIND FLANGES TO BE DRILLED TO MATCH PIPE DIA SUPPLIED BY THE SHIPYARD.

Die Gewinde-Anschluesse werden komplett geliefert
SCREWED CONNECTIONS ARE SUPPLIED COMPLETE

Gasaustritt-Stellung GAS OUTLET POSITION	X	Y
0°	3790	9630
15°	3998	9603
30°	4192	9522
45°	4359	9394

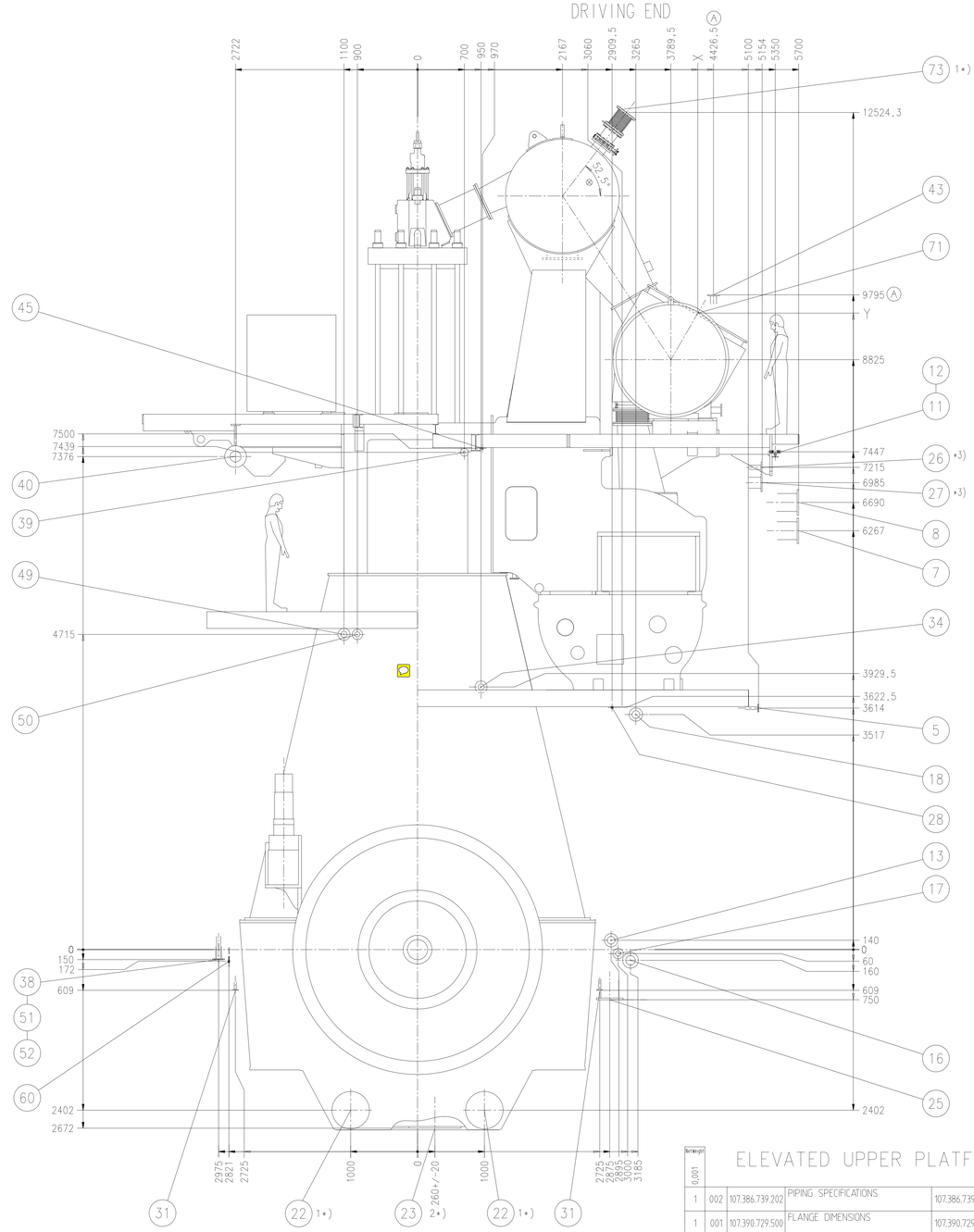
Abgasseite
EXHAUST SIDE



Antriebseite
DRIVING END

Freies Ende
FREE END

Antriebseite
DRIVING END



ELEVATED UPPER PLATFORM FPS

Ref.weight							
0.001							
1	002	107.386.739.202	PIPING SPECIFICATIONS	107.386.739			0.002
1	001	107.390.729.500	FLANGE DIMENSIONS	107.390.729			0.001
PER TURBO	SEQ NO	Material ID	Material Name Dimension, Occ	Standard or Drawing		Basic Material Material Standard	Weight GR_NET
						Q-Code XXXXX Standard JIS	Main Drw. H
Material	Mod	Prev. issue for Approval					
DAAD134651	A	EAAD090409	20.02.2019				
		Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date

Approved

WIN GD Winterthur Gas & Diesel

Product W7X82

PIPE CONNECTION PLAN

Rohranschlussplan

Units	mm kg	NX	Basic Material	Net Weight

SURFACE PROTECTION SEE GROUP 0344	Made	03.07.2013	hri004 H.Riser	Scale 1:30	Size A0	Page 1/1	Material ID
TOLERANCING PRINCIPLE ISO8015	Chkd	03.09.2013	sma032 Mäder	Design Group			
GENERAL TOLERANCES ACCORDING TO ISO2768-mK	Appd	12.09.2013	bha009 Haag	ID 8020	Drawing DAAD041369		Rev. A

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2x MET66MB

INTERNAL OIL SYSTEM

*1) Optionelle Ausfuehrung (wenn verlangt)
OPTIONAL EXECUTION (IF REQUIRED)

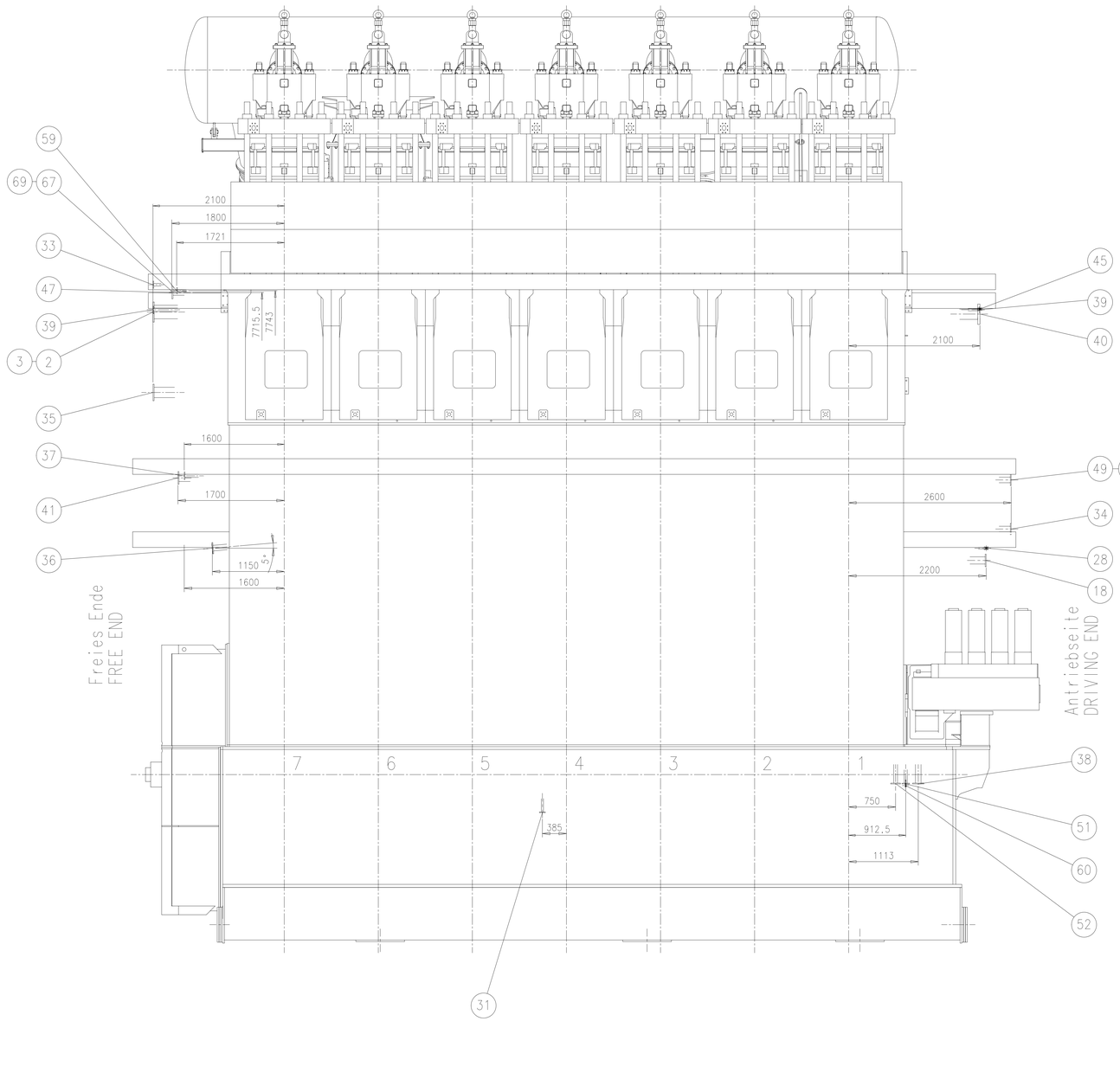
*2) Standard Ausfuehrung
STANDARD EXECUTION
Vorschlag. Endgueltige Position ist mit Werft zu bestimmen.
PROPOSAL. FINAL POSITION TO BE DETERMINED IN ACCORDANCE WITH SHIPYARD

*3) Externe Ausfuehrung (wenn verlangt)
EXTERNAL EXECUTION (IF REQUIRED)

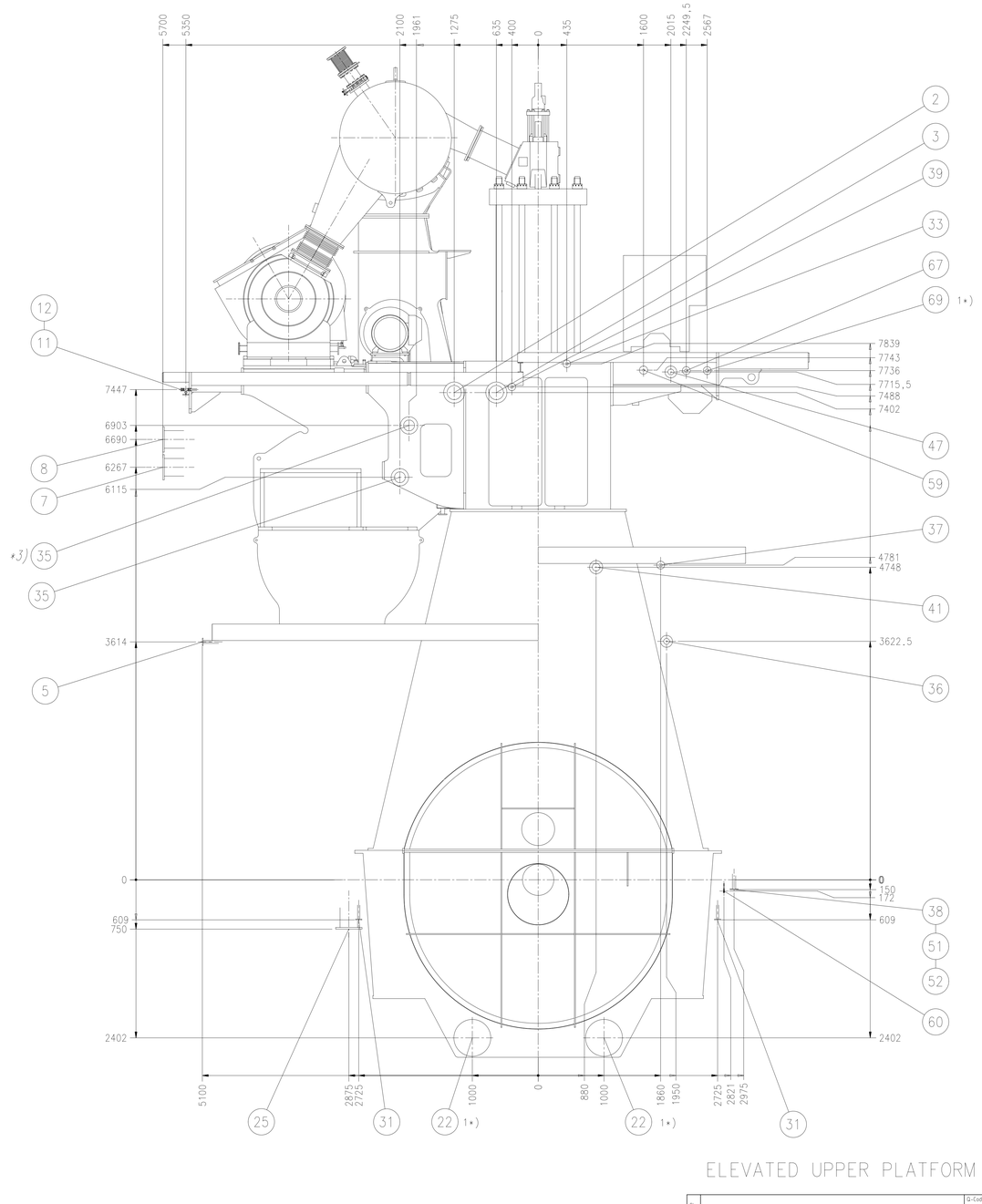
Alle Flanschanschluesse am Motor sind mit Gegenflanschen versehen (Blindflansch), ausgenommen der Anschluss fuer den Gasaustritt am Turbolader. Die Blindflansche sind nach dem betreffenden Rohrdurchmesser des Werftanschlusses aufzubohren.
THE PIPE CONNECTIONS ON THE ENGINE ARE SUPPLIED WITH MATING FLANGES (BLIND), WITH EXCEPTION OF THE TURBOCHARGER EXHAUST GAS OUTLET. BLIND FLANGES TO BE DRILLED TO MATCH PIPE DIA SUPPLIED BY THE SHIPYARD.

Die Gewinde-Anschluesse werden komplett geliefert
SCREWED CONNECTIONS ARE SUPPLIED COMPLETE

Brennstoffseite
FUEL SIDE



Freies Ende
FREE END



ELEVATED UPPER PLATFORM FPS

Prev. gener. for ref.									Q-Code XXXXX Standard MS		Main Drw. H
Mod.	A	EAAD090409	20.02.2019								
	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date			

WIN GD Winterthur Gas & Diesel

Product W7X82

PIPE CONNECTION PLAN

Rohranschlussplan

Units	mm kg	NX	Basic Material			Net Weight	
Mode	03.07.2013	hri004 H.Riser	Scale 1:30	Size A0	Page 2/3	Material ID	
Chkd	03.09.2013	sma032 Mäder	Design Group 8020	Drawing ID DAAD041369		Rev. A	
Appd	12.09.2013	bha009 Haag					

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

PUBLICATION DRAWING - Internal

Approved

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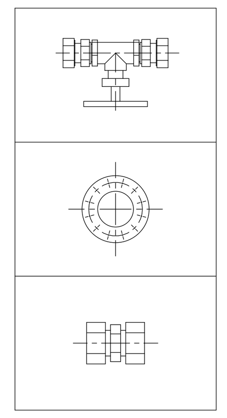
Note	No.	Symbol	Bezeichnung / Description	DN / PN	Ko.Gr. KO.GR.	Freies Ende FREE END	Antriebseite DRIVING END	Abgasseite EXHAUST SIDE	Brennstoffseite FUEL SIDE
						Leitungs-Anschluesse PIPE-CONNECTIONS			
	1		Zylinderkuehlwasser Eintritt CYLINDER COOLING WATER INLET	DN PN	8301	Nicht benoetigt NOT USED			
	2		Zylinderkuehlwasser Eintritt CYLINDER COOLING WATER INLET	DN 200 PN 5	8305	X			
	3		Zylinderkuehlwasser Austritt CYLINDER COOLING WATER OUTLET	DN 200 PN 5	8310	X			
	4		Zylinderkuehlwasser Entlueftung Entlueftung CYLINDER COOLING WATER VENTING VENTING	DN PN	8310	Nicht benoetigt NOT USED			
	5		Zylinderkuehlwasser Entleerung Austritt CYLINDER COOLING WATER DRAIN OUTLET	DN 32 PN 5	8313			X	
	6		SLK Entleerung Austritt SAC DRAIN OUTLET	DN PN	8314	Nicht benoetigt NOT USED			
	7		SLK-NT-Kuehlwasser Eintritt SAC-LT-COOLING WATER INLET	DN 250 PN 5	8335			X	
	8		SLK-NT-Kuehlwasser Austritt SAC-LT-COOLING WATER OUTLET	DN 250 PN 5	8335			X	
	9		SLK-HT-Kuehlwasser Eintritt SAC-HT-COOLING WATER INLET	DN PN	8335	Nicht benoetigt NOT USED			
	10		SLK-HT-Kuehlwasser Austritt SAC-HT-COOLING WATER OUTLET	DN PN	8335	Nicht benoetigt NOT USED			
	11		Wasser fuer Reinigungsanlage TL und SLK Eintritt WATER FOR CLEANING PLANT TC AND SAC INLET	DN 20 PN 16	8338			X	
	12		Luft fuer Reinigungsanlage TL und SLK Eintritt AIR FOR CLEANING PLANT TC AND SAC INLET	DN 20 PN 16	8338			X	
	13		Oeliges Wasser vom Receiver Austritt OILY WATER FROM RECEIVER OUTLET	DN 100 PN 5	8352		X		
	14								
	15		Ablauf vom Wasserabscheider Austritt WATER DRAIN FROM WATERSEPERATOR OUTLET	DN PN	8356	Nicht benoetigt NOT USED			
	16		SLK Kondenswasser Austritt SAC CONDENSATE WATER OUTLET	DN 125 PN 5	8357		X		
	17		SLK Waschwasser Austritt SAC WASHING WATER OUTLET	DN 65 PN 5	8357		X		
	18		SLK Entlueftung Entlueftung SAC VENTING VENTING	DN 100 PN 5	8357		X		
	19								
	20								
	21								
	22	siehe Detail SEE DETAIL	Oelablauf Grundplatte Horizontal OIL DRAIN BEDPLATE HORIZONTAL	DN 350 PN 5	1110	X	X		
	23	siehe Detail SEE DETAIL	Oelablauf Grundplatte Vertikal OIL DRAIN BEDPLATE VERTICAL	DN 600 PN 5	1110	X DOWN	X DOWN		
	24								
	25		Hauptschmieroel Eintritt MAIN LUBRICATING OIL INLET	DN 250 PN 10	8406			X DOWN	
*3)	26		Schmieroel Turbolader Eintritt LUBRICATING OIL TURBOCHARGER INLET	DN 50 PN 10	8430			X	
*3)	27		Schmieroel Turbolader Austritt LUBRICATING OIL TURBOCHARGER OUTLET	DN 150 PN 5	8431			X	
	28		Spueloel Automatikfilter Austritt FLUSHING OIL AUTOMATIC FILTER OUTLET	DN 20 PN 10	8445		X		
	29		Schmutzoel Ablauf Versorgungseinheit Austritt DIRTY OIL DRAIN SUPPLY UNIT OUTLET	DN PN	8452	Nicht benoetigt NOT USED			
	30		Schmieroel Kreuzkopf Eintritt LUBRICATING OIL CROSSHEAD INLET	DN PN	8455	Nicht benoetigt NOT USED			
	31		Leckagen vom Motor Austritt DIRTY OIL LEAKAGE FROM ENGINE OUTLET	DN 25 PN 5	8463			X DOWN	X DOWN
	32		Zylinder Schmieroel Eintritt CYLINDER LUB. OIL INLET	DN PN	8473	Nicht benoetigt NOT USED			
	33		Zylinder Schmieroel Eintritt CYLINDER LUB. OIL INLET	DN 32 PN 5	8475	X			
	34		Leckoel Antriebseite Austritt LEAKAGE OIL DRIVING END OUTLET	DN 80 PN 5	8482		X		
	35		Leckoel Freies Ende Austritt LEAKAGE OIL FREE END OUTLET	DN 150 PN 5	8483	X			
	36		Schmutzoel Kolbenunterseite Austritt DIRTY OIL PISTON UNDERSIDE OUTLET	DN 80 PN 5	8487	X			
	37		Leckoel Stopfbuechse Austritt LEAKAGE OIL GLAND BOX OUTLET	DN 40 PN 5	8488	X			
	38		Oelablaufltg. Versorgungseinheit Austritt OIL PIPE DRAIN SUPPLY UNIT OUTLET	DN 80 PN 5	8454				X DOWN
	39		Leckageablauf Zylinderblock Austritt LEAKAGE DRAIN CYLINDER BLOCK OUTLET	DN 32 PN 5	8462	X	X		
	40		Anlassluft Eintritt STARTING AIR PIPE INLET	DN 150 PN 30	8605		X		
	41		Entlueftung Kurbelgehaeuse Austritt VENTING CRANKCASE OUTLET	DN 100 PN 5	8608	X			
	42		Entlueftung Waste Gate Austritt VENTING WASTE GATE OUTLET	DN PN	8609	Nicht benoetigt NOT USED			
	43		Entlueftung Turbolader Austritt VENTING TURBOCHARGER OUTLET(2 POINTS)	DN 80 PN 5	8610			X UP	
	44		Entlueftung Zylinderkuehlwasser Austritt VENTING CYLINDER COOLING WATER OUTLET	DN PN	8611	Nicht benoetigt NOT USED			
	45		Steuerluftversorgung Eintritt CONTROL AIR SUPPLY INLET	DN 15 PN 10	8630		X		
	46		Steuerluftversorgung Eintritt CONTROL AIR SUPPLY INLET	DN PN	4605	Nicht benoetigt NOT USED			
	47		Del Ablaufleitung Servosystem OIL DRAIN PIPE SERVO SYSTEM	DN 80 PN 16	8449	X			
	48								
	49		Brennstoff Eintritt FUEL INLET	DN 80 PN 16	8702		X		
	50		Brennstoffruecklauf Austritt FUEL RETURN OUTLET	DN 65 PN 16	8704		X		
	51		Leckbrennstoff Rail Unit Austritt FUEL LEAKAGE RAIL UNIT OUTLET	DN 40 PN 5	8740				X DOWN
	52		Leckbrennstoff Einspritzventil Austritt FUEL LEAKAGE INJECTION VALVE OUTLET	DN 65 PN 5	8741				X DOWN
	53		Leckbrennstoff HD-Leitungen Austritt FUEL LEAKAGE HP-PIPES OUTLET	DN PN	8742	Nicht benoetigt NOT USED			
	54		Leckbrennstoff Einspritzpumpe Austritt FUEL LEAKAGE INJECTION PUMP OUTLET	DN PN	8743	Nicht benoetigt NOT USED			
	55		Leckbrennstoff Rail/Versorgungs Einheit Austritt FUEL LEAKAGE RAIL/SUPPLY UNIT OUTLET	DN PN	8744	Nicht benoetigt NOT USED			
	56		Leckbrennstoff Einspritzeinheit Austritt FUEL LEAKAGE ICU OUTLET	DN PN	8745	Nicht benoetigt NOT USED			
	57								
	58								
	59		Begleitheizung Brennstoff Eintritt TRACE HEATING FUEL INLET	DN 25 PN 16	8810	X			
	60		Begleitheizung Brennstoff Austritt TRACE HEATING FUEL OUTLET	DN 20 PN 16	8810				X DOWN
	61		Begleitheizung Brennstoff Eintritt TRACE HEATING FUEL INLET	DN PN	8812	Nicht benoetigt NOT USED			
	62		Begleitheizung Brennstoff Austritt TRACE HEATING FUEL OUTLET	DN PN	8812	Nicht benoetigt NOT USED			
	63		Begleitheizung Brennstoffzirkulation Eintritt TRACE HEATING FUEL CIRCULATION INLET	DN PN	8820	Nicht benoetigt NOT USED			
	64		Begleitheizung Brennstoffzirkulation Austritt TRACE HEATING FUEL CIRCULATION OUTLET	DN PN	8823	Nicht benoetigt NOT USED			
	65								
	66								
	67		Feuerloesch Anlage Zylinderblock Eintritt FIRE EXTINGUISHING PLANT CYLINDER BLOCK INLET	DN 40 PN 16	8830	X			
	68		Feuerloesch Anlage Rail Unit Eintritt FIRE EXTINGUISHING PLANT RAIL UNIT INLET	DN PN	8831	Nicht benoetigt NOT USED			
*1)	69		Feuerloesch Anlage Rail Unit Eintritt FIRE EXTINGUISHING PLANT RAIL UNIT INLET	DN 40 PN 16	8832	X			
	70								
	71	siehe Detail SEE DETAIL	Abgas Turbolader Austritt EXHAUST GAS TURBOCHARGER OUTLET		6506 6509			X UP	
	72								
*1)	73		Abgas-Abblaseventil Austritt EXHAUST WASTE GATE OUTLET	DN 200 PN 10	8135			X	
	74								
	75								

*1) Optionelle Ausfuehrung (wenn verlangt)
OPTIONAL EXECUTION (IF REQUIRED)

*2) Standard Ausfuehrung
STANDARD EXECUTION
Vorschlag. Endgueltige Position ist mit Werf zu bestimmen.
PROPOSAL. FINAL POSITION TO BE DETERMINED IN ACCORDANCE WITH SHIPYARD

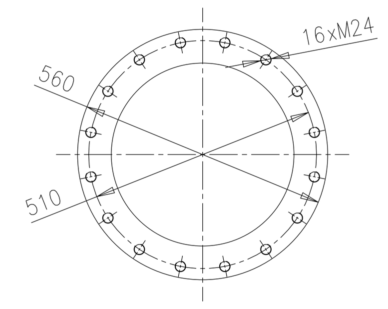
*3) Externe Ausfuehrung (wenn verlangt)
EXTERNAL EXECUTION (IF REQUIRED)



Abmasse der Flansche siehe 4-107.390.729

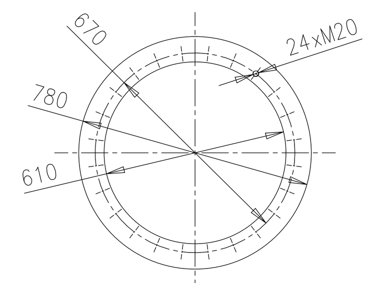
(22) Fuer horizontalen Oelablauf
FOR HORIZONTAL LUB. OIL DRAIN

1:10



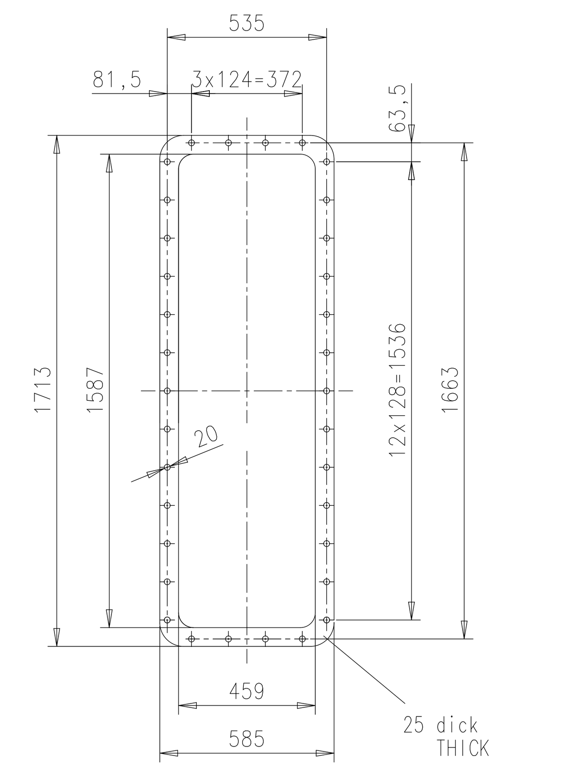
(23) fuer vertikalen Oelablauf
FOR VERTICAL LUB. OIL DRAIN

1:15



(71) Gas-Austritt vom Turbolader
GAS OUTLET FROM TURBOCHARGER

1:15



2xMET66MB
ELEVATED UPPER PLATFORM FPS

Free space for lic.		Q-Code XXXXX Standard JIS	Main Drw. H
Modif.	(A) EAAD090409 20.02.2019 (Number / Drawn date)	Number / Drawn date	Number / Drawn date
WIN GD Winterthur Gas & Diesel	Product W7X82	PIPE CONNECTION PLAN Rohranschlussplan	
Units mm kg	NX	Basic Material	Net Weight
Made 03.07.2013 hri004 H.Riser	Scale 1:1	Size A0 / Page 3/3	Material ID
Chkd 03.09.2013 sma032 Mäder	Design Group 8020	Drawing ID DAAD041369	Rev. A
Appd 12.09.2013 bha009 Haag			

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

Approved

ILD - INSTALLATION DRAWING - Internal

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*1) *Optionelle Ausfuehrung (wenn verlangt)*
OPTIONAL EXECUTION (IF REQUIRED)

*2) *Standard Ausfuehrung*
STANDARD EXECUTION
Vorschlag Endgueltige Position ist
mit Werft zu bestimmen
PROPOSAL: FINAL POSITION TO BE DETERMINED
IN ACCORDANCE WITH SHIPYARD

*3) *Externale Ausfuehrung (wenn verlangt)*
EXTERNAL EXECUTION (IF REQUIRED)

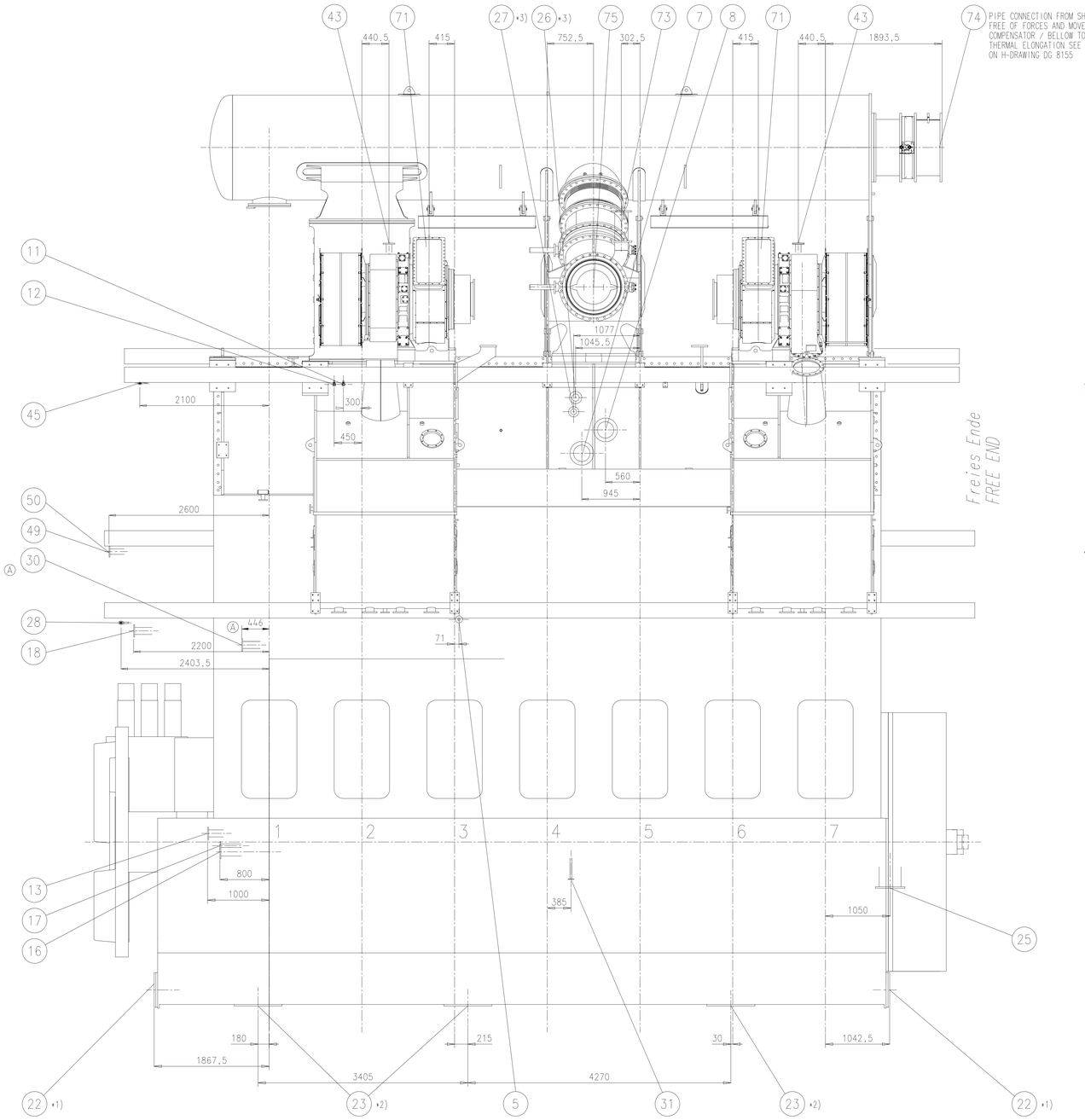
Alle Flanschanschluesse am Motor sind mit Gegenflanschen versehen (Blindflansch), ausgenommen der Anschluss fuer den Gasaustritt am Turbolader. Die Blindflansche sind nach dem betreffenden Rohrdurchmesser des Werftanschlusses aufzubohren.
THE PIPE CONNECTIONS ON THE ENGINE ARE SUPPLIED WITH MATING FLANGES (BLIND), WITH EXCEPTION OF THE TURBOCHARGER EXHAUST GAS OUTLET. BLIND FLANGES TO BE DRILLED TO MATCH PIPE DIA SUPPLIED BY THE SHIPYARD.

Die Gewinde-Anschluesse werden komplett geliefert
SCREWED CONNECTIONS ARE SUPPLIED COMPLETE

DIMENSIONS FOR REFERENCE ONLY. TECHNICAL MODIFICATIONS RESERVED. LATER ADAPTATIONS ARE POSSIBLE BASED ON PROJECT REQUIREMENTS AND RELATED DETAIL DESIGN.
THIS PIPE CONNECTION PLAN MAY NOT BE USED FOR FINAL DESIGN!

Gasaustritt-Stellung GAS OUTLET POSITION	Y	Z
0°	3909	9532
15°	4095	9508
30°	4269	9436
45°	4418	9321

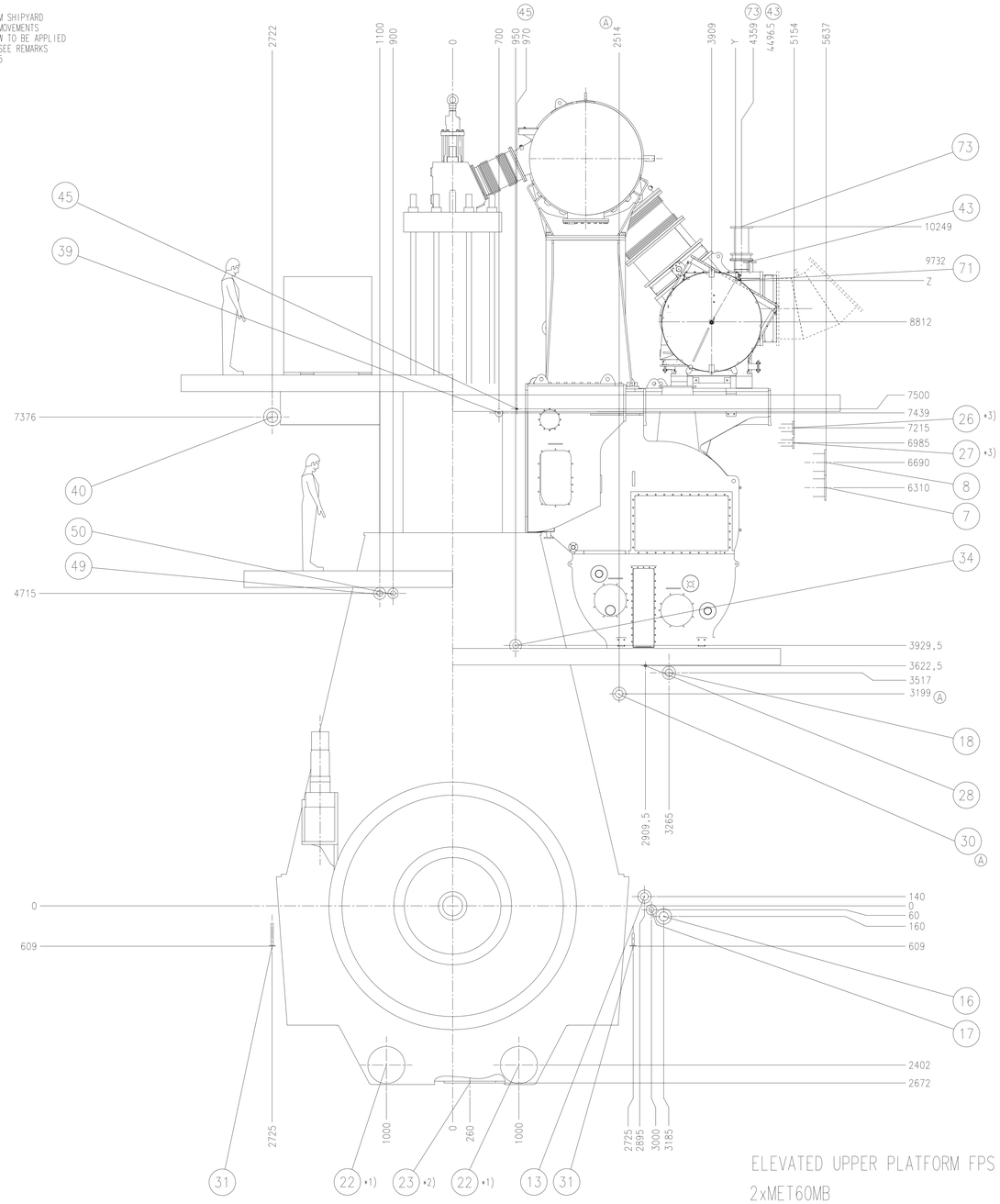
Abgasseite
EXHAUST SIDE



Antriebseite
DRIVING END

Freies Ende
FREE END

Antriebseite
DRIVING END



ELEVATED UPPER PLATFORM FPS
2xMET60MB

1	001	107.390.729.500	FLANGE DIMENSIONS		107.390.729					0,001
QTY	SEQ NO	Material ID	Material Name	Dimension, Occ	Standard or Drawing		Basic Material Material Standard			Weight GR.NET
							Q-Code XXXXX Standard JIS			Main Drw. H
Mod.	A	EAAD092009	06.01.2020							
	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date		

Prev. issue for ref.

Approved

WIN GD Winterthur Gas & Diesel

Product W7X82-B

PIPE CONNECTION PLAN
HP SCR
Rohranschlussplan
HP SCR

Units	mm kg	NX	Basic Material				Net Weight 0,003
SURFACE PROTECTION SEE GROUP 0344	Made	11.08.2019	jba039 J.H Bae	Scale 1:30	Size A0	Page 1/1	Material ID PAAD343223
TOLERANCING PRINCIPLE ISO8015	Chkd	20.11.2019	ihe003 Hercog	Design Group 8020	Drawing ID DAAD123372		Rev. A
GENERAL TOLERANCES ACCORDING TO ISO2768-mK	Appd	20.11.2019	sth017 Thalmann				

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CONFIDENTIAL DRAWING - Confidential

*1) Optionelle Ausfuehrung (wenn verlangt)
OPTIONAL EXECUTION (IF REQUIRED)

*2) Standard Ausfuehrung
STANDARD EXECUTION
Vorschlag Endgueltige Position ist mit Werft zu bestimmen
PROPOSAL; FINAL POSITION TO BE DETERMINED IN ACCORDANCE WITH SHIPYARD

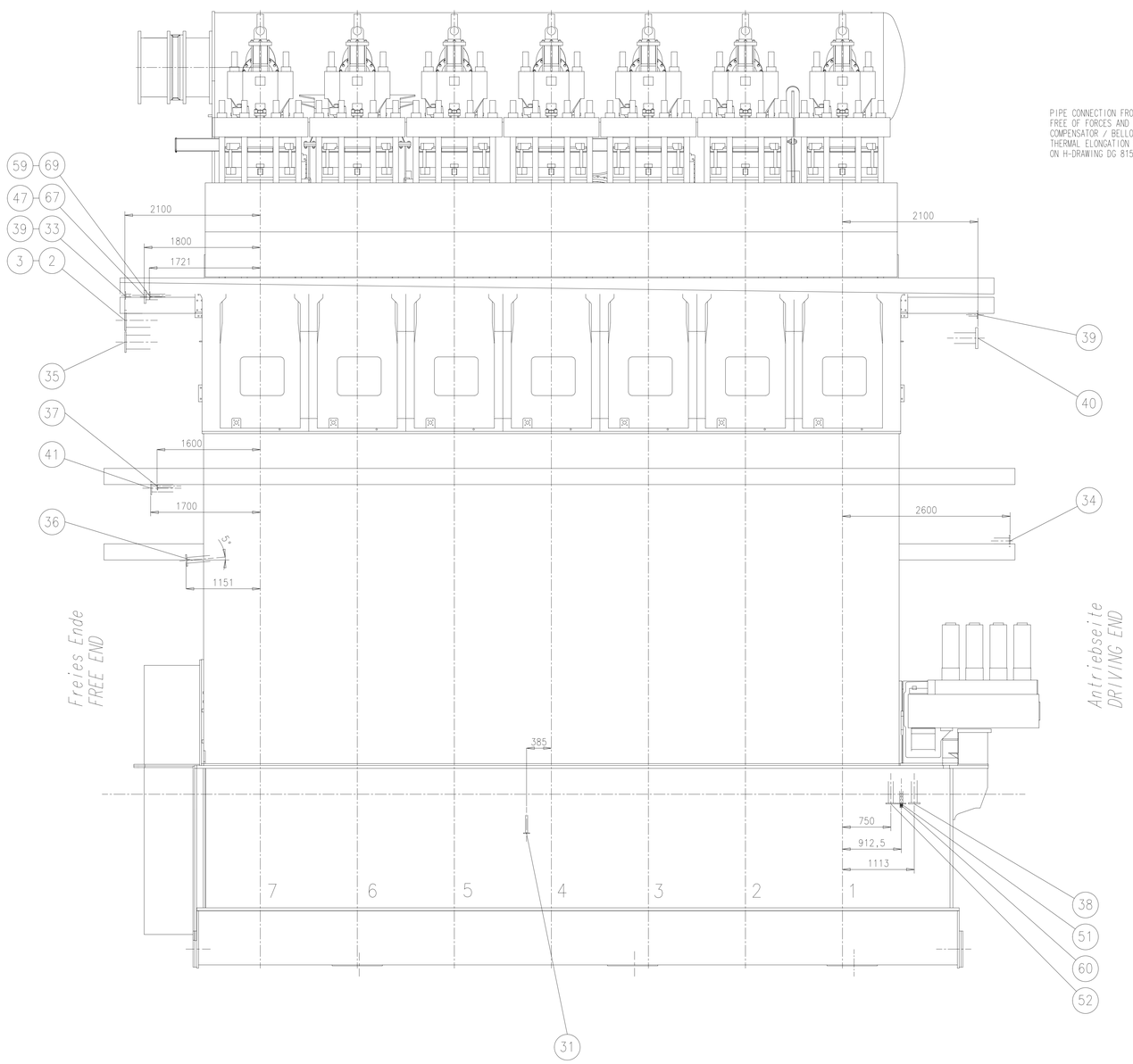
*3) Externale Ausfuehrung (wenn verlangt)
EXTERNAL EXECUTION (IF REQUIRED)

Alle Flanschanschluesse am Motor sind mit Gegenflanschen versehen (Blindflansch), ausgenommen der Anschluss fuer den Gasaustritt am Turbolader. Die Blindflansche sind nach dem betreffenden Rohrdurchmesser des Werftanschlusses aufzubohren.
THE PIPE CONNECTIONS ON THE ENGINE ARE SUPPLIED WITH MATING FLANGES (BLIND), WITH EXCEPTION OF THE TURBOCHARGER EXHAUST GAS OUTLET, BLIND FLANGES TO BE DRILLED TO MATCH PIPE DIA SUPPLIED BY THE SHIPYARD.

Die Gewinde-Anschluesse werden komplett geliefert
SCREWED CONNECTIONS ARE SUPPLIED COMPLETE

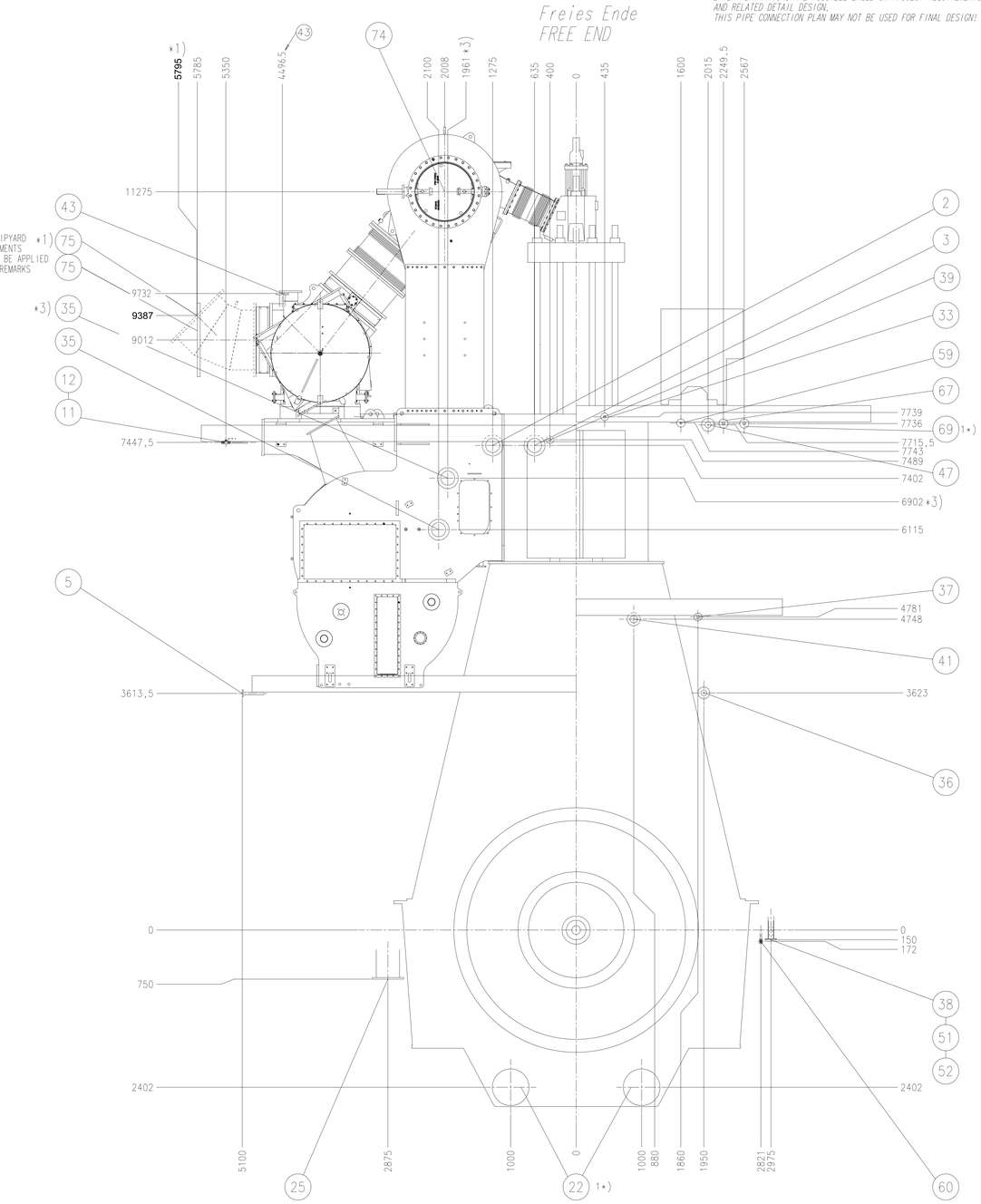
DIMENSIONS FOR REFERENCE ONLY. TECHNICAL MODIFICATIONS RESERVED.
LATER ADAPTATIONS ARE POSSIBLE BASED ON PROJECT REQUIREMENTS AND RELATED DETAIL DESIGN.
THIS PIPE CONNECTION PLAN MAY NOT BE USED FOR FINAL DESIGN!

Brennstoffseite
FUEL SIDE



PIPE CONNECTION FROM SHIPYARD FREE OF FORCES AND MOVEMENTS COMPENSATOR / BELLOW TO BE APPLIED THERMAL ELONGATION SEE REMARKS ON H-DRAWING DG 8155

Freies Ende
FREE END



2xMET60MB

Next	For data for							Q-Code XXXXX Standard MS	Main Drw. H
	A	EAAD092009	06.01.2020						
	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date	

WIN GD Winterthur Gas & Diesel

Product W7X82-B

PIPE CONNECTION PLAN
HP SCR
Rohranschlussplan
HP SCR

Units	mm kg	NX	Basic Material	Net Weight 0.003

Mode	11.08.2019	jba039 J.H Bae	Scale 1:30	Size A0	Page 2/3	Material ID	PAAD343223
Chkd	20.11.2019	ihe003 Herceg	Design Group 8020	Drawing ID	DAAD123372	Rev.	A
Appd	20.11.2019	sth017 Thalmann					

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

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Approved

Note	No.	Symbol	Description	DN / PN	Ko.Gr. KO.GR.	Freies Ende FREE END	Antriebseite DRIVING END	Abgasseite EXHAUST SIDE	Brennstoffseite FUEL SIDE
						Leitungs-Anschluesse PIPE-CONNECTIONS			
	1		Zylinderkuehlwasser Eintritt CYLINDER COOLING WATER INLET	DN PN	8301	Nicht benoetigt NOT USED			
	2		Zylinderkuehlwasser Eintritt CYLINDER COOLING WATER INLET	DN 200 PN 5	8305	X			X
	3		Zylinderkuehlwasser Austritt CYLINDER COOLING WATER OUTLET	DN 200 PN 5	8310	X			X
	4		Zylinderkuehlwasser Entlueftung Entlueftung CYLINDER COOLING WATER VENTING VENTING	DN PN	8310	Nicht benoetigt NOT USED			
	5		Zylinderkuehlwasser Entleerung Austritt CYLINDER COOLING WATER DRAIN OUTLET	DN 32 PN 5	8313	X		X	
	6		SLK Entleerung Austritt SAC DRAIN OUTLET	DN PN	8314	Nicht benoetigt NOT USED			
	7		SLK-NT-Kuehlwasser Eintritt SAC-LT-COOLING WATER INLET	DN 300 PN 5	8335		X	X	
	8		SLK-NT-Kuehlwasser Austritt SAC-LT-COOLING WATER OUTLET	DN 300 PN 5	8335		X	X	
	9		SLK-HT-Kuehlwasser Eintritt SAC-HT-COOLING WATER INLET	DN PN	8335	Nicht benoetigt NOT USED			
	10		SLK-HT-Kuehlwasser Austritt SAC-HT-COOLING WATER OUTLET	DN PN	8335	Nicht benoetigt NOT USED			
	11		Wasser fuer Reinigungsanlage TL und SLK Eintritt WATER FOR CLEANING PLANT TC AND SAC INLET	DN 20 PN 16	8338	X		X	
	12		Luft fuer Reinigungsanlage TL und SLK Eintritt AIR FOR CLEANING PLANT TC AND SAC INLET	DN 20 PN 16	8338	X		X	
	13		Oeliges Wasser vom Receiver Austritt OILY WATER FROM RECEIVER OUTLET	DN 100 PN 5	8352		X	X	
	14		Waschanlage TL Schmutzwasser Austritt WASHING PLANT TC DIRTY WATER OUTLET	DN PN	8355	Nicht benoetigt NOT USED			
	15		Ablauf vom Wasserabscheider Austritt WATER DRAIN FROM WATERSEPERATOR OUTLET	DN PN	8356	Nicht benoetigt NOT USED			
	16		SLK Kondenswasser Austritt SAC CONDENSATE WATER OUTLET	DN 125 PN 5	8357		X	X	
	17		SLK Waschwasser Austritt SAC WASHING WATER OUTLET	DN 65 PN 5	8357		X	X	
	18		SLK Entlueftung Entlueftung SAC VENTING VENTING	DN 100 PN 5	8357		X	X	
	19								
	20								
	21								
*1)	22	siehe Detail SEE DETAIL	Oelablauf Grundplatte Horizontal OIL DRAIN BEDPLATE HORIZONTAL	DN 350 PN 5	1110	X	X		
*2)	23	siehe Detail SEE DETAIL	Oelablauf Grundplatte Vertikal OIL DRAIN BEDPLATE VERTICAL	DN 600 PN 5	1110	X DOWN	X DOWN		
	24								
	25		Hauptschmieroel Eintritt MAIN LUBRICATING OIL INLET	DN 250 PN 10	8406	X DOWN		X DOWN	

Note	No.	Symbol	Description	DN / PN	Ko.Gr. KO.GR.	Freies Ende FREE END	Antriebseite DRIVING END	Abgasseite EXHAUST SIDE	Brennstoffseite FUEL SIDE
						Leitungs-Anschluesse PIPE-CONNECTIONS			
*3)	26		Schmieroel Turbolader Eintritt LUBRICATING OIL TURBOCHARGER INLET	DN 32 PN 10	8430		X	X	
Ⓐ *3)	27		Schmieroel Turbolader Austritt LUBRICATING OIL TURBOCHARGER OUTLET	DN 200 PN 5	8431		X	X	
	28		Spueloel Automatikfilter Austritt FLUSHING OIL AUTOMATIC FILTER OUTLET	DN 20 PN 10	8445		X	X	
	29		Schmutzoel Ablauf Versorgungseinheit Austritt DIRTY OIL DRAIN SUPPLY UNIT OUTLET	DN PN	8452	Nicht benoetigt NOT USED			
Ⓐ	30		Schmieroel Kreuzkopf Eintritt LUBRICATING OIL CROSSHEAD INLET	DN 125 PN 16	8455		X	X	
	31		Leckagen vom Motor Austritt DIRTY OIL LEAKAGE FROM ENGINE OUTLET	DN 25 PN 5	8463		X	X	X
	32		Zylinder Schmieroel Eintritt CYLINDER LUB. OIL INLET	DN PN	8473	Nicht benoetigt NOT USED			
	33		Zylinder Schmieroel Eintritt CYLINDER LUB. OIL INLET	DN 32 PN 5	8475	X			X
	34		Leckoel Antriebseite Austritt LEAKAGE OIL DRIVING END OUTLET	DN 80 PN 5	8482		X		X
	35		Leckoel Freies Ende Austritt LEAKAGE OIL FREE END OUTLET	DN 150 PN 5	8483	X			X
	36		Schmutzoel Kolbenunterseite Austritt DIRTY OIL PISTON UNDERSIDE OUTLET	DN 80 PN 5	8487	X			X
	37		Leckoel Stopfbuechse Austritt LEAKAGE OIL GLAND BOX OUTLET	DN 40 PN 5	8488	X			X
	38		Oelablaufltg. Versorgungseinheit Austritt OIL PIPE DRAIN SUPPLY UNIT OUTLET	DN 80 PN 5	8454	X DOWN			X DOWN
	39		Leckageablauf Zylinderblock Austritt LEAKAGE DRAIN CYLINDER BLOCK OUTLET	DN 32 PN 5	8462	X	X		X
	40		Anlassluft Eintritt STARTING AIR PIPE INLET	DN 150 PN 30	8605		X		X
	41		Entlueftung Kurbelgehaeuse Austritt VENTING CRANKCASE OUTLET	DN 100 PN 5	8608	X			X
	42		Entlueftung Waste Gate Austritt VENTING WASTE GATE OUTLET	DN PN	8609	Nicht benoetigt NOT USED			
	43		Entlueftung Turbolader Austritt VENTING TURBOCHARGER OUTLET	DN 80 PN 5	8610		X UP	X UP	
	44		Entlueftung Zylinderkuehlwasser Austritt VENTING CYLINDER COOLING WATER OUTLET	DN PN	8611	Nicht benoetigt NOT USED			
	45		Steuerluftversorgung Eintritt CONTROL AIR SUPPLY INLET	DN 15 PN 10	8630		X	X	
	46		Steuerluftversorgung Eintritt CONTROL AIR SUPPLY INLET	DN PN	4605	Nicht benoetigt NOT USED			
	47		Oel Ablaufleitung Servosystem Austritt OIL DRAIN PIPE SSERVO SYSTEM OUTLET	DN 80 PN 16	8449	X			X
	48								
	49		Brennstoff Eintritt FUEL INLET	DN 80 PN 16	8702		X	X	
	50		Brennstoffruecklauf Austritt FUEL RETURN OUTLET	DN 65 PN 16	8704		X	X	

Note	No.	Symbol	Description	DN / PN	Ko.Gr. KO.GR.	Freies Ende FREE END	Antriebseite DRIVING END	Abgasseite EXHAUST SIDE	Brennstoffseite FUEL SIDE
						Leitungs-Anschluesse PIPE-CONNECTIONS			
	51		Leckbrennstoff Rail Unit Austritt FUEL LEAKAGE RAIL UNIT OUTLET	DN 40 PN 5	8740	X DOWN			X DOWN
	52		Leckbrennstoff Einspritzventil Austritt FUEL LEAKAGE INJECTION VALVE OUTLET	DN 65 PN 5	8741	X DOWN			X DOWN
	53		Leckbrennstoff HD-Leitungen Austritt FUEL LEAKAGE HP-PIPES OUTLET	DN PN	8742	Nicht benoetigt NOT USED			
	54		Leckbrennstoff Einspritzpumpe Austritt FUEL LEAKAGE INJECTION PUMP OUTLET	DN PN	8743	Nicht benoetigt NOT USED			
	55		Leckbrennstoff Rail/Versorgungs Einheit Austritt FUEL LEAKAGE RAIL/SUPPLY UNIT OUTLET	DN PN	8744	Nicht benoetigt NOT USED			
	56		Leckbrennstoff Einspritzeinheit Austritt FUEL LEAKAGE ICU OUTLET	DN PN	8745	Nicht benoetigt NOT USED			
	57								
	58								
	59		Begleitheizung Brennstoff Eintritt TRACE HEATING FUEL INLET	DN 25 PN 16	8810	X			X
	60		Begleitheizung Brennstoff Austritt TRACE HEATING FUEL OUTLET	DN 20 PN 16	8810	X DOWN			X DOWN
	61		Begleitheizung Brennstoff Eintritt TRACE HEATING FUEL INLET	DN PN	8812	Nicht benoetigt NOT USED			
	62		Begleitheizung Brennstoff Austritt TRACE HEATING FUEL OUTLET	DN PN	8812	Nicht benoetigt NOT USED			
	63		Begleitheizung Brennstoffzirkulation Eintritt TRACE HEATING FUEL CIRCULATION INLET	DN PN	8820	Nicht benoetigt NOT USED			
	64		Begleitheizung Brennstoffzirkulation Austritt TRACE HEATING FUEL CIRCULATION OUTLET	DN PN	8823	Nicht benoetigt NOT USED			
	65								
	66								
	67		Feuerloesch Anlage Zylinderblock Eintritt FIRE EXTINGUISHING PLANT CYLINDER BLOCK INLET	DN 40 PN 16	8830	X			X
	68		Feuerloesch Anlage Rail Unit Eintritt FIRE EXTINGUISHING PLANT RAIL UNIT INLET	DN PN	8831	Nicht benoetigt NOT USED			
*1)	69		Feuerloesch Anlage Rail Unit Eintritt FIRE EXTINGUISHING PLANT RAIL UNIT INLET	DN 40 PN 16	8832	Nicht benoetigt NOT USED			
	70								
	71	siehe Detail SEE DETAIL	Abgas Turbolader Austritt EXHAUST GAS TURBOCHARGER OUTLET		6506 6509		X UP	X UP	
	72								
	73		Abgas-Abblaseventil Austritt EXHAUST WASTE GATE OUTLET	DN 200 PN 10	8135	X	X	X	
	74	siehe Detail SEE DETAIL	Abgassammelleitung Austritt EXHAUST MANIFOLD OUTLET	DN 900 PN 10	8155	X		X	
	75	siehe Detail SEE DETAIL	Abgassammelleitung Eintritt EXHAUST MANIFOLD INLET	DN 900 PN 10	8155		X	X	

*1) *Optionelle Ausfuehrung (wenn verlangt)*
OPTIONAL EXECUTION (IF REQUIRED)

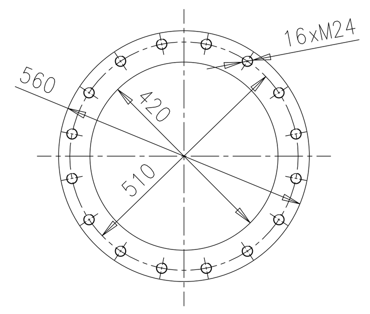
*2) *Standard Ausfuehrung*
STANDARD EXECUTION
Vorschlag Endgueltige Position ist mit Werft zu bestimmen
PROPOSAL. FINAL POSITION TO BE DETERMINED IN ACCORDANCE WITH SHIPYARD

*3) *Externale Ausfuehrung (wenn verlangt)*
EXTERNAL EXECUTION (IF REQUIRED)

Abmasse der Flansche siehe Stueckliste
FLANGE DIMENSIONS SEE PARTS LIST

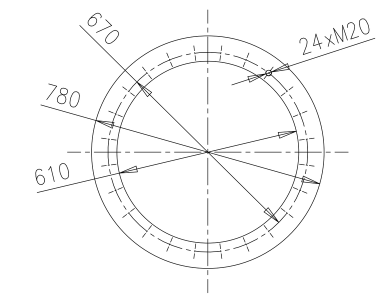
(22) *fuer horizontalen Oelablauf*
FOR HORIZONTAL LUB. OIL DRAIN

1:10



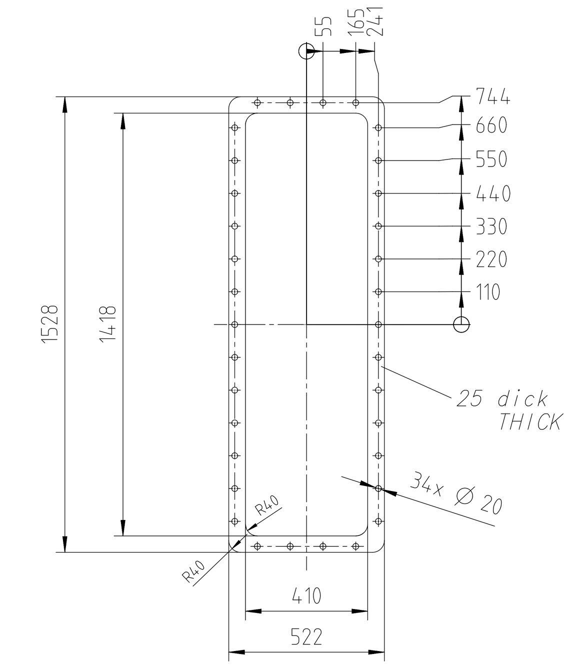
(23) *fuer vertikalen Oelablauf*
FOR VERTICAL LUB. OIL DRAIN

1:15

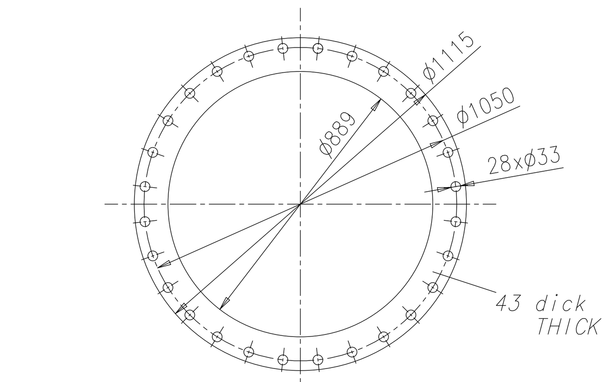


(71) *Gas-Austritt vom Turbolader*
GAS OUTLET FROM TURBOCHARGER

1:10



(74)–(75) *Gas-Austritt der Abgassammelleitung*
GAS OUTLET FROM EXHAUST MANIFOLD



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ELEVATED UPPER PLATFORM FPS

Free space for lic.			Q-Code XXXXX Standard JIS	Main Drw. H
Modif.	A EAAD092009 06.01.2020 (Number / Drawn date)	(Number / Drawn date)	(Number / Drawn date)	(Number / Drawn date)
WIN GD Winterthur Gas & Diesel	Product W7X82-B	PIPE CONNECTION PLAN HP SCR Rohranschlussplan HP SCR		
Units mm kg	NX	Basic Material		Net Weight 0,003
Made 11.08.2019 jba039 J.H Bae	Scale 1:30	Size A0	Page 3/3	Material ID PAAD343223
Chkd 20.11.2019 ihe003 Herceg	Design Group 8020	Drawing ID DAAD123372		Rev. A
Appd 20.11.2019 sth017 Thalmann				

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

Approved

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ISO

PN	DN	OUT.DIA.	THICK	DIM. FOR SCREWS			
6 bar	25	100	14	75	4	M10	11
	32	120	16	90	4	M12	14
	40	130	16	100	4	M12	14
	50	140	16	110	4	M12	14
	65	160	16	130	4	M12	14
	80	190	18	150	4	M16	18
	100	210	18	170	4	M16	18
	125	240	20	200	8	M16	18
	150	265	20	225	8	M16	18
	200	320	22	280	8	M16	18
	250	375	24	335	12	M16	18
	300	440	24	395	12	M20	22
	350	490	26	445	12	M20	22
	400	540	28	495	16	M20	22
	450	595	30	550	16	M20	22
	500	645	30	600	20	M20	22

PN	DN	OUT.DIA.	THICK	DIM. FOR SCREWS			
16 bar	25	115	16	85	4	M12	14
	32	140	18	100	4	M16	18
	40	150	18	110	4	M16	18
	50	165	19	125	4	M16	18
	65	185	20	145	8	M16	18
	80	200	20	160	8	M16	18
	100	220	22	180	8	M16	18
	125	250	22	210	8	M16	18
	150	285	24	240	8	M20	22
	200	340	26	295	12	M20	22
	250	405	32	355	12	M24	26
	300	460	32	410	12	M24	26
	350	520	35	470	16	M24	26
	400	580	38	525	16	M27	30
	450	640	42	585	20	M27	30
	500	715	46	650	20	M30	33

PN	DN	OUT.DIA.	THICK	DIM. FOR SCREWS			
10 bar	25	115	16	85	4	M12	14
	32	140	18	100	4	M16	18
	40	150	18	110	4	M16	18
	50	165	19	125	4	M16	18
	65	185	20	145	8	M16	18
	80	200	20	160	8	M16	18
	100	220	22	180	8	M16	18
	125	250	22	210	8	M16	18
	150	285	24	240	8	M20	22
	200	340	24	295	8	M20	22
	250	395	26	350	12	M20	22
	300	445	26	400	12	M20	22
	350	505	28	460	16	M20	22
	400	565	32	515	16	M24	26
	450	615	38	565	20	M24	26
	500	670	38	620	20	M24	26

PN	DN	OUT.DIA.	THICK	DIM. FOR SCREWS			
40 bar	25	115	16	85	4	M12	14
	32	140	18	100	4	M16	18
	40	150	18	110	4	M16	18
	50	165	20	125	4	M16	18
	65	185	22	145	8	M16	18
	80	200	24	160	8	M16	18
	100	235	26	190	8	M20	22
	125	270	28	220	8	M24	26
	150	300	30	250	8	M24	26
	200	375	36	320	12	M27	30
	250	450	44	385	12	M30	33
	300	515	48	450	16	M30	33
	350	580	54	510	16	M33	36
	400	660	60	585	16	M36	39

JIS

PN	DN	OUT.DIA.	THICK	DIM. FOR SCREWS			
5 bar	25	95	10	75	4	M10	12
	32	115	12	90	4	M12	15
	40	120	12	95	4	M12	15
	50	130	14	105	4	M12	15
	65	155	14	130	4	M12	15
	80	180	14	145	4	M16	19
	100	200	16	165	8	M16	19
	125	235	16	200	8	M16	19
	150	265	18	230	8	M16	19
	200	320	20	280	8	M20	23
	250	385	22	345	12	M20	23
	300	430	22	390	12	M20	23
	350	480	24	435	12	M22	25
	400	540	24	495	16	M22	25
	450	605	24	555	16	M22	25
	500	655	24	605	20	M22	25

PN	DN	OUT.DIA.	THICK	DIM. FOR SCREWS			
16 bar	25	125	14	90	4	M16	19
	32	135	16	100	4	M16	19
	40	140	16	105	4	M16	19
	50	155	16	120	8	M16	19
	65	175	18	140	8	M16	19
	80	200	20	160	8	M20	23
	100	225	22	185	8	M20	23
	125	270	22	225	8	M22	25
	150	305	24	260	12	M22	25
	200	350	26	305	12	M22	25
	250	430	28	380	12	M24	27
	300	480	30	430	16	M24	27
	350	540	34	480	16	M30	33
	400	605	38	540	16	M30	33
	450	675	40	605	20	M30	33
	500	730	42	660	20	M30	33

PN	DN	OUT.DIA.	THICK	DIM. FOR SCREWS			
10 bar	25	125	14	90	4	M16	19
	32	135	16	100	4	M16	19
	40	140	16	105	4	M16	19
	50	155	16	120	4	M16	19
	65	175	18	140	4	M16	19
	80	185	18	150	8	M16	19
	100	210	18	175	8	M16	19
	125	250	20	210	8	M20	23
	150	280	22	240	8	M20	23
	200	330	22	290	12	M20	23
	250	400	24	355	12	M22	25
	300	445	24	400	16	M22	25
	350	490	26	445	16	M22	25
	400	560	28	510	16	M24	27
	450	620	30	565	20	M24	27
	500	675	30	620	20	M24	27

PN	DN	OUT.DIA.	THICK	DIM. FOR SCREWS			
30 bar	25	130	20	95	4	M16	19
	32	140	22	105	4	M16	19
	40	160	22	120	4	M20	23
	50	165	22	130	8	M16	19
	65	200	26	160	8	M20	23
	80	210	28	170	8	M20	23
	100	240	32	195	8	M22	25
	125	275	36	230	8	M22	25
	150	325	38	275	12	M24	27
	200	370	42	320	12	M24	27
	250	450	48	390	12	M30	33
	300	515	52	450	16	M30	33
	350	560	54	495	16	M30	33
	400	630	60	560	16	M36	39

Substitute for:

PC	Q-Code					
		X	X	X	X	X

Modif												
	A	EAAD084180	04.10.2012									
		Number	Drawn Date		Number	Drawn Date		Number	Drawn Date		Number	Drawn Date

WÄRTSILÄ

Product
W-2S

Flange Dimensions

Made	19.09.2007	N. Brand	Main Drw.	Page 1 / 1	Material ID **107.390.729.500**
Chkd	27.09.2007	M. Frei	Design Group **8020**		
Appd	27.09.2007	B. Haag		Drawing ID **107.390.729**	Rev **A**

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WinGD-7X82-B_pipe-connection-plan

TRACK CHANGES

DATE	SUBJECT	DESCRIPTION
2018-02-26	DRAWING SET	First web upload
2019-12-05	DAAD051586 DAAD093682 DAAD041369	Revised Pipe Connection Plan for Turbocharger type 2xA170/A270-L _JIS, 2xA270-L_HP-SCR_JIS and 2xMET66MB _JIS have been updated.
2020-09-07	DAAD123372	Pipe Connection Plan for Turbocharger type 2xMET60MB_HP-SCR has been added.

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