Available executions

Execution No.	Material ID
001	PAAD367810

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.

Prod.								
	X72DF X72DF-1.1	X72DF-1.2						

Change History

Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Activity Code	E	C
–	sde101				new Design			

WIN GD
Winterthur Gas & Diesel

LEAKAGE COLLECTION/WASHING SYS.

MIDS master drawing

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		A4	Item ID PTAA025083	Drawing Page/s	1/1

SEQ NO	QTY	Item ID	Item Name Dimension	Standard-ID	Basic Material	Net Weight
001	1	PAAD367808	LEAKAGE COLLECTION/WASHING SYS.			0.001

Prod.			
5,6,7,8 X72DF 5,6,7,8 X72DF-1.1	5,6 X72DF-1.2		

Change History

Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Activity Code	E	C
A	sde101	mhu019	23.11.2022	CNAA002695	Main Design/Drawing Introduced		-	-
-	sde101	mhu019	26.04.2021		-		-	-

Approved

WIN GD
Winterthur Gas & Diesel

LEAKAGE COLLECTION/WASHING SYS.

Bill Of Material

Dimension

Units	[m] [kg]	Basic Material						Net Weight	0
Main Design	Yes	Design Group		9724	Q-Code	XXXXX		Standard	WDS
Qty per	Engine	A4	Item ID	PAAD367810				BOM Page/s	01/01

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

Prod.								
	X72DF X72DF-1.1	X72DF-1.2						

Change History

Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Activity Code	E	C
A	npa101	mhu019	15.12.2023	CNAC04312	Drawing updated		4	3
-	sde101	mhu019	26.04.2021	EAAD787403	-		-	-

WIN GD
Winterthur Gas & Diesel

LEAKAGE COLLECTION/WASHING SYS.

SYSTEM DIAGRAM

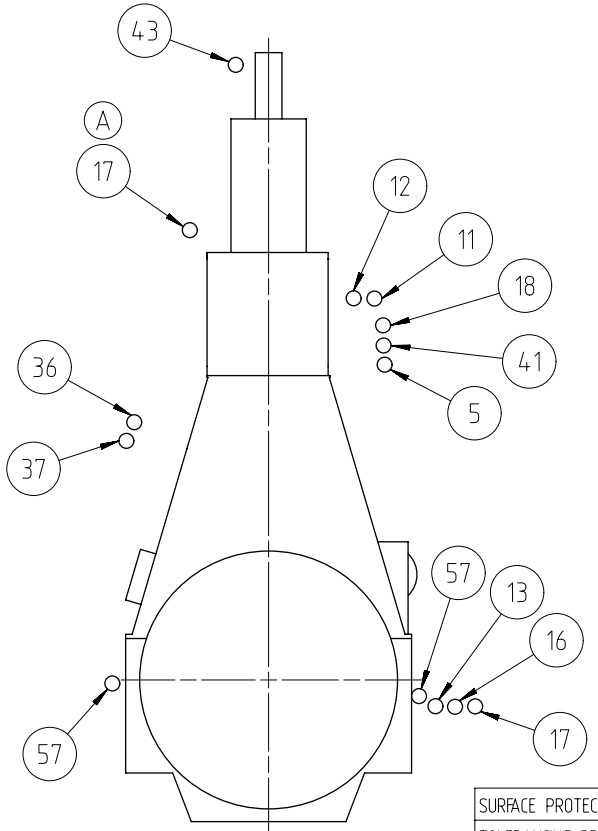
Bill Of Material

Dimension					
Units [m] [kg]	Basic Material			Net Weight	0.001
Main Design	Design Group	9724	Q-Code X X M	Standard	WDS
Qty per	A4	Item ID	PAAD367808	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 A	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: 0.75 m3
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 A	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
18	OUTLET - SAC venting - Free flow outside of engine room



Prod.: X72DF, X72DF-1.1, X72DF-1.2

Change History

Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Activity Code	E	C
A	npa101	mhu019	15.12.2023	CNAA00432	Drawing updated		4	3
-	sde101	mhu019	26.04.2021	EAAD787403	-		-	-

Approved

WIN GD 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 PAAD367808

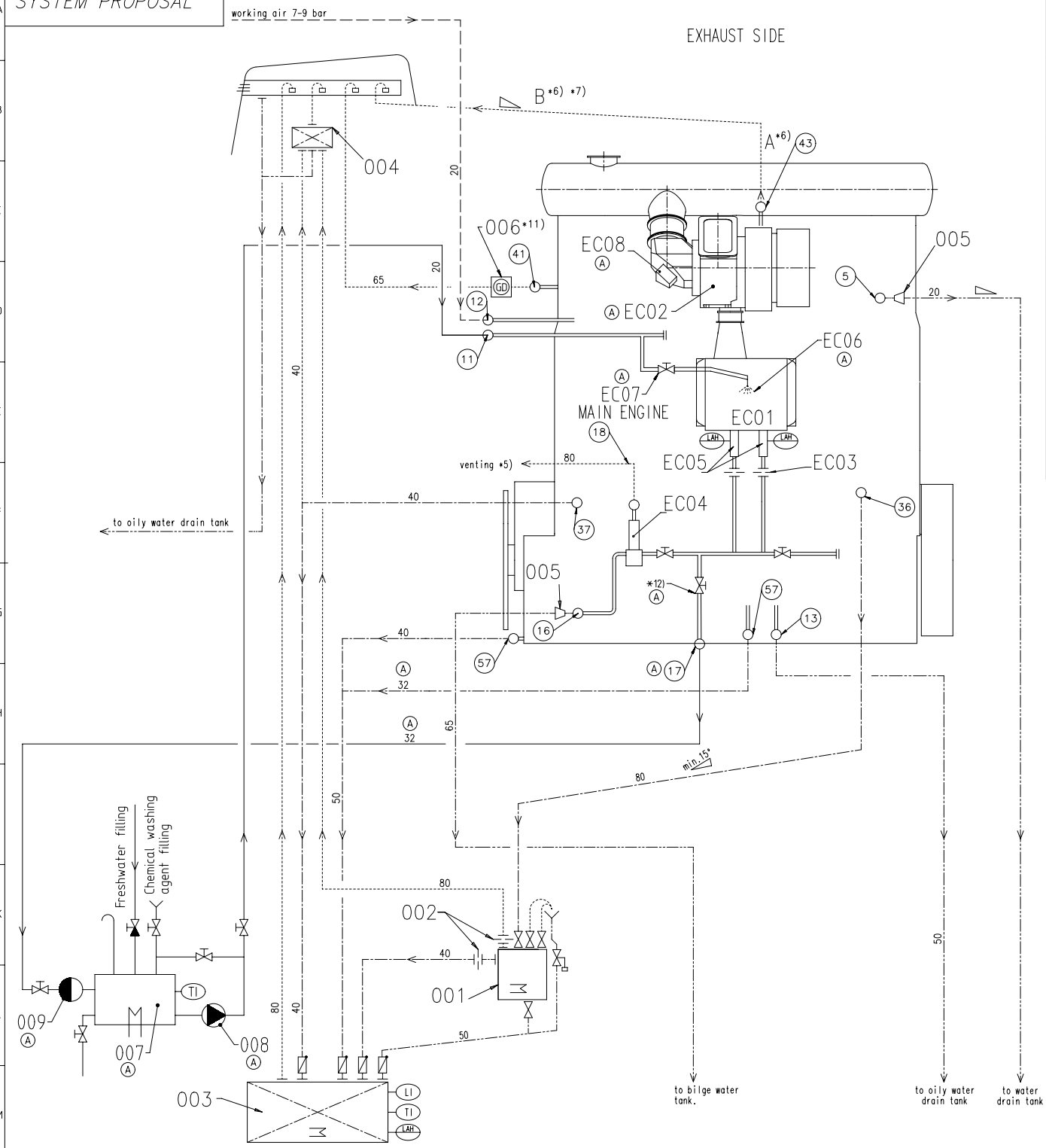
Drawing Page/s 1/2

SURFACE PROTECTION SEE GROUP 0344

TOLERANCING PRINCIPLE ISO8015

GENERAL TOLERANCES ACCORDING TO ISO2768-mK

SYSTEM PROPOSAL



Turbocharger type	A *7)	B *8)	Min. Inclination
1x A165	65	65	>5°
1x A265	65	65	>5°
1x A170	65	65	>5°
1x A270	65	65	>5°
1x A175	65	65	>5°
1x A275	65	65	>5°
1x A180	80	80	>5°
1x A280	80	80	>5°
1x A185	80	80	>5°
1x A285	80	80	>5°
2x A165	65	80	>5°
2x A170	65	90	>5°
2x A175	65	100	>5°
2x A180	80	100	>5°
2x A185	80	125	>5°
2x A190	80	125	>5°
1x MET53MB	65	65	>3°
1x MET60MB	80	80	>3°
1x MET66MB	80	80	>3°
1x MET71MB	80	80	>3°
1x MET83MB	100	100	>3°
2x MET53MB	65	80	>3°
2x MET60MB	80	100	>3°
2x MET66MB	80	100	>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 approriate 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)
A EC01	Scavenge air cooler (SAC)
A EC02	Turbocharger (TC)
EC03	Throttling disc
EC04	Venting Unit
EC05	Condensate drain unit
A EC06	SAC washing spray nozzle
A EC07	SAC washing 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. 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) 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, 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.

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

Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Activity Code
A	npa101	mhu019	15.12.2023	CNAD0432	Drawing updated	4 3

Approved

[mm] [kg]	-	NX	A1	Item ID	PAAD367808	Drawing Pages	2/2

Remarks:

*1) Orifice to be as shown

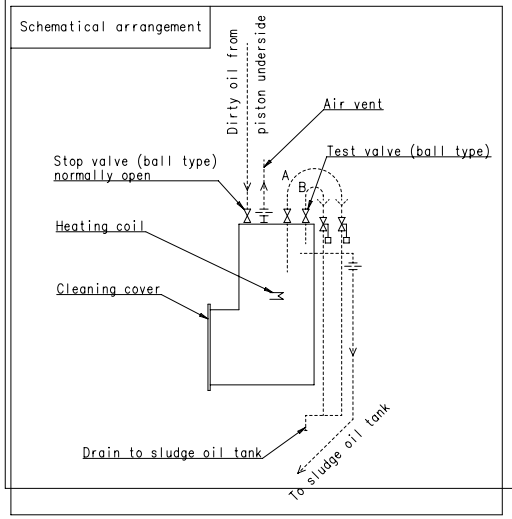
*2) Observe location of pipes with regard to each other

*3) Optional - Alternatives, such as level sensors, are possible

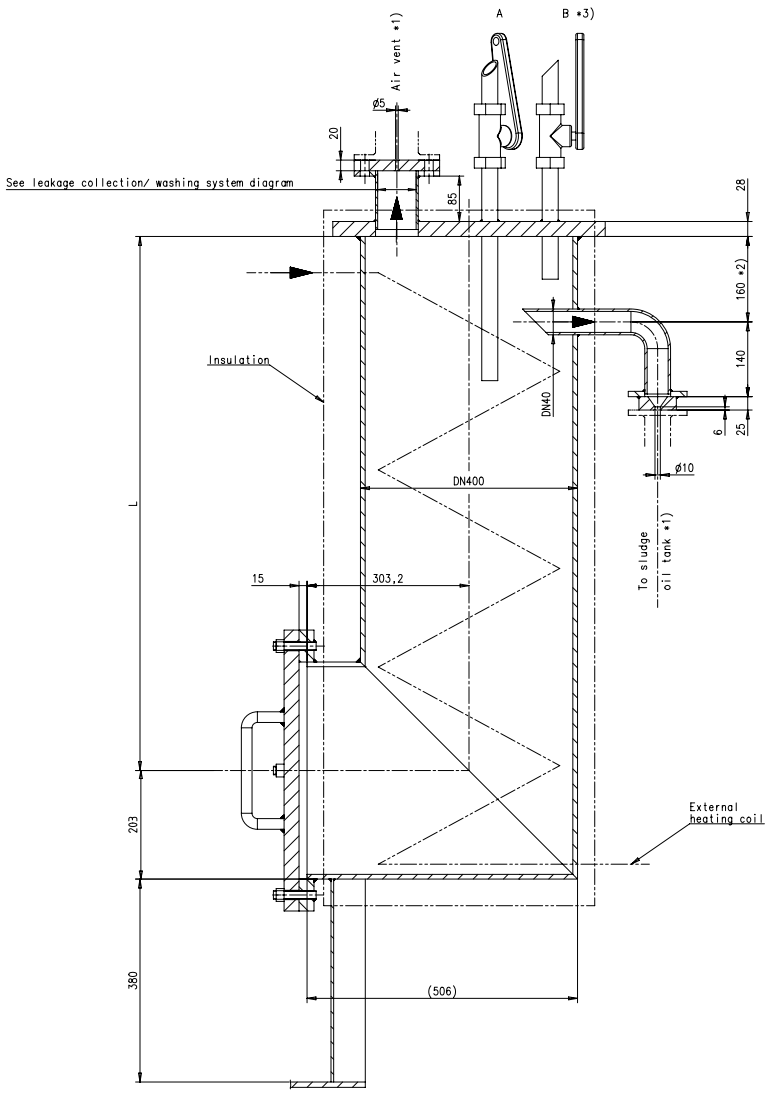
Details:

	L = 1000	L = 550
Cylinder bore size:	55-96	35-54
Capacity:	150 l	100 l
Working pressure:	4 bar	
Testing pressure:	6 bar	
Temperatur:	80°C	

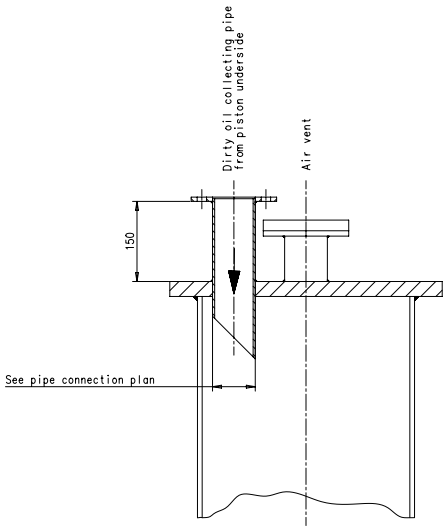
Schematical arrangement

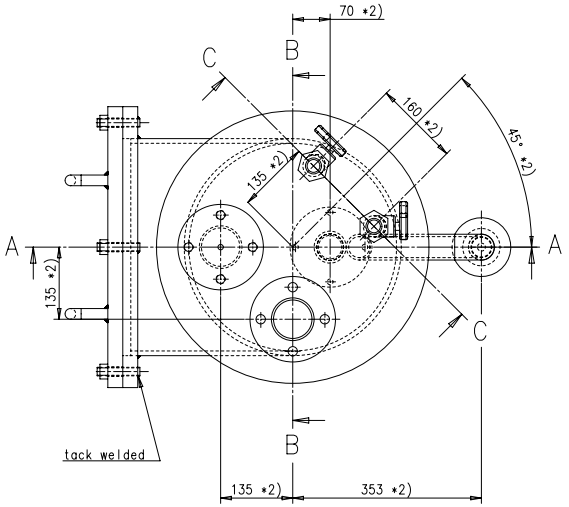


A-A



B-B 90°

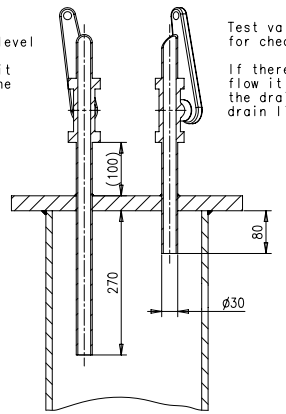




C-C 45°

Ⓓ
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.

Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Activity Code	E	C
D	sde101	mhu019	19.012022	CNAA001373	drawing updated		4	3
C	sde101	mhu019	10.09.2018	EAAD089439	Legacy information. See corresponding ChangeNotice		4	-
B	dki021	mhu019	14.07.2017	EAAD087849	Legacy information. See corresponding ChangeNotice		4	-
-	WinGD	jba029	13.11.2009		-		-	-

Approved

Func: CX40DF RT-flex48T-D | RT-flex50-D RT-flex58T-D | RT-flex58T-D V1 RT-flex58T-D V2 | RT-flex58T-E RT-flex68-D | RT-flex68-D_L RT-flex82C | RT-flex82T RTA68-D | CR-HHM-PILOT X35 | X35-B [...]

WINGD Winterthur Gas & Diesel

SLUDGE OIL TRAP

Dimension

Scale 1:5 | NX | Units [mm] [kg] | Basic Material | Net Weight 0.001

SURFACE PROTECTION SEE GROUP 0344

TOLERANCING PRINCIPLE ISO8015

GENERAL TOLERANCES ACCORDING TO ISO2768-mK

Main Design | Design Group 9724 | Q-Code XXXXX | Standard WDS

Qty per | A1 | Item ID 107.425.369.500 | Drawing Page/s 1/1

MIDS - LEAKAGE-COLLECTION and WASHING-SYSTEM (DG9724)
WinGD-X72DF/1.1/1.2

TRACK CHANGES

DATE	SUBJECT	DESCRIPTION
2021-05-04	DRAWING SET	First web upload
2023-12-20	PAAD367808A	New revision

DISCLAIMER

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