

# EC-TYPE EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2014/93/EU, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. This Certificate is issued by DNV GL AS under the authority of the Government of the Kingdom of Norway.

**This is to certify:****That the Shipboard incinerators**

with type designation(s)

**Incinerator Types ATLAS 400 S, 400 S WS/ 400 S BWS, 400 SL P, 400 SL M, 400 SL WS P/ 400 SL WS M/ 400 SL B WS P/ 400 SL B WS M**

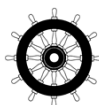
Issued to

**Atlas Incinerators A/S  
Vordingborg, Denmark**

is found to comply with the requirements in the following Regulations/Standards:

**Annex A.1, item No. A.1/2.7 and Annex B, Module B in the Directive. Marpol 73/78 as amended, Annex VI Regulation 16, IMO Res. MEPC.244(66)**

Further details of the equipment and conditions for certification are given overleaf.

**Høvik, 2015-08-14**  
for **DNV GL AS**This Certificate is valid until  
**2018-09-13**Notified Body No.: **0575**

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**Vidar Dolonen**  
**Head of Department**DNV GL local office:  
**Copenhagen**

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**Pål Evang Nundal**  
**Surveyor**

## Product description

The equipment is intended for installation onboard ships and other marine installations for incineration of garbage/ solid wastes and waste oil / 'sludge'. The following models are batch loaded: ATLAS 400 S and ATLAS 400 SL P. The following models are continuous loaded: ATLAS 400 S WS/ S BWS and ATLAS 400 SL WS P/ SL BWS P.

## Application/Limitation

|                                                                                                                    |                                                    |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Type ATLAS 400 S;<br>Calorific Capacity<br>Solid waste                                                             | 400,000 kcal/hr (465 kW)<br>170 l/charge           |
| Type ATLAS 400 S WS/ S BWS;<br>Calorific Capacity<br>Solid waste                                                   | 400,000 kcal/hr (465 kW)<br>70 kg/h                |
| Type ATLAS 400 SL P/ SL M;<br>Calorific Capacity<br>Solid waste<br>Oil sludge waste                                | 400,000 kcal/hr (465 kW)<br>170 l/charge<br>53 l/h |
| Type ATLAS 400 SL WS P/ SL WS M/<br>SL B WS P/ SL B WS M;<br>Calorific Capacity<br>Solid waste<br>Oil sludge waste | 400,000 kcal/hr (465 kW)<br>70 kg/h<br>53 l/h      |

## Type Examination documentation

| <i>Model/Type:</i>      | <i>Dwg.No:</i>                                                                                                                                         | <i>Rev./Date</i> | <i>Title:</i>                              |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------------------------------|
| ATLAS 400 S;            | 110421                                                                                                                                                 | 121212           | Dimension drawing for ATLAS 400 S          |
|                         | 211080                                                                                                                                                 | 120403           | Refractory dwg. for ATLAS 400              |
|                         | 211082                                                                                                                                                 | 120411           | Refractory dwg. for ATLAS 400              |
|                         | 110001                                                                                                                                                 | Rev.1            | Thermocouple for funnel                    |
|                         | 26I30305                                                                                                                                               | Rev.1            | Pipe diagram for ATLAS 400 S               |
|                         | 130109-01-B01                                                                                                                                          | 121016           | Electrical diagrams for ATLAS 400 S        |
|                         | 211050                                                                                                                                                 | 120306           | Welding drawing of incinerator body        |
|                         | 260087                                                                                                                                                 | 130513           | Sight glass and flame detector             |
|                         | 280001                                                                                                                                                 | Rev.1            | Warning sign for incinerator               |
|                         | General Document: Technical Data for Incineration Plant - ATLAS 400<br>Atlas ignition transformer, Danfoss A/S (Electronic Ignition Units, EB14), 2009 |                  |                                            |
| ATLAS 400 S WS / S BWS; | 110422                                                                                                                                                 | 121212           | Dimension drawing for ATLAS 400 S WS       |
|                         | 110428                                                                                                                                                 | 130912           | Dimension drawing for ATLAS 400 S BWS      |
|                         | 211080                                                                                                                                                 | 120403           | Refractory dwg. for ATLAS 400              |
|                         | 211082                                                                                                                                                 | 120411           | Refractory dwg. for ATLAS 400              |
|                         | 110001                                                                                                                                                 | Rev.1            | Thermocouple for funnel                    |
|                         | 26I30300                                                                                                                                               | Rev.3            | Pipe diagram for ATLAS 400 S WS            |
|                         | 130109-02-B01                                                                                                                                          | 130912           | Electrical diagrams for ATLAS 400 S (B) WS |
|                         |                                                                                                                                                        |                  |                                            |

Job Id: **344.1-003051-6**  
Certificate No: **MEDB000006B**

|        |        |                                     |
|--------|--------|-------------------------------------|
| 211050 | 120306 | Welding drawing of incinerator body |
| 260087 | 130513 | Sight glass and flame detector      |
| 280001 | Rev.1  | Warning sign for incinerator        |
| 280037 | 120911 | Warning sign for waste sluice       |

General Document: Technical Data for Incineration Plant - ATLAS 400  
Atlas ignition transformer, Danfoss A/S (Electronic Ignition Units, EB14), 2009

|                 |          |        |                                      |
|-----------------|----------|--------|--------------------------------------|
| ATLAS 400 SL P; | 110423   | 121212 | Dimension drawing for ATLAS 400 SL P |
|                 | 211080   | 120403 | Refractory dwg. for ATLAS 400        |
|                 | 211082   | 120411 | Refractory dwg. for ATLAS 400        |
|                 | 110000   | Rev.1  | Thermocouple for funnel              |
|                 | 26I30202 | Rev.2  | Pipe diagram for ATLAS 400 SL P      |

MOD340 400 SLP 120816 Electrical drawings for ATLAS 400 SL P

|        |        |                                     |
|--------|--------|-------------------------------------|
| 211050 | 120306 | Welding drawing of incinerator body |
| 260087 | 130513 | Sight glass and flame detector      |
| 280001 | Rev.1  | Warning sign for incinerator        |

General Document: Technical Data for Incineration Plant - ATLAS 400  
Atlas ignition transformer, Danfoss A/S (Electronic Ignition Units, EB14), 2009

|           |                 |            |                                                                                                            |
|-----------|-----------------|------------|------------------------------------------------------------------------------------------------------------|
| 400 SL M; | 110432          | 26.08.2015 | Dimension and component drawing of incinerator                                                             |
|           | 211082          | Rev 2      | Drawing of refractory for wall no. 3                                                                       |
|           | 110000          | Rev. No. 2 | Thermocouple for funnel, PLC controlled                                                                    |
|           | 26I30356        | 03.09.2015 | Pipe diagram for incineration plant                                                                        |
|           | Mod340 400 SL M | 27.08.2015 | Atlas 400 SL M, Sludge oil tank S P<br>Page 1-9, 11-14, 17, 21, 23-27, 30-35, 40,<br>100, 200-205, 400-403 |

General document: Technical data for incineration plant: Atlas 400

ATLAS 400 SL WS P / SL B WS P;

|          |        |                                          |
|----------|--------|------------------------------------------|
| 110424   | 121212 | Dimension drawing for ATLAS 400 SL WS P  |
| 110429   | 130912 | Dimension drawing for ATLAS 400 SL BWS P |
| 211080   | 120403 | Refractory dwg. for ATLAS 400            |
| 211082   | 120411 | Refractory dwg. for ATLAS 400            |
| 110000   | Rev.1  | Thermocouple for funnel                  |
| 26I30200 | Rev.2  | Pipe diagram for ATLAS 400 SL WS P       |

MOD340 400 SLBWSP Rev.1 Electrical drawings for ATLAS 400 SL (B) WS P

|        |        |                                     |
|--------|--------|-------------------------------------|
| 211050 | 120306 | Welding drawing of incinerator body |
| 260087 | 130513 | Sight glass and flame detector      |
| 280001 | Rev.1  | Warning sign for incinerator        |
| 280037 | 120911 | Warning sign for waste sluice       |

General Document: Technical Data for Incineration Plant - ATLAS 400  
Atlas ignition transformer, Danfoss A/S (Electronic Ignition Units, EB14), 2009

Atlas 400 SL (B) WS M;

|                           |            |                                                                                                                   |
|---------------------------|------------|-------------------------------------------------------------------------------------------------------------------|
| 110430                    | 26.08.2015 | Dimension and component drawing of incinerator                                                                    |
| 110431                    | 26.08.2015 | Dimension and component drawing of incinerator                                                                    |
| 211082                    | Rev 2      | Drawing of refractory for wall no. 3                                                                              |
| 110000                    | Rev. No. 2 | Thermocouple for funnel, PLC controlled                                                                           |
| 26I30210                  | Rev. 4     | Pipe diagram for incineration plant                                                                               |
| Mod340 400<br>SL (B) WS M | 27.08.2015 | Atlas 400 SL (B) WS M, Sludge oil tank S P<br>Page 1-9, 11-14, 17, 21, 23-27, 30-35, 40,<br>100, 200-205, 400-403 |

General document: Technical data for incineration plant: Atlas 400

Instruction Manual for Incinerator Plant - Installation, Operation, Maintenance, Spare Parts – ATLAS Incinerators

## Tests carried out

### *Test Reports*

- DANAK, FORCE Technologies, Test of Solid waste Class 2, ATLAS 400 SLWSP Ser. No. 402417, Accredited Report No. 5482-03, dated 2013-08-08, revised 2013-08-16.
- Atlas incinerators, Factory Acceptance Test (FAT), tested on S.No. 402417, dated 2013-05-22.
- DANAK, FORCE Technologies, Test of Solid waste Class 2 and Sludge oil, ATLAS 400 SLWSP Ser. No. 402417, Accredited Report No. 5244-02, dated 12-11-22, revised 13-05-15.
- DNV Copenhagen, Survey Report, Test of incinerator, Test of incineration of Solid Waste and Sludge Oil,

ATLAS 400 SL WS P, dated 2012-10-03.

- DNV Copenhagen, Survey Report, Test of new PLC and horizontal exhaust, ATLAS 200 SL WSP, dated 2012-07-23.
- DNV Copenhagen, Survey Report, Test of incineration of bilge water, ATLAS 600 SL WSM, dated 2012-06-20.

## Marking of product

For traceability to this type approval, each incinerator is to be marked with:

- Manufacturers name or trade mark
- Type designation
- Capacity
- Serial No.

## Mark of Conformity

The manufacturer is allowed to affix the Mark of Conformity according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and shall issue a Declaration of Conformity, only when the module D or E or F of Annex B in the same directive is fully complied with.

Module D: The quality system for production and testing shall be approved by the Notified Body.

Module E: The quality system for inspection and testing shall be approved by the Notified Body.

Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a Certificate of Conformity.