Quantity	SEQ NO	Material ID	Material Name	Dimension/Occ.Dimension	Standard or Drawing	Basic Material Material Standard	Weight GR./NET
Net Weight 0.002							
1	002	107.425.369.500	SLUDGE OIL TRAP		107.425.369		0.001
1	001	107.340.951.500	LEAKAGE COLLECTION/WASHING SYS.		107.340.951		0.001

PER ENGINE

Material ID 107.340.953.200

Free space for lic.

Q-Code XXXXX

Standard ISO JIS

Main Drw. H

Modif.	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date
A	7-77.597	16.11.2009	B EAAD084882	31.10.2013				

WÄRTSILÄ

Product
5-8RT-flex50
5-8RT-flex50-B
5-8RT-flex50-D
5-8RT-flex50DF

LEAKAGE COLLECTION/WASHING SYS.

Units mm kg | IDE | Basic Material | Net Weight

SURFACE PROTECTION SEE GROUP 0344

TOLERANCING PRINCIPLE ISO8015

GENERAL TOLERANCES ACCORDING TO ISO2768-mK

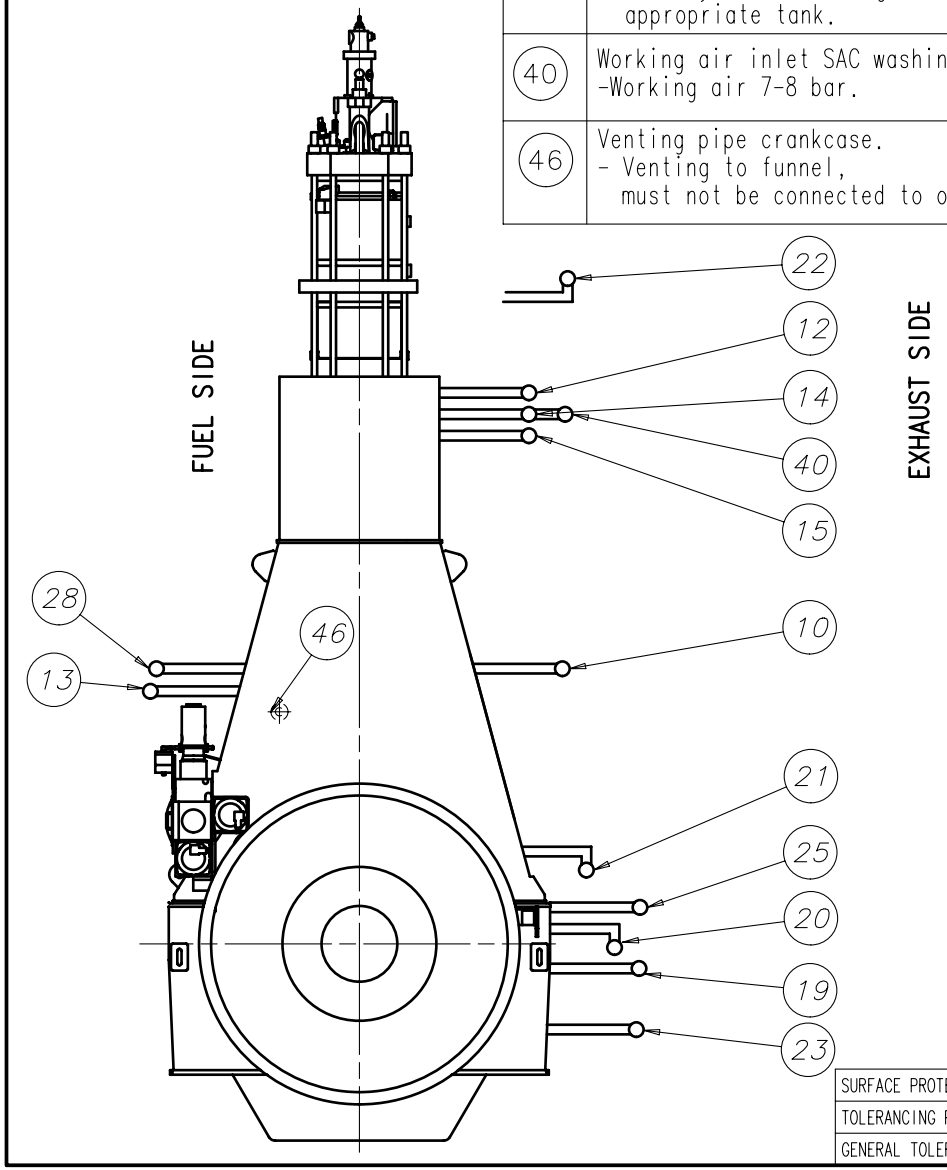
Made	25.03.2004 S.Natali	Scale –	Size A3	Page 1/1	Material ID
Chkd		Design Group 9724	Drawing ID 107.340.953		Rev. B
Appd	26.07.2004 sna001 Natali				

Approved

ASD - ASSEMBLY DRAWING - Internal

RT-flex50
RT-flex50DF

DRIVING END



25	Leakage oil from piston underside - Flow with SAC pressure to sludge oil trap or appropriate arrangement. - Min. inclination of drain pipe 60%.
28	Dirty oil from piston rod stuffing box (on fuel side) - Gravity flow to sludge or appropriate tank.
40	Working air inlet SAC washing plant -Working air 7-8 bar.
46	Venting pipe crankcase. - Venting to funnel, must not be connected to other venting pipes.

Specifications that need to be met:

10	SAC venting -free flow venting.
12	Cooling water drain pipe - Gravity flow to cooling water drain or appropriate tank.
13	SAC cooling water drain - Gravity flow to cooling water drain or appropriate tank.
14	Washing water inlet TC/SAC - From fresh water hydrophore system, min >2 bar for TPL TC. application
15	TC washing water, outlet - Gravity flow to bilge water or appropriate tank.
19	Condensate water from water separator and SAC - Gravity flow to bilge water or appropriate tank.
20	Washing water outlet from SAC - Gravity flow to bilge water or appropriate tank.
21	Collector main oil water water separator - Gravity flow to oily water drain or appropriate tank.
22	Oil system TC, venting - Venting to funnel, minimum inclination according to TC maker's spec. must not be connected to other venting pipes.
23	Common dirty oil drain from engine - Gravity flow to sludge or appropriate tank.

Free space for lic.

Q-Code XXXXX

Standard ISO JIS

Main Drw.

Modif.	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date
E	7-79.341	09.03.2010	F EAAD084349	14.12.2012	G EAAD084882	15.10.2013	H EAAD086378	26.01.2016

WIN GD Winterthur Gas & Diesel

Product W-2S

LEAKAGE COLLECTION/WASHING SYS.

Units mm kg | IDE

Basic Material

Net Weight 0.001

SURFACE PROTECTION SEE GROUP 0344

TOLERANCING PRINCIPLE ISO8015

GENERAL TOLERANCES ACCORDING TO ISO2768-mK

Made 25.03.2004 S. NATALI

Chkd

Appd 31.07.2007 sna001 Natali

Scale –

Design Group 9724

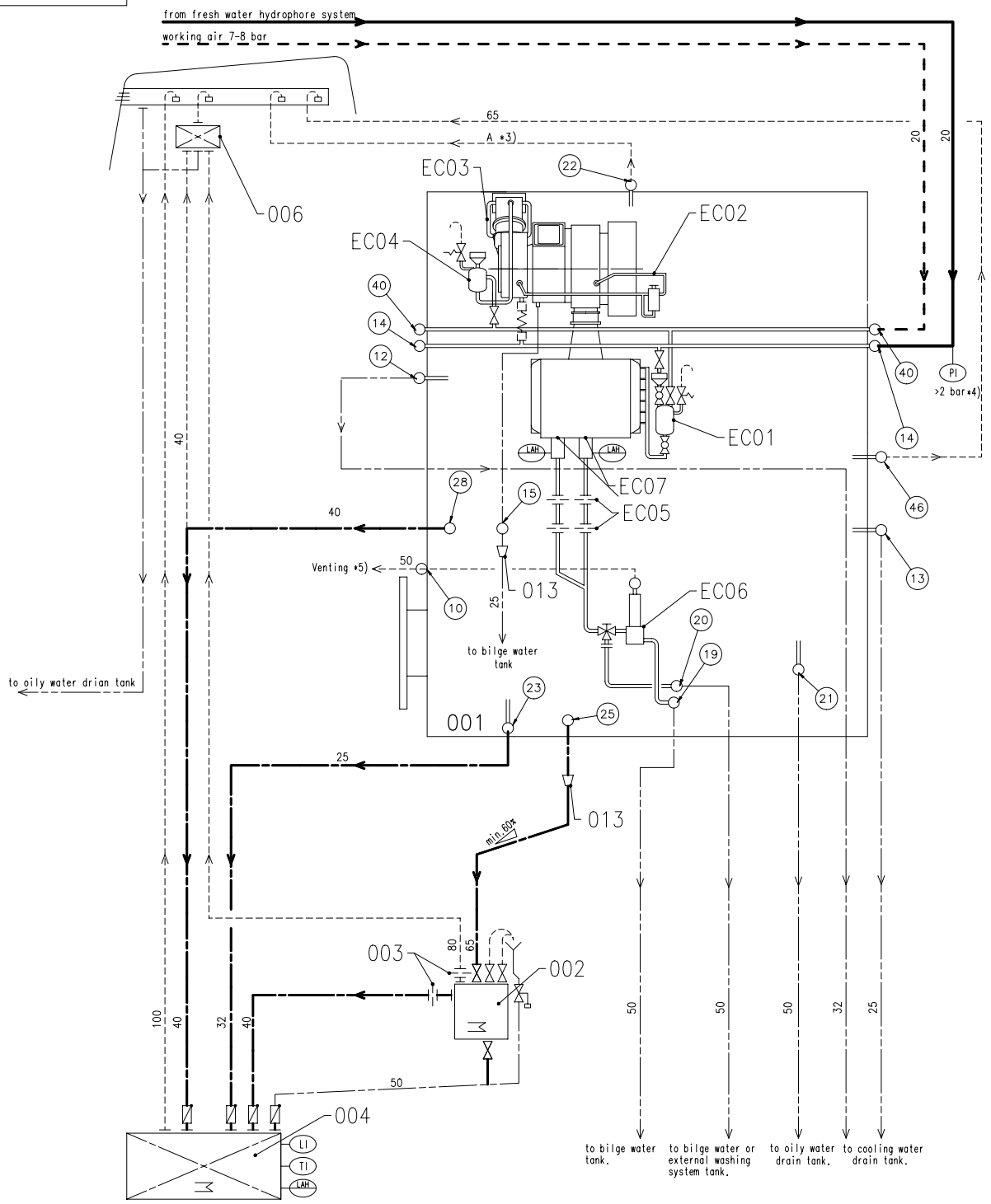
Size A3 | Page 1/2 | Material ID 107.340.951.500

Drawing ID 107.340.951 | Rev. H

Approved

DID - DIMENSIONAL DRAWING - Confidential

SYSTEM PROPOSAL



TC type	A	Inclination
2x TPL 73	*80*	*>5°*
1x TPL 77	*65*	*>5°*
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	*60*	*>5°*
Ⓗ *1x A165*	*65*	*>5°*

Pos.	Description
001	Main engine (R1-Rating)
002	Sludge oil trap,
003	Throttling disc, according to separate drawing
004	Sludge or appropriate tank
006	Air vent manifold
013	Reduction piece *7)
(10)	SAC venting
(12)	SAC cooling water drain
(13)	Venting/drain SAC
(14)	Water/air pipe cleaning plant
(15)	TC washing water, outlet *6)
(19)	Condensate water from water separator and SAC *2)
(20)	Washing water outlet from SAC
(21)	Collector main oilwater water separator
(22)	Oil system TC, venting
(23)	Common dirty oil drain from engine
(25)	Leakage oil from piston underside
(28)	Dirty oil from piston rod stuffing box (on fuel side)
(40)	Working air inlet SAC washing plant
(46)	Venting pipe crankcase

Remarks:

*1) One unit per turbocharger

*2) The amount of condense water drained off after SAC depends on the relative air humidity and on the scavenge air temperature before and after SAC. Under extreme ambient conditions a maximum condensate quantity of up to 0.16 kg/kWh may be produced.

*3) According to TC see table: TC type

*4) Pressure indicator only required for TPL TC.

*5) Free flow venting outside of engine room.

*6) Not used for Mitsubishi MET and A Turbocharger

*7) Installed as required (check with the pipe connection plan)

- Air vent and drain pipes must be fully functional at all inclination angles of the ship at which the engine must be operational.

- For "◯" marked positions please refer to the pipe connection drawings.

- For info:
  Engine equipped with following
  leakage collect./ washing system components.

  EC01 Scavenge air cooler washing plant
  EC02 Turbocharger compressor wheel washing plant *1)
  EC03 Turbocharger turbine washing plant *1)
  EC04 Turbocharger turbine dry cleaning plant (optional) *1)
  EC05 Throttling disc
  EC06 Venting unit
  EC07 Condensate Collector

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

Modif.	Number	Drawn date	Number	Drawn date	Number	Drawn date	Number	Drawn date
E	7-79.341	09.03.2010	F EAAD084349	14.12.2012	G EAAD084882	15.10.2013	H EAAD086378	26.01.2016

Free space for Lic.

Q-Code XXXXX
Standard ISO JIS
Main Drw.
Approved

WIN GD Winterthur Gas & Diesel

Product W-2S

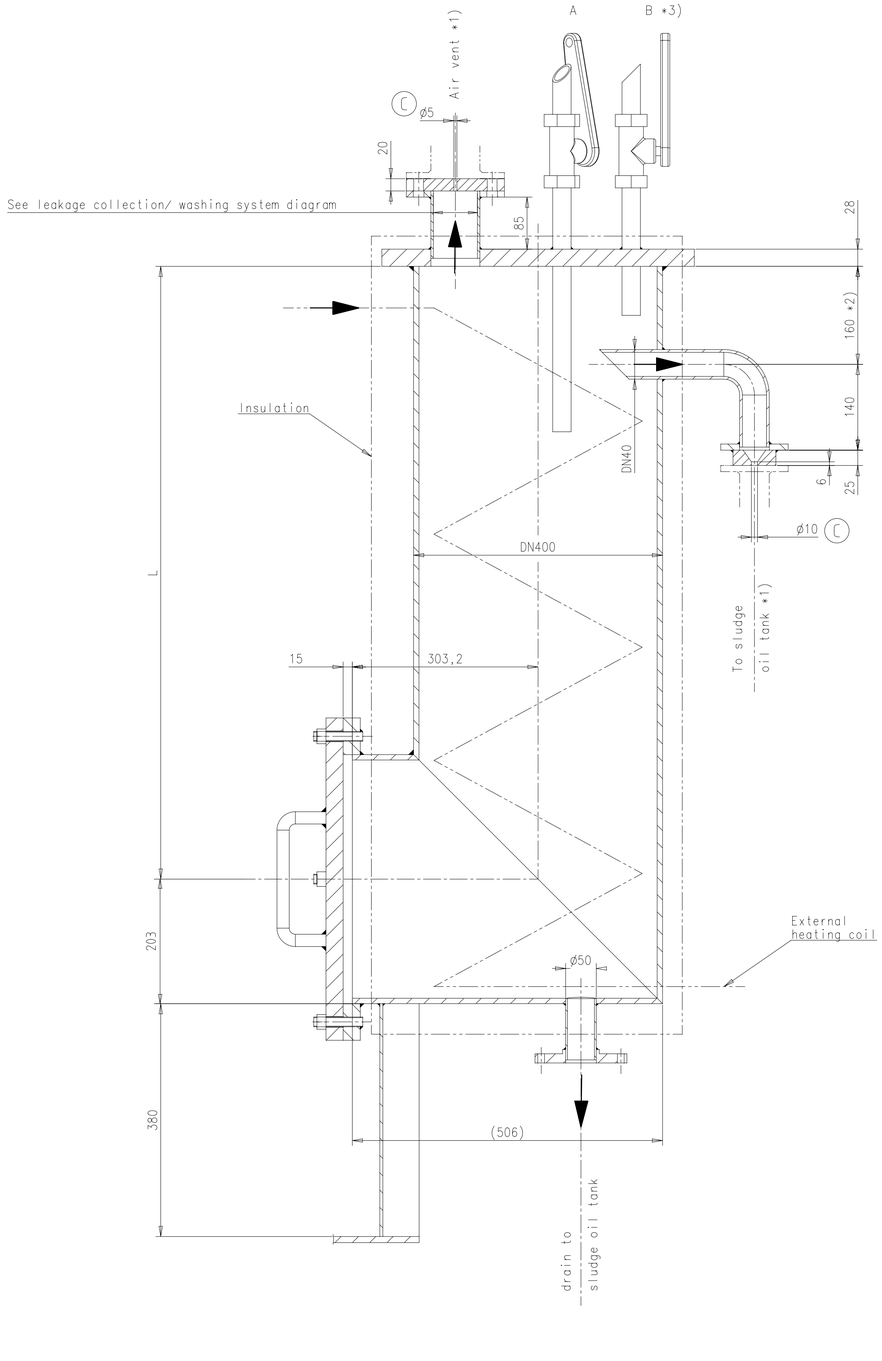
LEAKAGE COLLECTION/WASHING SYS.

Units	mm kg	IDE	Basic Material	Net Weight 0.001
Mode	25.03.2004 S. NATALI		Scale –	Size A1
Chkd			Design Group 9724	Page 2/2
Appd	31.07.2007 snaO01 Natali			Material ID 107.340.951.500
				Drawing ID 107.340.951 Rev. H

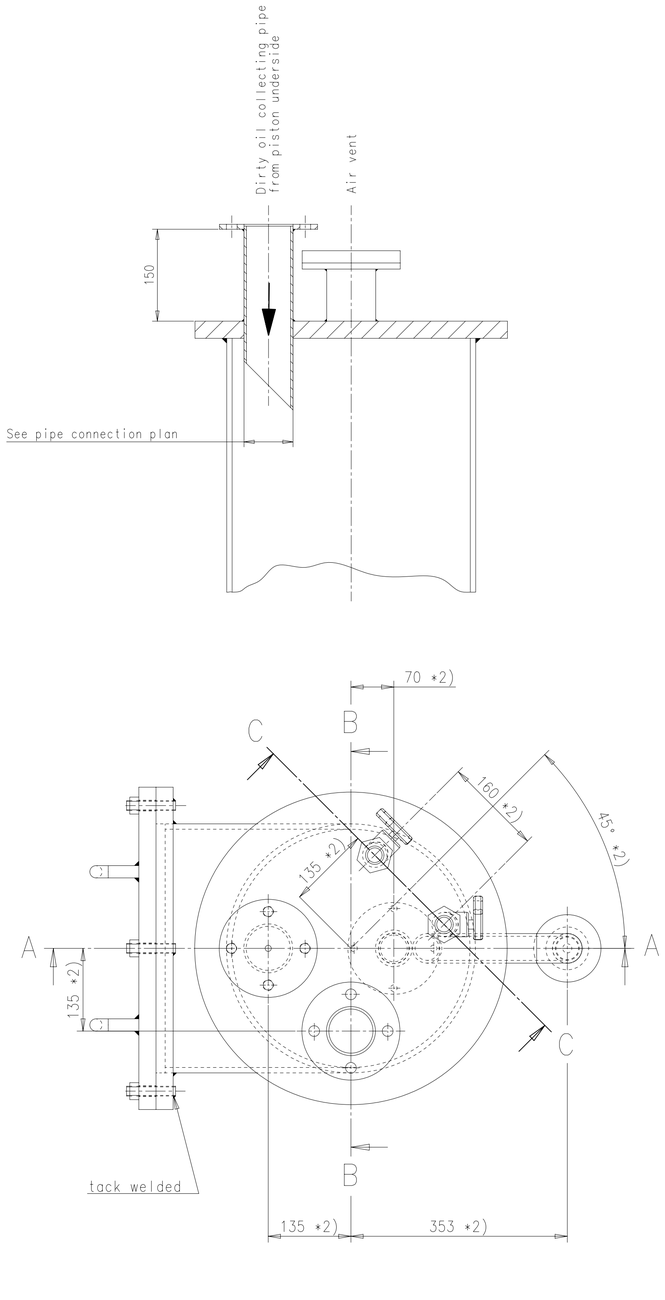
SURFACE PROTECTION SEE GROUP 0344
TOLERANCING PRINCIPLE ISO8015
GENERAL TOLERANCES ACCORDING TO ISO2768-mK

DRAWING - Confidential

A-A



B-B 90°



Remarks:

*1) Orifice to be as shown

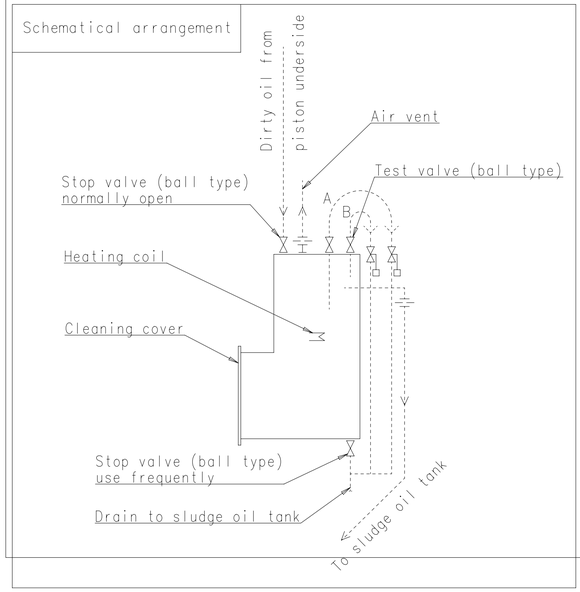
*2) Observe location of pipes with regard to each other

*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



C-C 45°

A:

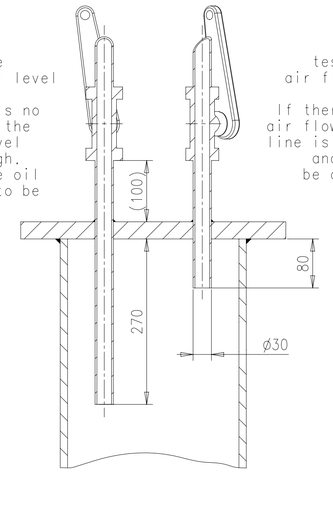
Test valve sludge oil level

If there is no oil flow, the sludge level is too high. The sludge oil trap has to be cleaned!

B:

test valve air flow *3)

If there is no air flow, drain line is blocked and has to be cleaned!



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Free space for lic.									Q-Code XXXXX	Main Drw.
									Standard ISO; JIS	
Modif.	A	EAAD084051	22.01.2013	B	EAAD087849	14.07.2017	C	EAAD089439	12.07.2018	
	Number		Drawn date	Number		Drawn date	Number		Drawn date	Number / Drawn date

WIN GD Winterthur Gas & Diesel

Product W-2S

SLUDGE OIL TRAP

Units	mm kg	NX	Basic Material	Net Weight 0.001

SURFACE PROTECTION SEE GROUP 0344	Made	31.08.2009 J.BAUMANN	Scale 1:5	Size A1	Page 1/1	Material ID 107.425.369.500
TOLERANCING PRINCIPLE ISO8015	Chkd		Design Group 9724	Drawing ID 107.425.369		Rev. C
GENERAL TOLERANCES ACCORDING TO ISO2768-mK	Appd	13.11.2009 JBA029 Baumann				

DD - DIMENSIONAL DRAWING - Confidential

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

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