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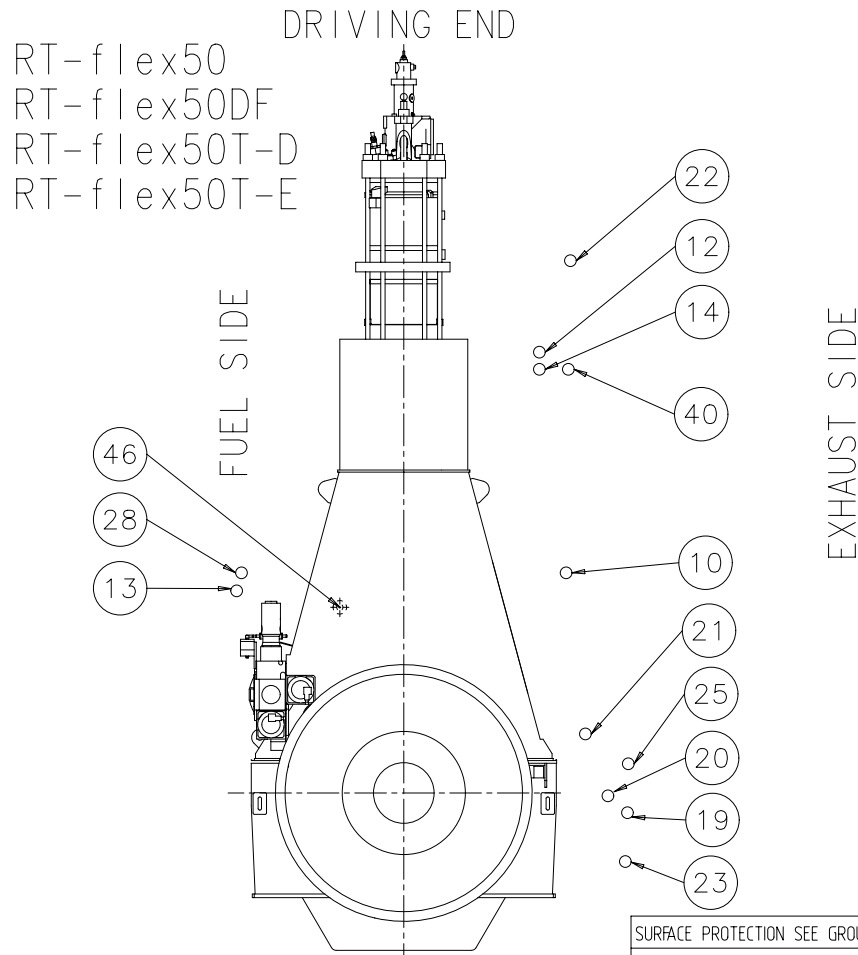
Net Weight		0,002										
Quantity PER ENGINE	SEQ NO	Material ID	Material Name			Dimension, Occ	Standard or Drawing	Basic Material Material Standard	Weight GR./NET	0,001		
1	001	107.340.951.500	LEAKAGE COLLECTION/WASHING SYS.			107.340.951						
Material ID	Modif.	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date	
107.340.953.200	A	7-77.597	30.06.2010	B	EAAD084882	06.11.2013	C	EAAD090104	12.09.2019			
Free space for lic.									Q-Code	Main Drw.		
									XXXXXX	H		
									Standard			
									ISO; JIS			
WIN GD Winterthur Gas & Diesel		Product		5-8RT-flex50		LEAKAGE COLLECTION/WASHING SYS.						
				5-8RT-flex50DF		LEAKAGE COLLECTION/WASHING SYS.						
				5-8RT-flex50-E								
				5-8RT-flex50-D								
Units	mm kg	NX		Basic Material						Net Weight		
SURFACE PROTECTION SEE GROUP 0344		Made	25.03.2004 S. NATALI		Scale	-		Size	A3	Page	1/1	
TOLERANCING PRINCIPLE ISO8015		Chkd			Design Group	9724		Drawing ID	107.340.953		Rev.	C
GENERAL TOLERANCES ACCORDING TO ISO2768-mK		Appd	26.07.2004 SNA001									

Approved
ASD - ASSEMBLY DRAWING - Internal

SPECIFICATION which must be met ①

②5	OUTLET - Dirty oil piston underside - Flow with SAC pressure to sludge oil trap or appropriate arrangement. - Min. inclination of drain pipe: 60 %
②8	OUTLET - Leakage oil gland box - Gravity flow to sludge tank or appropriate tank.
④0	INLET - Air for cleaning plants TC and SAC - Working air, supply pressure: 7-9 bar
④6	OUTLET - Venting crank case - Venting to funnel - Must not be connected to other venting pipes.

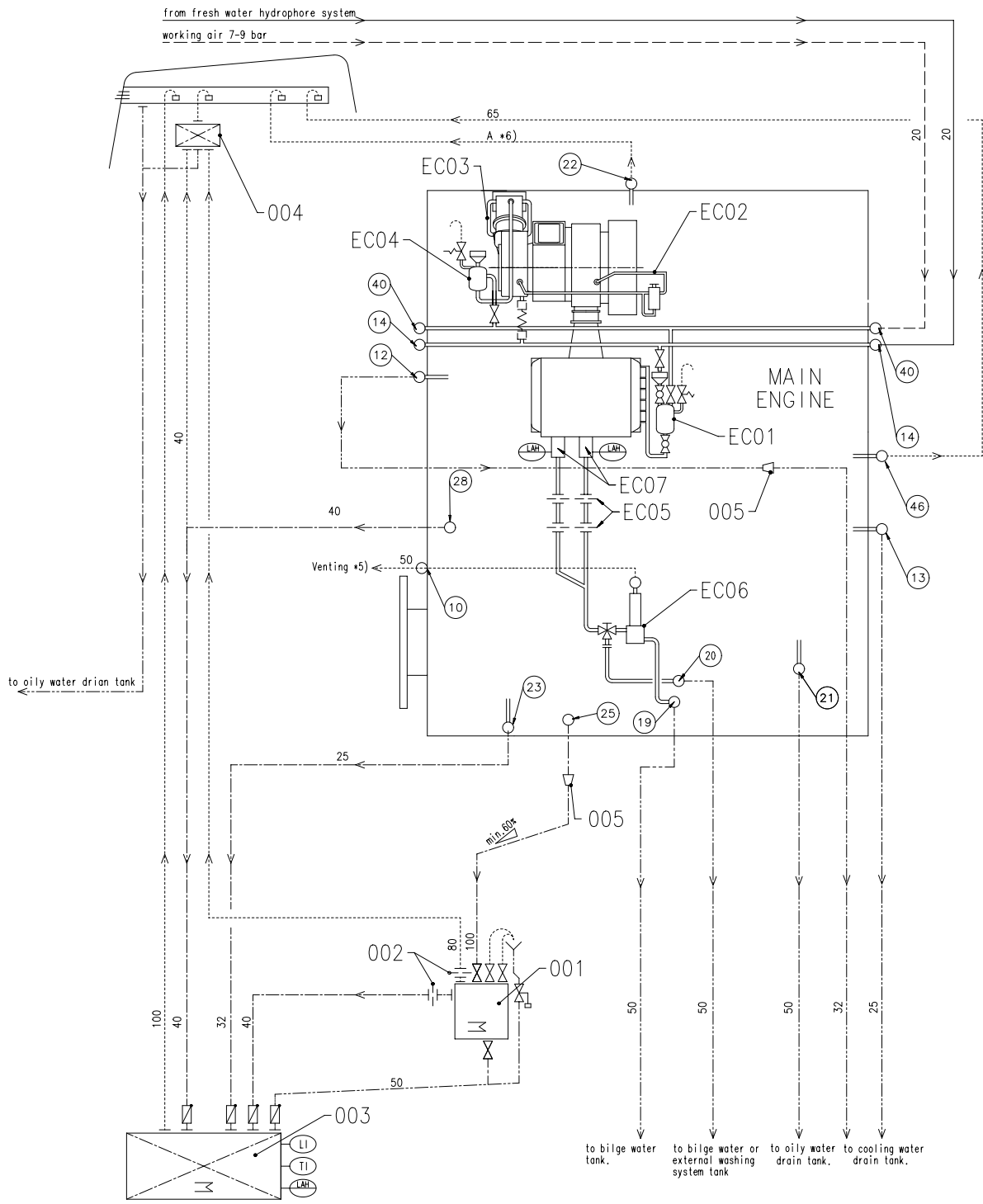
⑩	OUTLET - SAC venting - Free flow outside of engine room.
⑫	OUTLET - Cylinder cooling water drain. - Gravity flow to cooling water drain tank or appropriate tank.
⑬	OUTLET - SAC cooling water drain. - Gravity flow to cooling water drain tank or appropriate tank.
⑭	INLET - Washing water SAC - From fresh water hydrophore system, supply pressure: 2.5 bar
⑰	OUTLET - SAC condensate water - Gravity flow to bilge water tank or appropriate tank.
⑳	OUTLET - Washing water from scavenge air coller. - Gravity flow to bilge water or chemical cleaning tank.
㉑	OUTLET - Oily water from scavenge air receiver - Gravity flow to oily water tank or appropriate tank.
㉒	OUTLET - Venting turbocharger - Venting to funnel - Minimum inclination according to TC suppliers specification - Must be not connected to other venting pipes.
㉓	OUTLET - Various leakages - Gravity flow to sludge tank or appropriate tank.



1	001	107.425.369.500	SLUDGE OIL TRAP	107.425.369		0,001							
QTY	SEQ NO	Material ID	Material Name	Dimension, Occ	Standard or Drawing	Basic Material Material Standard	Weight GR./NET						
Free space for lic.						Q-Code XXXXXX	Main Drw.						
Standard	ISO; JIS												
Modif.	F	EAAD084349	30.01.2013	G	EAAD084882	06.11.2013	H	EAAD086378	04.02.2016	I	EAAD090104	23.08.2019	
	Number	Drawn date		Number	Drawn date		Number	Drawn date		Number	Drawn date		
Units			mm kg	NX	Basic Material			Net Weight 0,001					
SURFACE PROTECTION SEE GROUP 0344			Made	25.03.2004 S. NATALI		Scale	-	Size	A3	Page	1/2	Material ID	107.340.951.500
TOLERANCING PRINCIPLE ISO8015			Chkd			Design Group	9724	Drawing ID	107.340.951		Rev.	1	
GENERAL TOLERANCES ACCORDING TO ISO2768-mK			Appd	22.07.2004 SNA001									

Approved
WIN GD
Winterthur Gas & Diesel
100 - DIMENSIONAL DRAWING - Confidential

SYSTEM PROPOSAL



Turbocharger type	A *6	Min. Inclination
2x MET53MA	80	>3°
1x MET60MA	80	>3°
1x MET66ME	80	>3°
1x MET66S	80	>3°
2xA165	80	>5°
1xA170	65	>5°
1x A175	65	>5°
1x A180	80	>5°
1x A265	65	>5°
1x A165	65	>5°

Pos.	SYSTEM COMPONENTS *1) ①
001	Sludge oil trap (according to separate drawing)
002	Throttling disc (size shown on separate sludge oil trap drawing)
003	Sludge or appropriate tank
004	Air vent manifold
005	Transition piece (adaptor) *8)

Pos.	ENGINE CONNECTIONS *2) ①
⑩	OUTLET - SAC venting *5)
⑫	OUTLET - Cylinder cooling water drain
⑬	OUTLET - SAC cooling water drain.
⑭	INLET - Washing water SAC
⑰	OUTLET - SAC condensate water *4) *11)
⑳	OUTLET - Washing water from scavenge air cooler
㉑	OUTLET - Oily water from scavenge air receiver *11)
㉒	OUTLET - Venting turbocharger
㉓	OUTLET - Various leakages
㉔	OUTLET - Dirty oil piston underside
㉕	OUTLET - Leakage oil gland box
④	INLET - Air for cleaning TC and SAC
⑥	OUTLET - venting crankcase

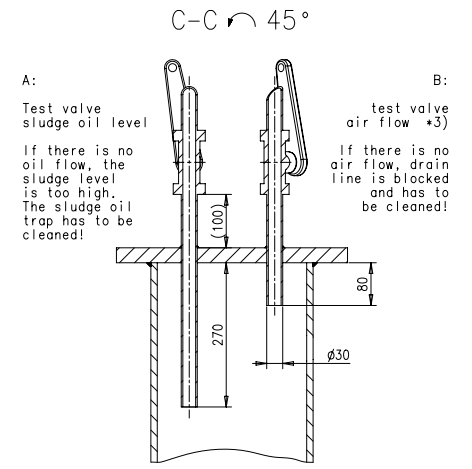
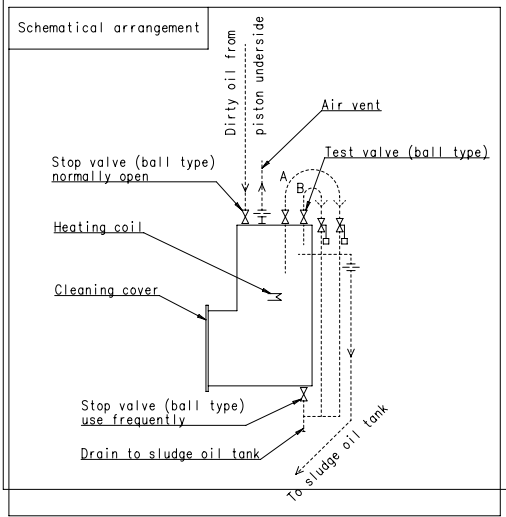
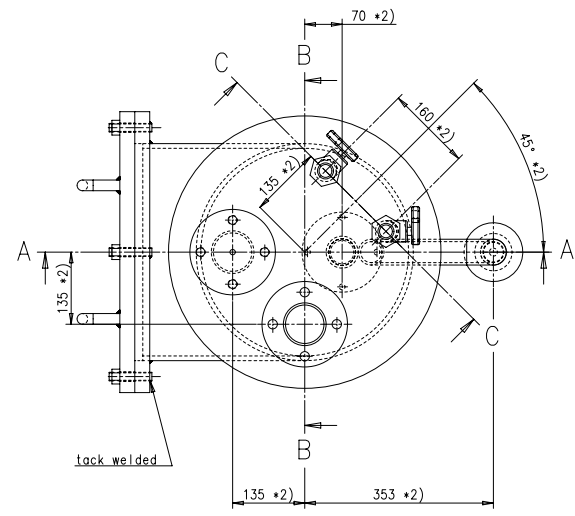
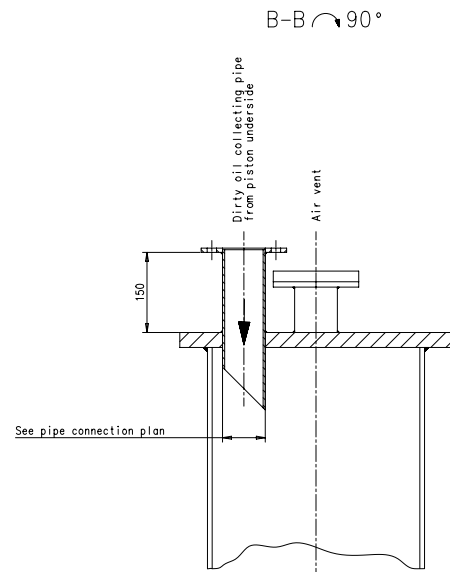
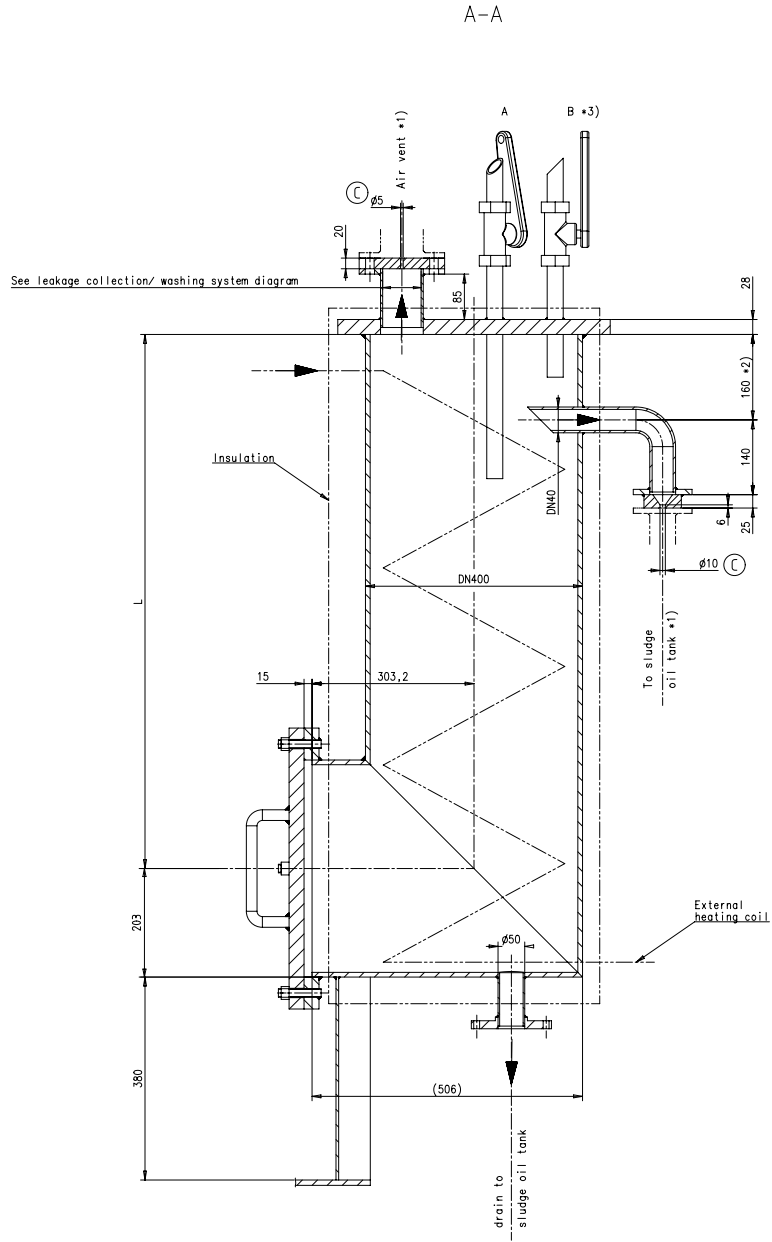
Pos.	ENGINE COMPONENTS *3) ①
EC01	Scavenge air cooler washing plant
EC02	Turbocharger compressor wheel washing plant *10)
EC03	Turbocharger turbine washing plant *10)
EC04	Dry cleaning device *10)
EC05	Throttling disc
EC06	Venting Unit
EC07	Condensate drain unit

Remarks ①

- Air vent and drain pipes must be fully functional at all inclination angles of the ship at which the engine must be operational.
- *1) To be delivered by external suppliers and to be installed by the shipyard.
- *2) Refer to the "Pipe Connection Plan" for the execution and location of the engine pipe connections.
- *3) To be delivered by the engine manufacturer, i.e. already equipped on engine side.
- *4) The amount of condensate water drained off after the SAC depends on the relative air humidity and the scavenge air temperature before and after the SAC. Under extreme ambient conditions a maximum condensate quantity of up to 0.16 kg/kWh may be produced.
- *5) Free flow venting outside of engine room.
- *6) In relation to turbocharger type, see table on the left side.
- *8) Installed as required (check with the Pipe Connection Plan).
- *10) One unit per turbocharger.
- *11) Drain connection 19 and 21 are with air flow from scavenging system. It is recommended to connect these drains to different tanks. The tanks must be designed with sufficiently sized vents to avoid excessive pressure in the tanks. The drain amount depends on the ambient conditions.

- Compressed air pipes
- Air vent pipes
- Water drain pipes
- Washing water pipes
- Dirty oil drain pipes
- Pipes on engine
- Pipe connections

WINGO Winkothur Gas & Diesel		Product: 5-BRT-flex50 5-BRT-flex50DF 5-BRT-flex50T-D 5-BRT-flex50T-E		LEAKAGE COLLECTION/WASHING SYS. SYSTEM DIAGRAM LEAKAGE COLLECTION/WASHING SYS.	
Units	mm kg	NX	Basic Material	Scale	Page
SURFACE PROTECTION SEE GROUP 0344 TOLERANCING PRINCIPLE ISO8015 GENERAL TOLERANCES ACCORDING TO ISO2768-mK		Made 25.03.2004 S. NARAI Chd Appd 22.07.2004 SMA001	No. 9724 Design Group B Drawing ID 107.340.951	Size A1 Page 2/2 Material ID 107.340.951.500 Rev. 1	Net Weight 0,001



G-Code XXXXX Standard ISO, JIS		Main Drw.
Mod. A EAAD08405122.01.2013 Number Drawn date	B EAAD08784914.07.2017 Number Drawn date	C EAAD08943912.07.2018 Number Drawn date
WINGD Winkler Gas & Diesel		Product W-25 SLUDGE OIL TRAP
Units: mm kg NX	Basic Material	Net Weight 0,001
Made 31.08.2009 J.BAUMANN	Scale 1:5	Page 1/1
TOLERANCING PRINCIPLE ISO8015	Design Group	Material ID 107.425.369.500
GENERAL TOLERANCES ACCORDING TO ISO2768-mK	Appd 13.11.2009 JBA020 Baumann	Drawing ID 9724 107.425.369

SURFACE PROTECTION SEE GROUP 0344
 TOLERANCING PRINCIPLE ISO8015
 GENERAL TOLERANCES ACCORDING TO ISO2768-mK
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MIDS_WinGD-RT-flex50-D_LEAKAGE-COLLECTION_and_WASHING-SYSTEM

TRACK CHANGES

DATE	SUBJECT	DESCRIPTION
2017-02-24	DRAWING SET	First web upload
2017-08-23	107.425.369	Sludge oil trap drg– new revision
2018-10-02	107.425.369	Sludge oil trap drg – new revision
2019-09-18	107.340.953 107.340.951	Main and system drg – new revision

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