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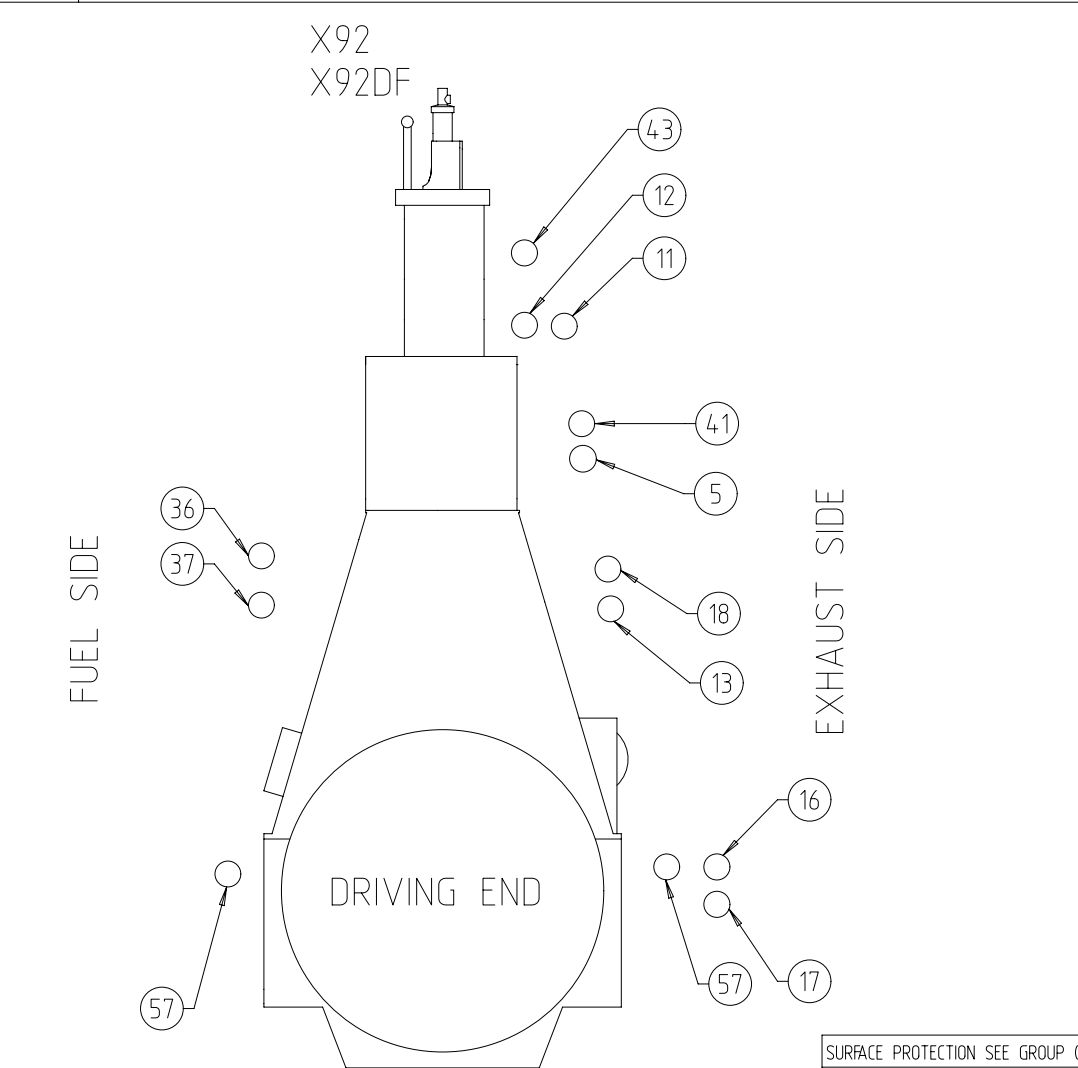
| | | | | | | | | | | | | | | | | |
|---|--------|---------------------|-------------|---|-------------------|----------------|--------------|---------------------------------|----------------------------------|---------------------------------|----------------|------------|--------------|--------|-------------|---|
| Net Weight | | 0,001 | | 1 | | 001 | | PAAD119105 | | LEAKAGE COLLECTION/WASHING SYS. | | DAAD037181 | | 0,001 | | |
| Quantity PER ENGINE | | SEQ NO | Material ID | Material Name | | Dimension, Occ | | Standard or Drawing | Basic Material Material Standard | | Weight GR./NET | | Q-Code XXXXX | | Main Drw. H | |
| PAAD119154 | | Free space for lic. | | Q-Code | | Standard | | ISO; JIS | | H | | | | | | |
| Material ID | Modif. | Number | Drawn date | Number | Drawn date | Number | Drawn date | Number | Drawn date | Number | Drawn date | Number | Drawn date | Number | Drawn date | |
| | A | EAAD090104 | 04.12.2018 | | | | | | | | | | | | | |
|  | | Product | | W6-12X92 | | W6-12X92DF | | LEAKAGE COLLECTION/WASHING SYS. | | LEAKAGE COLLECTION/WASHING SYS. | | | | | | |
| Units | mm kg | NX | |  | | Basic Material | | Net Weight | | | | | | | | |
| SURFACE PROTECTION SEE GROUP 0344 | | Made | 07.03.2013 | sfe006 | Feuerstein | | Scale | - | Size | A3 | Page | 1/1 | Material ID | | | |
| TOLERANCING PRINCIPLE ISO8015 | | Chkd | 05.03.2014 | | achx13 Chiwacumar | | Design Group | | 9724 | | Drawing ID | | DAAD037188 | | Rev. | A |
| GENERAL TOLERANCES ACCORDING TO ISO2768-mK | | Appd | 05.03.2014 | | wwr001 Wroblewski | | | | | | | | | | | |

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DIN - DIMENSIONAL DRAWING - Confidential

SPECIFICATION which must be met (C)

| | |
|----|---|
| 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. |

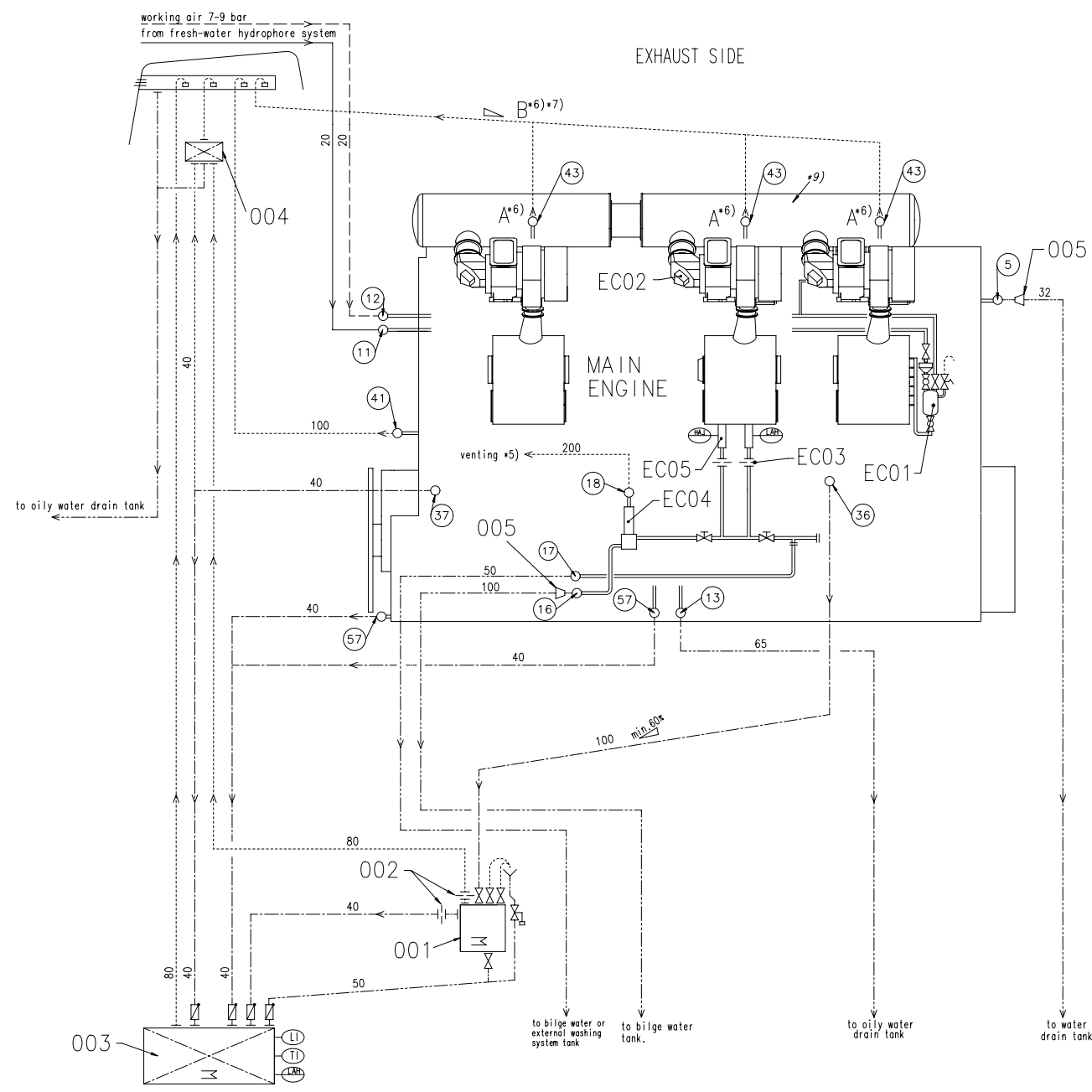
| | |
|----|--|
| 5 | OUTLET - Cylinder cooling water drain. - Gravity flow to cooling water drain tank or appropriate tank. |
| 11 | INLET - Washing water SAC - From fresh water hydrophore system, supply pressure: 2.5 bar |
| 12 | INLET - Air for cleaning plants TC and SAC - Working air, supply pressure: 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 - Washing water from scavenge air coller. - Gravity flow to bilge water or chemical cleaning tank. |
| 18 | OUTLET - SAC venting - Free flow outside of engine room. |
| 36 | OUTLET - Dirty oil piston underside - Flow with SAC pressure to sludge oil trap or appropriate arrangement. - Min. inclination of drain pipe: 60 % |
| 37 | OUTLET - Leakage oil gland box - 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 | Standard or Drawing | Basic Material Material Standard | Weight GR./NET | | | | | | | | |
| Free space for lic. | | | | | Q-Code XXXXXX | Main Drw. | | | | | | | | |
| Standard ISO; JIS | | | | | | | | | | | | | | |
| Modif. | A | EAAD086442 | 11.03.2016 | B | EAAD088894 | 16.01.2018 | C | EAAD090104 | 04.12.2018 | | | | | |
| | 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 | 07.03.2013 | sfe006 | Feuerstein | Scale | - | Size | A3 | Page | 1/2 | Material ID | PAAD119105 |
| TOLERANCING PRINCIPLE ISO8015 | | | Chkd | 05.03.2014 | achx13 | Chiwacumar | Design Group | 9724 | Drawing ID | DAAD037181 | Rev. | C | | |
| GENERAL TOLERANCES ACCORDING TO ISO2768-mK | | | Appd | 05.03.2014 | wvr001 | Wroblewski | | | | | | | | |
| | | | Product 6-12X92 6-12X92DF | | | LEAKAGE COLLECTION/WASHING SYS. SYSTEM DIAGRAM | | | LEAKAGE COLLECTION/WASHING SYS. | | | | | |

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10D - DIMENSIONAL DRAWING - Confidential

SYSTEM PROPOSAL



| Turbocharger type | A*7 | B*8 | Min. Inclination |
|-------------------|-----|-----|------------------|
| 2x A175 | 65 | 100 | 5° |
| 2x A180 | 80 | 100 | 5° |
| 2x A185 | 80 | 125 | 5° |
| 2x A190 | 80 | 125 | 5° |
| 2x A275 | 65 | 100 | 5° |
| 2x A280 | 80 | 100 | 5° |
| 2x A285 | 80 | 125 | 5° |
| 3x A175 | 65 | 125 | 5° |
| 3x A180 | 80 | 125 | 5° |
| 3x A185 | 80 | 150 | 5° |
| 3x A190 | 80 | 150 | 5° |
| 3x A275 | 65 | 125 | 5° |
| 3x A280 | 80 | 125 | 5° |
| 3x A285 | 80 | 150 | 5° |
| 2x MET66MB | 80 | 100 | 3° |
| 2x MET71MB | 80 | 100 | 3° |
| 2x MET83MB | 100 | 125 | 3° |
| 2x MET90MB | 100 | 125 | 3° |
| 3x MET66MB | 80 | 125 | 3° |
| 3x MET71MB | 80 | 125 | 3° |
| 3x MET83MB | 100 | 150 | 3° |
| 3x MET90MB | 100 | 150 | 3° |

| Pos. | SYSTEM COMPONENTS *1) (C) |
|------|--|
| 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) *10) |

| Pos. | ENGINE CONNECTIONS *2) (C) |
|------|---|
| 5 | OUTLET - Cylinder cooling water drain |
| 11 | INLET - Washing water SAC |
| 12 | INLET - Air for cleaning TC and SAC |
| 13 | OUTLET - Oily water from scavange air receiver *11) |
| 16 | OUTLET - SAC condensate water *4) *11) |
| 17 | OUTLET - Washing water from scavange air coller |
| 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) (C) |
|------|-----------------------------------|
| EC01 | Scavange air cooler washing plant |
| EC02 | Dry cleaning device |
| EC03 | Throttling disc |
| EC04 | Venting Unit |
| EC05 | Condensate drain unit |

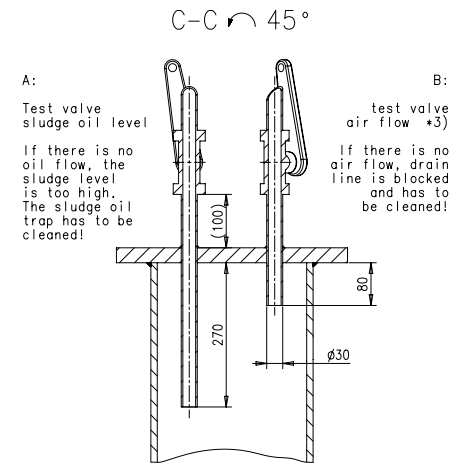
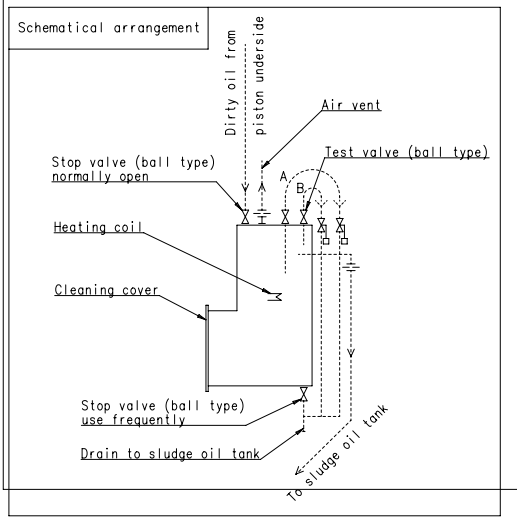
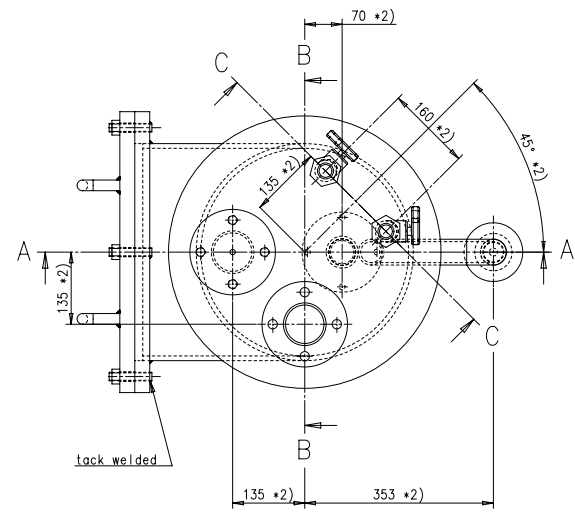
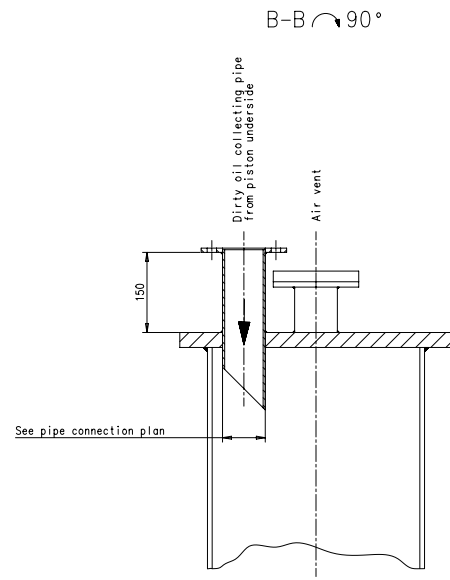
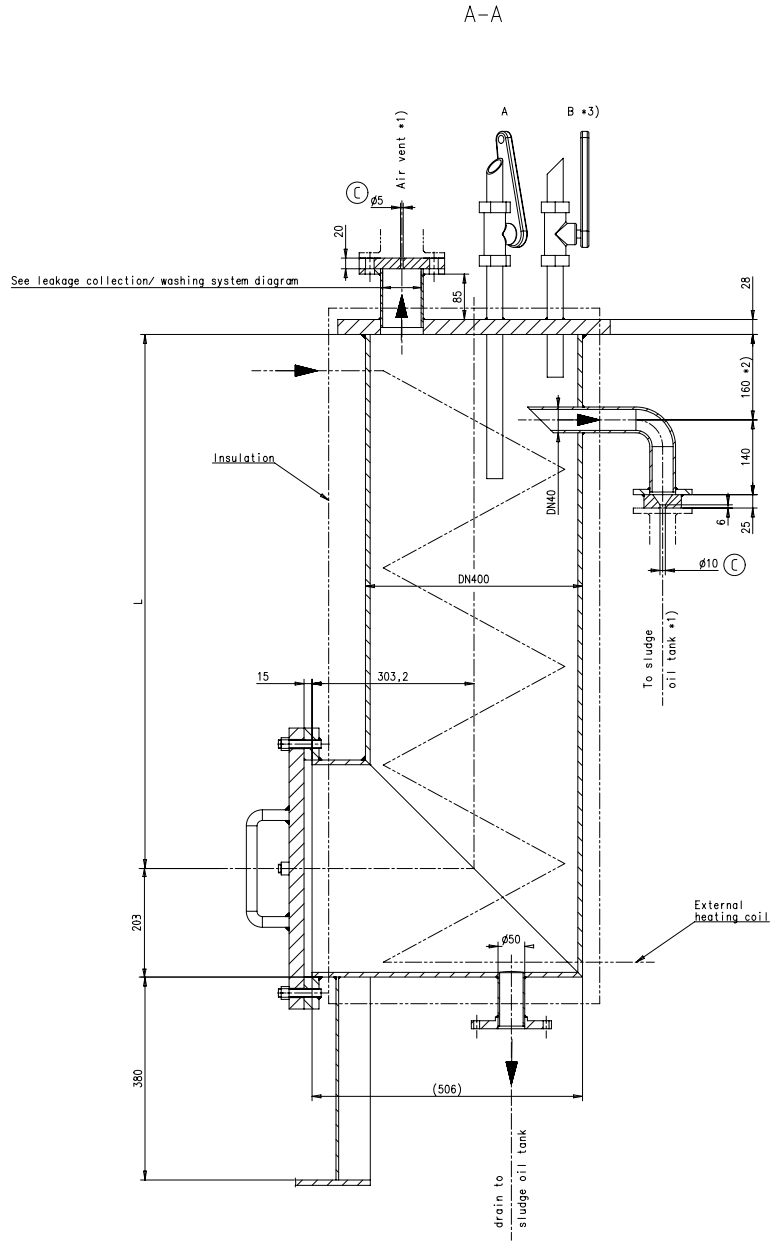
Remarks (C)

- 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 scavange 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.
- *7) Vent pipe diameter as per turbocharger requirements.
- *8) Vent pipe diameter of common collection pipe.
- *9) Manifold pipe for 2 TC
- *10) Installed as required (check with the pipe connection plan).
- *11) Drain connection 13 and 16 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
- Drain & overflow pipes
- Washing water pipes
- Dirty oil drain pipes
- ==== Pipes on engine
- Pipe connections

| | | |
|-----------------------------|--|---|
| Free space for file | U-Code XXXXXX Standard ISO, JIS | Man Drw. |
| Mod. A EAAD08644211.03.2016 | B EAAD0889416.01.2018 | C EAAD09104.04.12.2018 |
| Number Drawn date | Number Drawn date | Number Drawn date |
| | | Product: 6-12X92 6-12X92DF LEAKAGE COLLECTION/WASHING SYS. SYSTEM DIAGRAM LEAKAGE COLLECTION/WASHING SYS. |
| Units: mm kg NX | Basic Material | Net Weight 0,001 |

| | | | | | |
|--|-----------------------------------|--------------|---------|------------|------------------------|
| SURFACE PROTECTION SEE GROUP 0344 | Made 07.03.2013 sfe006 Feuerstein | Scale - | Size A1 | Page 2/2 | Material ID PAAD119105 |
| TOLERANCING PRINCIPLE ISO8015 | Chd 05.03.2014 ach13 Chwacumar | Design Group | 9724 | DAAD037181 | Rev. C |
| GENERAL TOLERANCES ACCORDING TO ISO2768-mK | Appd 05.03.2014 wwr001 Wroblewski | | | | |



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|--------------------------|----------------------|----------------------|----------------------|------------------|
| Mod. | EAAD08405122.01.2013 | EAAD08784914.07.2017 | EAAD08943912.07.2018 | |
| Number | Drawn date | Number | Drawn date | Number |
| Product: W-25 | | | | Q-Code: XXXXX |
| Standard: ISO, JIS | | | | Main Drw. |
| Product: SLUDGE OIL TRAP | | | | |
| Units | mm kg | NX | Basic Material | Net Weight 0,001 |
| Scale | 1:5 | Size | A1 | Page 1/1 |
| Material | 107.425.369.500 | | | Rev. C |

SURFACE PROTECTION SEE GROUP 0344

TOLERANCING PRINCIPLE ISO8015

GENERAL TOLERANCES ACCORDING TO ISO2768-mK

WINGD Wipacur Gas & Diesel

31.08.2009 J.BAUMANN

13.11.2009 JBA020 Baumann

9724

107.425.369

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MIDS WinGD-X92/X92DF LEAKAGE-COLLECTION and WASHING-SYSTEM (DG9724)

TRACK CHANGES

| DATE | SUBJECT | DESCRIPTION |
|------------|--------------------------|------------------------------------|
| 2017-01-12 | DRAWING SET | First web upload |
| 2017-08-18 | 107.425.369 | Sludge oil trap drg - new revision |
| 2018-01-15 | DAAD037181 | System drg - new revision |
| 2018-10-02 | 107.425.369 | Sludge oil trap drg - new revision |
| 2019-09-19 | DAAD037188 DAAD037181 | Main and system drg – new revision |

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