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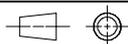
Available executions

Execution No.	Material ID
001	PAAD376122

NOTE

The above executions can be configured using the Engine Configurator. Detailed guidance for the executions is provided within the Marine Installation Manual (MIM). If a specific execution of interest is not shown in the above table, then it may still be under development or not available. For further information or in case of a project-specific request, WinGD must be contacted directly.

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Prod.	X62DF-S1.0									
Change History										
	-	sna102				new Design				
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Activity Code	E	C	
			LEAKAGE COLLECTION/WASHING SYS. MIDS master drawing							
separate BOM available			Dimension							
Scale	-		NX	Units [mm] [kg]	Basic Material			Net Weight	0.001	
<small>Copyright Winterthur Gas & Diesel Ltd. All rights reserved. By taking possession of the drawing the recipient recognizes and honours these rights. Neither the whole nor any part of this drawing may be used in any way for construction, fabrication, marketing or any other purpose nor copied in any way nor made accessible to third parties without the previous written consent of Winterthur Gas & Diesel Ltd.</small>				Main Design	Design Group	9724	Q-Code	X X M	Standard	WDS
				Qty per	A4	Item ID	PTAA026115		Drawing Page/s	1/1

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SEQ NO	QTY	Item ID	Item Name	Dimension	Standard-ID	Basic Material	Net Weight
001	1	PAAD376118	LEAKAGE COLLECTION/WASHING SYS.				0.001

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Prod.	5,6,7,8 X62DF-S1.0						
Change History							
	A	sna102	mhu019	28.11.2022	CNAA002855	Main Design/Drawing Introduced	4 3
	-	dki021	mhu019	26.02.2021		-	- -
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Approved Activity Code E C

	LEAKAGE COLLECTION/WASHING SYS.
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Bill Of Material		Dimension	
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	Main Design	Yes	Design Group 9724 Q-Code XXXXX Standard WDS
	Qty per	Engine A4	Item ID PAAD376122

SEQ NO	QTY	Item ID	Item Name	Dimension	Standard-ID	Basic Material	Net Weight
001	1	107.425.369.500	SLUDGE OIL TRAP				0.001

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Prod.	X62DF-S1.0								
Change History									
	A	npa101	nmh019	15.12.2023	EAAD787123	Drawing updated		4 3	
	-	dki021	mhu019	26.02.2021	EAAD787123	-		- -	
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Approved	Activity Code E C	

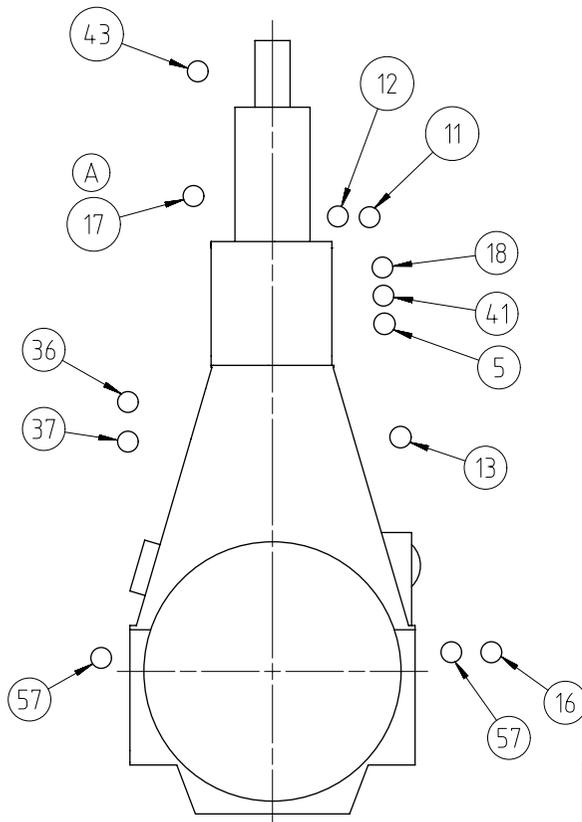
	<h1>LEAKAGE COLLECTION/WASHING SYS. SYSTEM DIAGRAM</h1>
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Bill Of Material				Dimension				
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Main Design		Design Group		9724	Q-Code	X X M	Standard	WDS
Qty per		A4	Item ID	PAAD376118			BOM Page/s	01/01

SPECIFICATION which must be met:

- 36 OUTLET - Dirty oil piston underside
- Flow with SAC pressure to sludge oil trap or appropriate arrangement
- Min. inclination of drain pipe: 15°
- 37 OUTLET - Leakage oil gland box
- Gravity flow to sludge tank or appropriate tank
- 41 OUTLET - Venting crankcase
- Venting to funnel
- Must not be connected to other venting pipes
- 43 OUTLET - Venting turbocharger
- Venting to funnel
- Minimum inclination according to TC suppliers specification
- Must not be connected to other venting pipes
- 57 OUTLET - Various leakages
- Gravity flow to sludge tank or appropriate tank

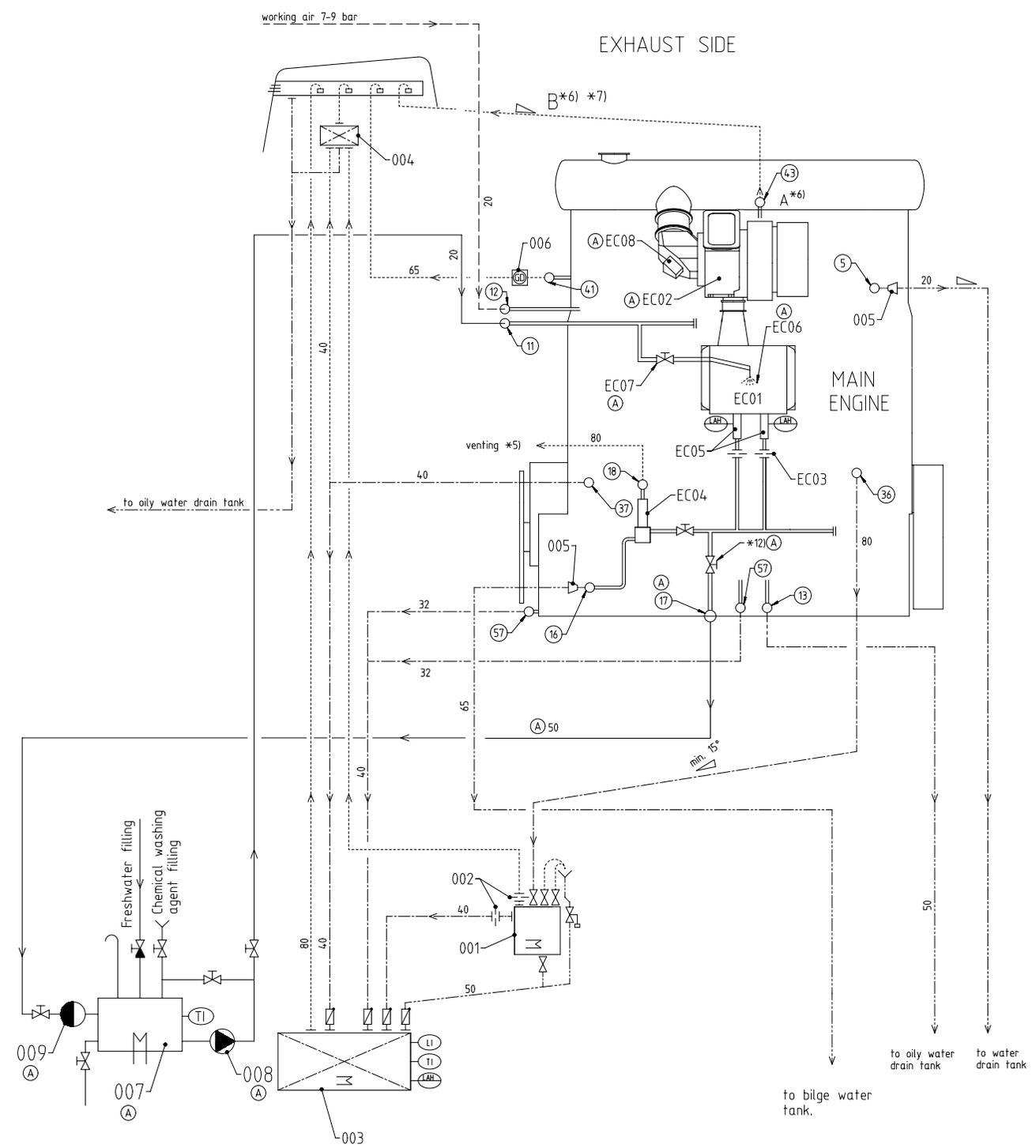
- 5 OUTLET - Cylinder cooling water drain.
- Gravity flow to cooling water drain tank or appropriate tank
- 11 INLET - SAC washing water
- Only in use if an optional SAC washing system is installed on the ship side
- Otherwise blinded with a blind flange
- Washing water properties: Fresh water mixed with a chemical washing agent
- Mixing ratio according to chemical washing agent suppliers specification
- Washing water supply pressure: 3 bar
- Washing water temperature: 50°C - 60 °C
- Washing water pump circulation rate: 3.8 m3/h
- Washing water circulation tank capacity: 0.4 m3
- A
- 12 INLET - Air for turbocharger cleaning
- Working air, supply pressure: 7-9 bar
- 13 OUTLET - Oily water from scavenge air receiver
- Gravity flow to oily water tank or appropriate tank
- 16 OUTLET - SAC condensate water
- Gravity flow to bilge water tank or appropriate tank
- 17 OUTLET - SAC washing water
- Only in use if an optional SAC washing system is installed on the ship side
- Otherwise blinded with a blind flange
- To chemical washing water circulation tank during SAC cleaning
- A
- 18 OUTLET - SAC venting
- Free flow outside of engine room



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

Prod.	X62DF-S1.0										
Change History											
	A	npa101	nm09	15.02.2023	0A00432	Drawing updated			4	3	
	-	dki021	mhu019	26.02.2021	EAAD787123	-			-	-	
Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Approved		Activity Code	E	C	
WINGD Winterthur Gas & Diesel						LEAKAGE COLLECTION/WASHING SYS. SYSTEM DIAGRAM					
separate BOM available						Dimension					
Scale	-		NX	Units [mm] [kg]	Basic Material				Net Weight	0.001	
Main Design					Design Group	9724	Q-Code	X X M	Standard	WDS	
Qty per					A3	Item ID	PAAD376118			Drawing Page/s	1/2

SYSTEM PROPOSAL



Turbocharger type	A**	B**	Min. Inclination
1x A165-L	65	65	≥ 5°
1x A170-L	65	65	≥ 5°
1x A175-L	65	65	≥ 5°
1x A265-L	65	65	≥ 5°
1x A270-L	65	65	≥ 5°
1x A275-L	65	65	≥ 5°
2x A165-L	65	80	≥ 5°
2x A170-L	65	100	≥ 5°
2x A265-L	65	80	≥ 5°
2x A270-L	65	100	≥ 5°
1x MET48MB	65	65	≥ 3°
1x MET53MB	65	65	≥ 3°
1x MET60MB	80	80	≥ 3°
1x MET66MB	80	80	≥ 3°
2x MET42MB	50	65	≥ 3°
2x MET48MB	65	80	≥ 3°
2x MET53MB	65	80	≥ 3°
1x MET42MBII	50	50	≥ 3°
1x MET48MBII	65	65	≥ 3°
1x MET53MBII	65	65	≥ 3°
1x MET60MBII	80	80	≥ 3°
1x MET66MBII	80	80	≥ 3°
2x MET37MBII	50	65	≥ 3°
2x MET42MBII	50	65	≥ 3°
2x MET48MBII	65	80	≥ 3°

Pos.	SYSTEM COMPONENTS *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) *9)
006	Gas detector *11)
(A) 007	Chemical washing water circulation tank *13)
(A) 008	Chemical washing water circulation pump
(A) 009	Chemical washing water strainer (0.5-1.0 mm)

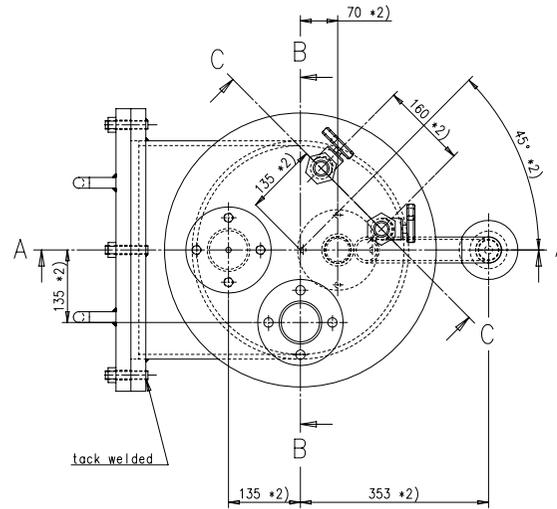
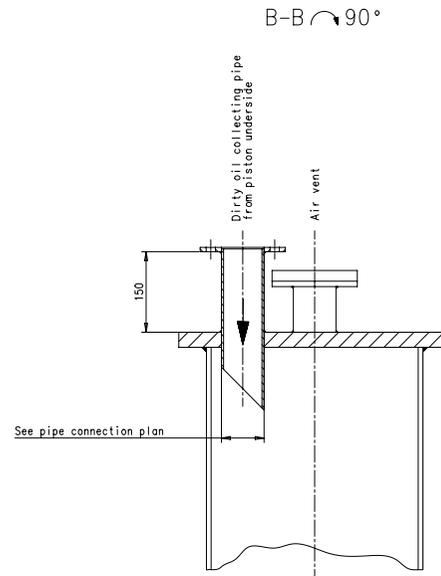
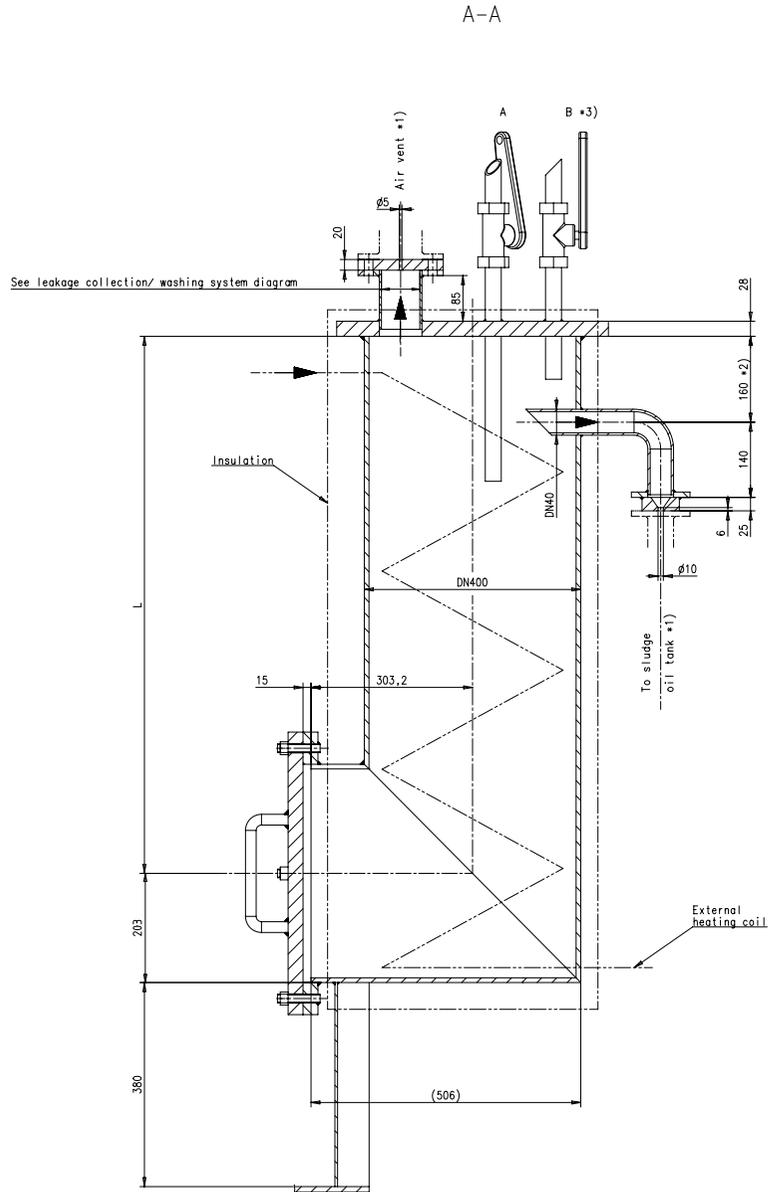
Pos.	ENGINE CONNECTIONS *2)
(5)	OUTLET - Cylinder cooling water drain
(11)	INLET - SAC washing water
(12)	INLET - Air for turbocharger cleaning
(13)	OUTLET - Oily water from scavenge air receiver *10)
(16)	OUTLET - SAC condensate water *4) *10)
(A) (17)	OUTLET - SAC washing water
(18)	OUTLET - SAC venting *5)
(36)	OUTLET - Dirty oil piston underside
(37)	OUTLET - Leakage oil gland box
(41)	OUTLET - Venting crankcase
(43)	OUTLET - Venting turbocharger
(57)	OUTLET - Various leakages

Pos.	ENGINE COMPONENTS *3)
EC01	Scavenge Air Cooler (SAC)
(A) EC02	Turbo Charger (TC)
EC03	Throttling disc
EC04	Venting Unit
EC05	Condensate drain unit
(A) EC06	SAC washing water spray nozzle
(A) EC07	SAC washing water isolating valve
(A) EC08	TC dry cleaning device

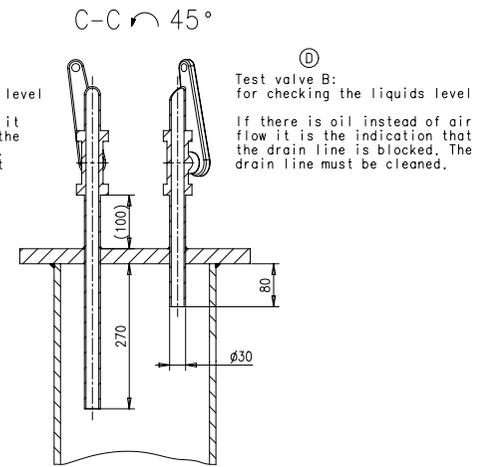
Remarks

- 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 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. During operation with iCER the SAC drain water amount is significantly increased. The bilge or appropriate separate tank needs to be sized accordingly.
- *5) Free flow venting outside of engine room.
- *6) Depends on turbocharger type, see table on the left side.
- *7) Vent pipe diameter as per turbocharger requirements.
- *8) Vent pipe diameter of common collection pipe.
- *9) Installed as required (check with the Pipe Connection Plan).
- *10) Drain connections 13 and 16 include air flow from scavenging air 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.
- *11) Optional, to be installed if requested by the flag state and/or class to achieve IGC compliance.
- (A) *12) Switching to the chemical washing water circulation tank must be carried out for SAC cleaning.
- (A) *13) Washing water is heated to between 50 and 60 °C by a heating coil.

- Compressed air pipes
- Air vent pipes
- Drain & overflow pipes
- Dirty oil drain pipes
- - - - - Washing water pipes
- ===== Pipes on engine
- Pipe connections



Test valve A:
for checking the solids level
If there is no oil flow it is the indication that the solid level is too high. The sludge oil trap must be cleaned.



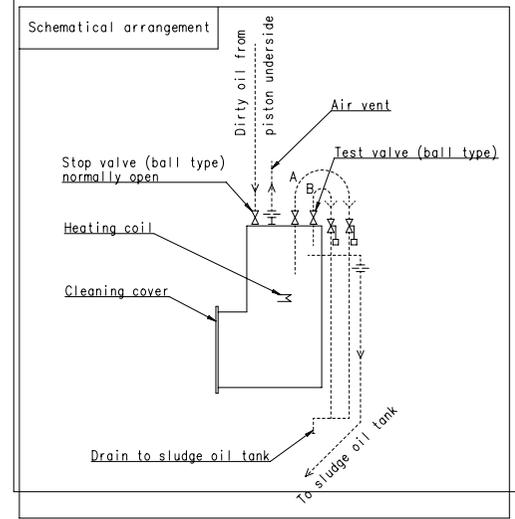
Test valve B:
for checking the liquids level
If there is oil instead of air flow it is the indication that the drain line is blocked. The drain line must be cleaned.

Remarks:

- *1) Orifice to be as shown
- *2) Observe location of pipes with regard to each other
- *3) Optional - Alternatives, such as level sensors, are possible

Details:

Cylinder bore size:	L = 1000	L = 550
Capacity:	55-96	35-54
Working pressure:	4 bar	
Testing pressure:	6 bar	
Temperature:	80°C	



Rev	Creator	Approver	Approval Date	Change ID	Change Synopsis	Appr. Code	Activity Code
1	WinGD	jba029	13.11.2009	-	-	-	-

WINGD Winterthur Gas & Diesel		SLUDGE OIL TRAP	
Scale	1:5	Units [mm] [kg]	Basic Material
Net Weight	0.001	Design Group	9724
Design	9724	Q-Code	XXXXX
Form ID	A1	Item ID	107.4.25.369.500
Sheet	1/1	Drawing Page	1/1

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

MIDS - LEAKAGE-COLLECTION_and_WASHING-SYSTEM (DG9724)
WinGD-X62DF-S1.0

TRACK CHANGES

DATE	SUBJECT	DESCRIPTION
2021-03-01	DRAWING SET	First web upload
2023-12-20	PAAD376118A	New revision

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