

Available executions

Execution No.	Material ID	Attribute 1: Emission class (Tier)			
		Tier II without SCR	Tier III HP-SCR on-engine	Tier III HP-SCR off-engine	Tier III LP-SCR off-engine
001	PAAD379323	X		X	X
002	PAAD379324		X		

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.	X52-S2.0										
Change History											
	-	sna102	mhu019	24.05.2023	CNAA003753	new Design		-	-		
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Approved	Activity Code	E C		
 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		
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				Qty per		A4	Item ID	PTAA025642		Drawing Page/s	1/1

SEQ NO	QTY	Item ID	Item Name	Dimension	Standard-ID	Basic Material	Net Weight					
001	1	PAAD379264	LEAKAGE COLLECTION/WASHING SYS.				0.001					
Prod.	5,6,7,8 X52-S2.0											
Change History												
	-	dki021	mhu019	26.04.2021	EAAD787404	-	-					
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Activity Code	E C				
<div>WIN GD Winterthur Gas &amp; Diesel</div>			LEAKAGE COLLECTION/WASHING SYS. PAAD294071									
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	PAAD379323		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.	X52-S2.0						
Change History							
	B	sjo101	dst 009	20.10.2023	CNAA004293	Drawing updated	4 3
	A	npa101	mhu019	06.04.2023	CNAA003513	Drawing Updated	4 3
	-	dki021	mhu019	26.04.2021	EAAD787404	-	- -
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Approved Activity Code E C
<div>WIN GD</div> <div>Winterthur Gas &amp; Diesel</div>				LEAKAGE COLLECTION/WASHING SYS.			
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 PAAD379264	BOM Page/s 01/01





SEQ NO	QTY	Item ID	Item Name	Dimension	Standard-ID	Basic Material	Net Weight					
2	1	PAAD379278	LEAKAGE COLLECTION/WASHING SYS.				0.001					
Prod.	5,6,7,8 X52-S2.0											
Change History												
	-	dki021	mhu019	26.04.2021	EAAD787404	-	-					
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Activity Code	E	C			
<div>WIN GD</div> <div>Winterthur Gas &amp; Diesel</div>			LEAKAGE COLLECTION/WASHING SYS. PAAD379324									
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		PAAD379324		BOM Page/s	01/01

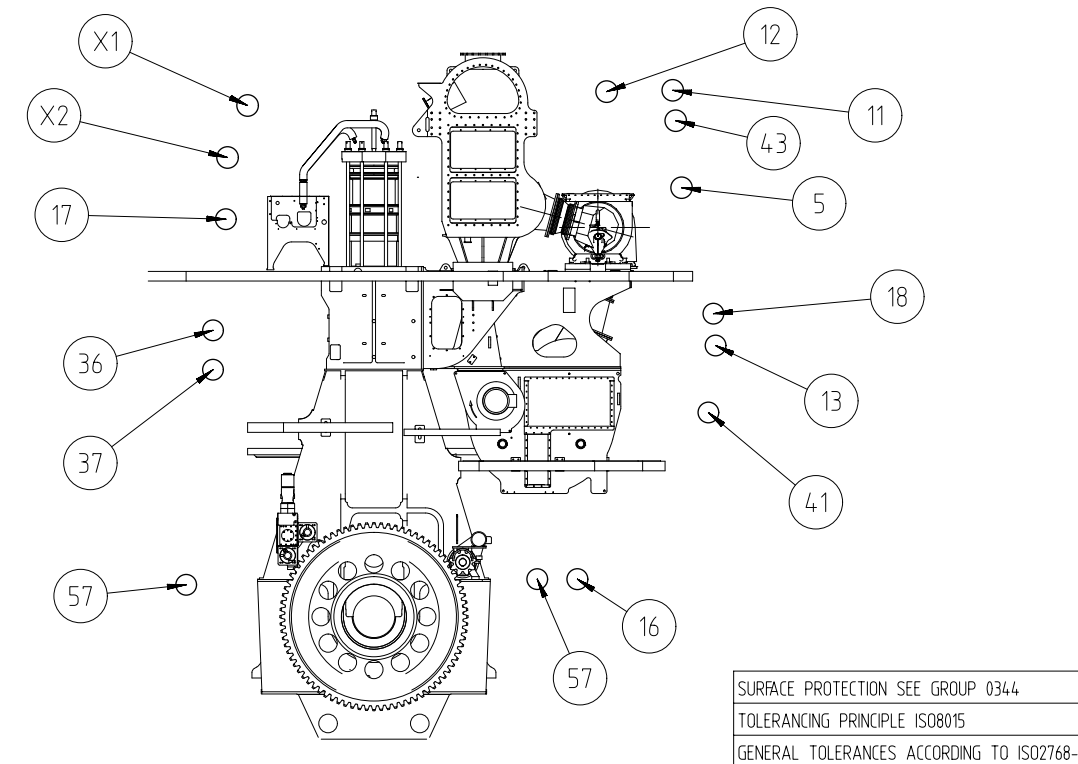
SEQ NO	QTY	Item ID	Item Name	Dimension	Standard-ID	Basic Material	Net Weight
001	1	107.425.369.500	SLUDGE OIL TRAP				0.001
Prod.	X52-S2.0						
Change History							
	A	npa101	mhu019	06.04.2023	CNAA003513	Drawing Updated	4 3
	-	dki021	mhu019	26.04.2021	EAAD787404	-	- -
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Approved Activity Code E C
<div>WIN GD</div> <div>Winterthur Gas &amp; Diesel</div>				LEAKAGE COLLECTION/WASHING SYS.			
Bill Of Material				Dimension			
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				Main Design		Design Group 9724 Q-Code XXXXX	Standard WDS
				Qty per	A4	Item ID PAAD379264	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.	X52-S2.0									
Change History										
	A	npa101	dst 009	20.10.2023	CNAA004293	Drawing Updated			4 3	
	-	dki021	mhu019	26.04.2021	EAAD787404	-			- -	
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Approved	Activity Code	E C	
<div>WIN GD</div> <div>Winterthur Gas &amp; Diesel</div>				LEAKAGE COLLECTION/WASHING SYS. with iSCR						
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 PAAD379278	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 crank case - 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
X1	INLET - SCR freshwater supply - Freshwater, supply pressure: 0.2 -1.5 bar
X2	OUTLET - SCR water drain - Gravity flow to sewage tank or an appropriate tank



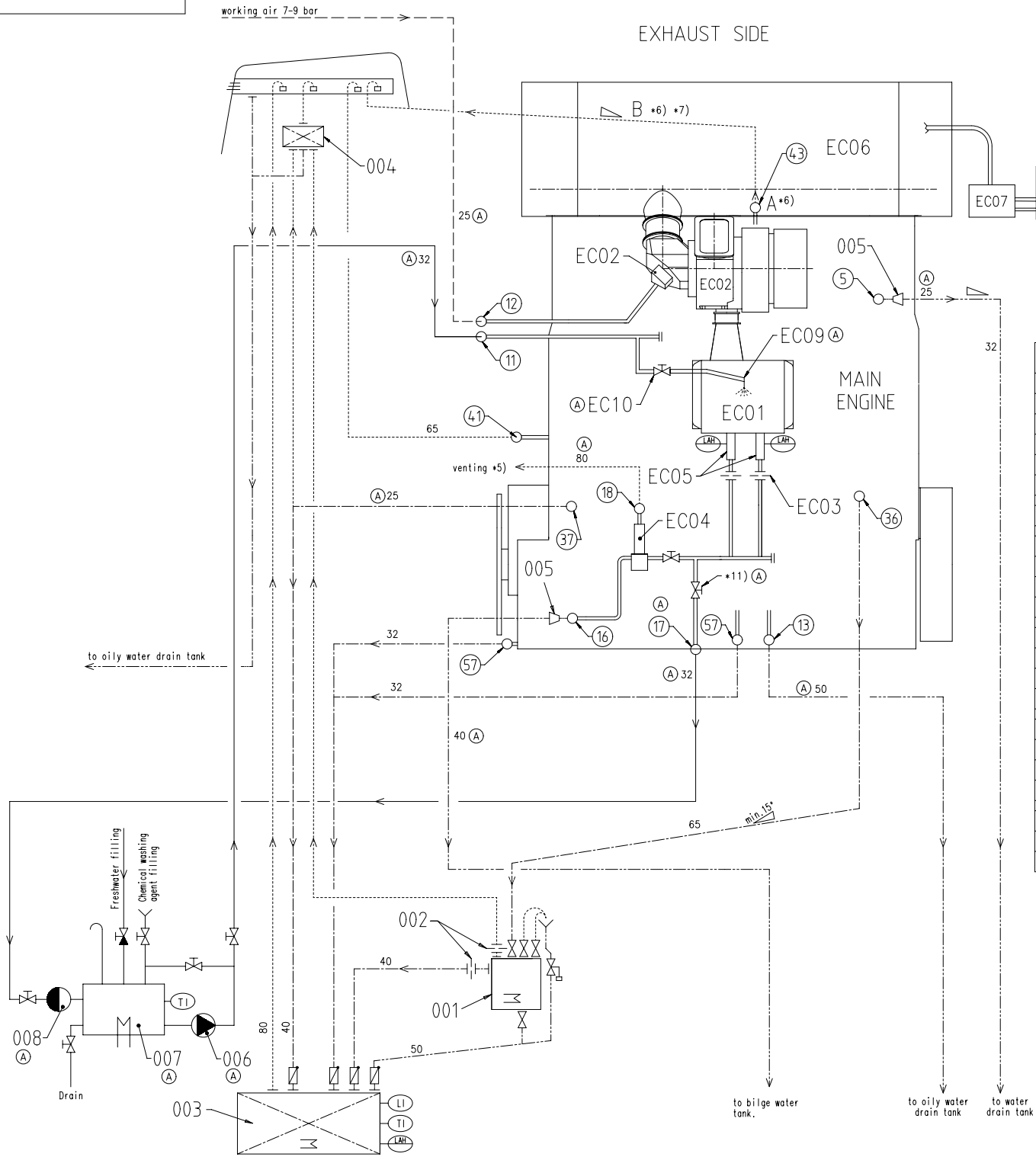
5	OUTLET - Cylinder cooling water drain. - Gravity flow to cooling water drain tank or appropriate tank
11	INLET - SAC washing water - Only in use if an optional SAC washing system is installed on the ship side. Otherwise blinded with a blind flange. - Washing water properties: Fresh water mixed with a chemical washing agent Mixing ratio according to chemical washing agent suppliers specification - Washing water supply pressure: 2.5 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
12	INLET - Air for TC 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
18	OUTLET - SAC venting - Free flow outside of engine room

Prod.	X52-S2.0													
Change History														
	A	npd101	dst009	20.10.2023	CNA004293	Drawing Updated					4	3		
	-	dkl021	mhu019	26.04.2021	EAAD787404	-					-	-		
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis					Approved	Activity Code	E	C
<div><div><div>WIN GD</div><div>Winterthur Gas &amp; Diesel</div></div></div>					LEAKAGE COLLECTION/WASHING SYS. with iSCR									
separate BOM available					Dimension									
Scale		-		NX	Units [mm] [kg]		Basic Material				Net Weight		0.00	
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Qty per		A3		Item ID	PAAD379278				Drawing Page/s		1/2			

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

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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 A260-L	65	65	≥ 5°
1x A265-L	65	65	≥ 5°
1x A270-L	65	65	≥ 5°
2x A165-L	65	80	≥ 5°
1x MET42MB	50	50	≥ 3°
1x MET48MB	65	65	≥ 3°
1x MET53MB	65	65	≥ 3°
1x MET60MB	80	80	≥ 3°
2x MET33MB	40	50	≥ 3°
2x MET37MB	50	65	≥ 3°
2x MET42MB	50	65	≥ 3°
2x MET48MB	65	80	≥ 3°
1x MET33MBII	40	50	≥ 3°
1x MET42MBII	50	50	≥ 3°
1x MET48MBII	65	65	≥ 3°
1x MET53MBII	65	65	≥ 3°
2x MET33MBII	40	50	≥ 3°
2x MET37MBII	50	65	≥ 3°
2x MET42MBII	50	65	≥ 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

Chemical washing water circulation tank \*12)

007

Chemical washing water circulation pump

008

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 TC cleaning

13

OUTLET - Oily water from scavenge air receiver \*10)

16

OUTLET - SAC condensate water \*4) \*10)

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

X1

INLET - SCR freshwater supply

X2

OUTLET - SCR water drain

Pos.

ENGINE COMPONENTS \*3)

EC01

Scavenge Air Cooler (SAC)

EC02

Turbo Charger (TC)

EC03

Throttling disc

EC04

Venting Unit

EC05

Condensate drain unit

EC06

SCR reactor

EC07

Urea dosing unit

EC08

Urea pump unit

EC09

SAC washing water spray nozzle

EC10

SAC washing water isolating valve

EC11

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 TC 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 connection 13 and 16 are with 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) Switching to the separate chemical washing water circulation tank must be carried out for SAC cleaning.

\*12) Washing water is heated to between 50 and 60 °C by a heating coil.

Change

A

ppa001

04.09.20

20.10.2023

0MA004293

Drawing Updated

Activity Code

4

3

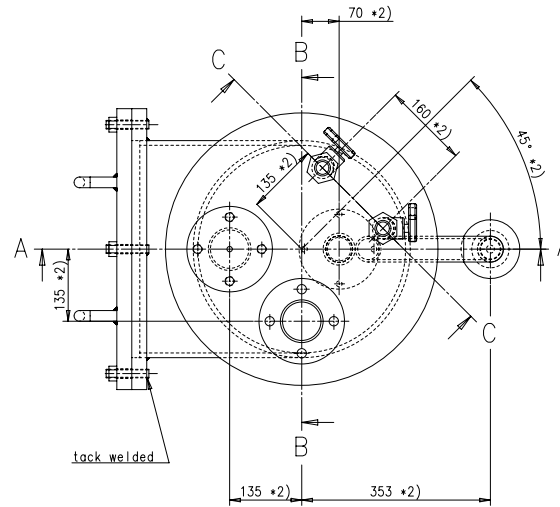
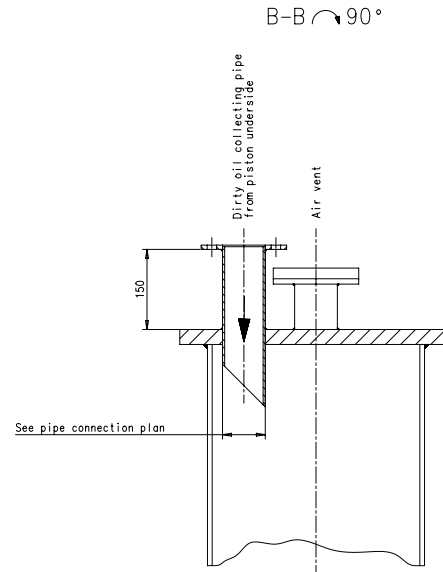
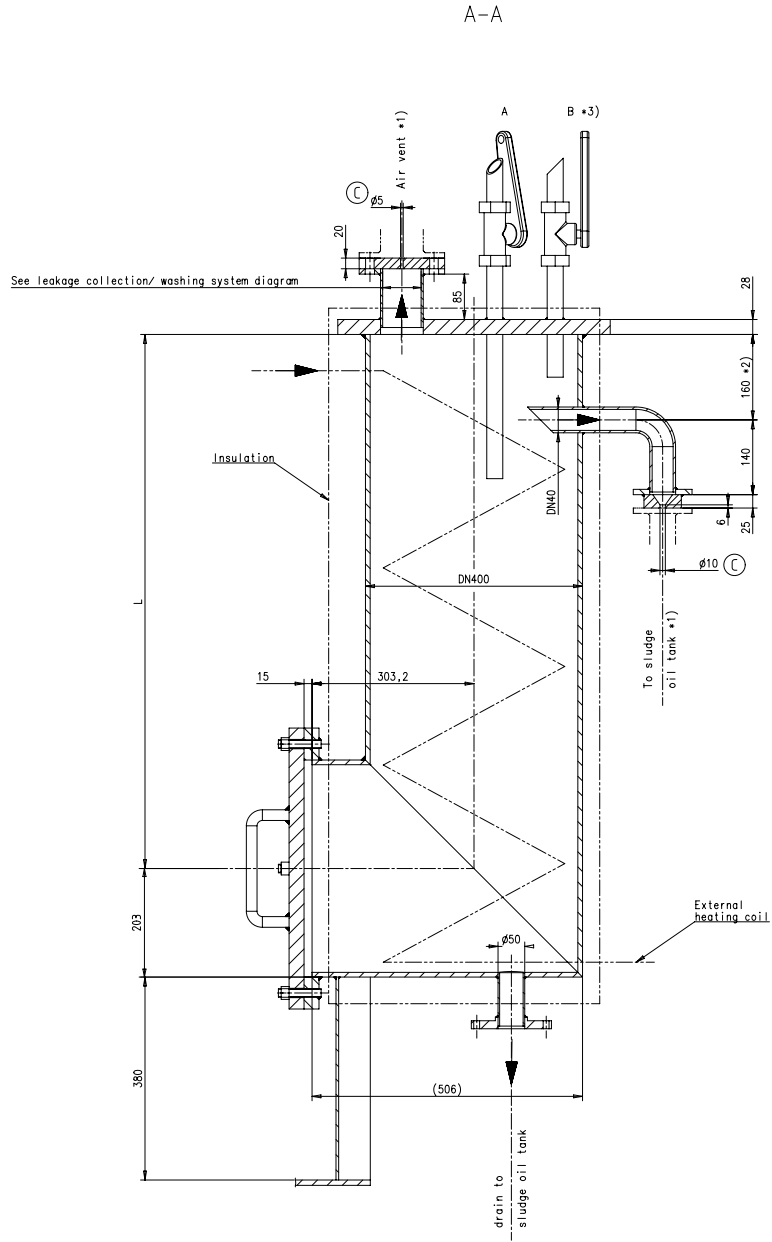
SURFACE PROTECTION SEE GROUP 0344

TOLERANCING PRINCIPLE ISO8015

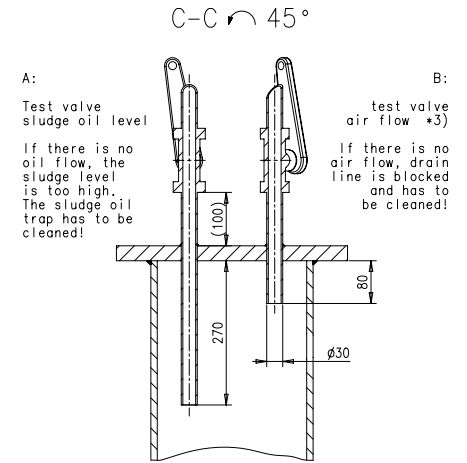
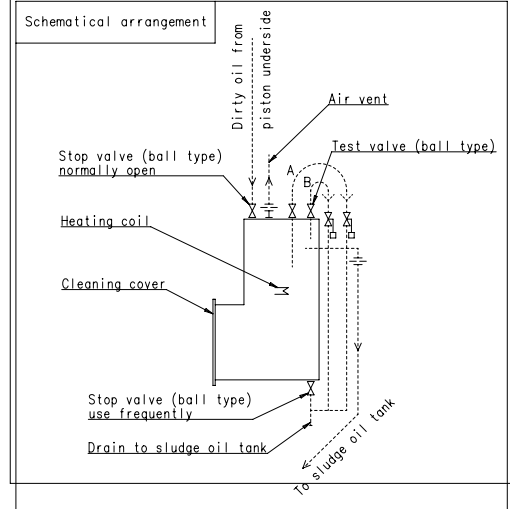
GENERAL TOLERANCES ACCORDING TO ISO2768-MK

PAAD379278

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



Model: A		B		C		D		E		F		G		H		I		J		K		L		M	
Number		Drawn date		Number		Drawn date		Number		Drawn date		Number		Drawn date		Number		Drawn date		Number		Drawn date		Number	
122.01.2013		14.07.2017		12.07.2018																					
EAAD084051		EAAD087849		EAAD089439																					
G-Code		XXXXXX		Standard		ISO, JIS		Main		Drw.															
Product		W-25		SLUDGE OIL TRAP																					
Units		mm kg		NX		Basic Material		Scale		1:5		Size		A1		Page		1/1		Material		107.425.369.500		Net Weight	
SURFACE PROTECTION		SEE GROUP 0344		Made		31.08.2009		J.BAUMANN		Scale		1:5		Size		A1		Page		1/1		Material		107.425.369.500	
TOLERANCING PRINCIPLE		ISO8015		Chd																					
GENERAL TOLERANCES		ACCORDING TO ISO2768-mK		Appd		13.11.2009		JBA020		Baumann		9724		Design Group											

## MIDS – Leakage Collection & Washing System (DG9724)

WinGD X52-S2.0

### TRACK CHANGES

DATE	SUBJECT	DESCRIPTION
2021-05-10	DRAWING SET	First web upload
2023-04-06	PAAD379264-A	New drg. revision
2023-05-25	PAAD379323 PAAD379324	New drg. revisions
2023-10-20	PAAD379264 PAAD379278	New drg. revisions

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