



Exploration & Production

## GENERAL SPECIFICATION

### HVAC

#### GS EP HVA 223

|                        |
|------------------------|
| <b>Kitchen Hood(s)</b> |
|------------------------|

|      |         |                                   |
|------|---------|-----------------------------------|
|      |         |                                   |
|      |         |                                   |
| 01   | 10/2009 | Updating of "Reference documents" |
| 00   | 10/2007 | First issue                       |
| Rev. | Date    | Notes                             |



## Contents

|                                      |           |
|--------------------------------------|-----------|
| <b>1. Scope .....</b>                | <b>3</b>  |
| <b>2. Reference documents.....</b>   | <b>3</b>  |
| <b>3. Definitions.....</b>           | <b>5</b>  |
| <b>4. Construction.....</b>          | <b>5</b>  |
| 4.1 Filtration.....                  | 6         |
| 4.2 Capture jet system.....          | 7         |
| 4.3 Washing system .....             | 7         |
| 4.4 Lighting .....                   | 8         |
| 4.5 Access hatch(es) .....           | 8         |
| 4.6 Duct connections .....           | 8         |
| 4.7 Fire fighting system.....        | 9         |
| 4.8 Interlocking .....               | 10        |
| <b>5. Characteristics .....</b>      | <b>11</b> |
| <b>6. Documents to provide .....</b> | <b>11</b> |
| 6.1 Submission of documents.....     | 11        |
| 6.2 Documents to provide .....       | 12        |
| 6.3 Quantities of documents .....    | 15        |
| 6.4 Format of documents.....         | 15        |
| <b>7. Equipment inspection.....</b>  | <b>16</b> |
| <b>8. Data sheet.....</b>            | <b>16</b> |
| <b>9. Spare parts list .....</b>     | <b>16</b> |



## 1. Scope

The purpose of this document is to define the minimum requirements for design, construction and supply of kitchen hood associated to a cooking equipment.

The words and expressions in capital characters and italic are defined inside the general specification **GS EP HVA 801**.

When other words require a definition only to be used in the present document, then the definition is given in a dedicated paragraph of the present document and the defined word, when used, is marked in small and *italic* letters.

## 2. Reference documents

The reference documents listed below form an integral part of this General Specification. Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and supplements, is the latest revision published at the effective date of the CONTRACT.

Order of precedence of documents is defined in **GS EP HVA 100**.

### Notes:

- In case of discrepancy between documents (whatever the documents and / or whatever origins), the most expensive solution must be quoted by the *BIDDER*. During the studies (Basic Engineering and/or Detailed Engineering) *CONTRACTOR(s)* shall raise the discrepancy in question to the *COMPANY's HVAC SPECIALIST* who will then review and advise which document(s) is (are) to be specified for the project.
- The *HVAC VENDOR* or *CONTRACTOR* may propose proven improvements to the reference documents but must obtain written approval of the *COMPANY* prior to implementation.
- An International Standard is a good "engineering practice" which shall be recognised and taken into consideration by *VENDOR*, *SUPPLIER*, *MANUFACTURER* and/or *CONTRACTOR*. If required, the translation of the standards must be included into *HVAC* scope.
- The latest revision of Standards, codes, regulations and the published errata if any must be used and applied by *VENDOR*, *SUPPLIER*, *MANUFACTURER* and *CONTRACTOR*.

### Standards

| Reference                              | Title                                                                                                                                              |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| EMC standards<br>EN 10204<br>ISO 15607 | Metallic materials - Types of inspection documents<br>Specification and qualification of welding procedures for metallic materials - General rules |

| Reference   | Title                                                                                                                                                    |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| ISO 15614-2 | Specification and qualification of welding procedures for metallic materials - Welding procedure tests - Part 2: Arc welding of aluminium and its alloys |
| ISO 15614-8 | Specification and qualification of welding procedures for metallic materials - Welding procedure tests - Part 8: Welding of tubes to tube-plate joints   |

### Professional Documents

| Reference                           | Title                                                                                                                                                                                                                                             |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| USPHS - Revised draft February 2001 | U.S Public Health Service - Recommended shipbuilding construction guidelines for cruise vessels destined to call on U.S. ports - Vessel for sanitation program, national center for environment health, center for disease control and prevention |

### Regulations

| Reference | Title                     |
|-----------|---------------------------|
| UL        | Underwriters Laboratories |

### Codes

| Reference                 | Title                                                                                                                              |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| IMO Resolution A.754 (18) | IMO resolution for testing                                                                                                         |
| MED directive             | Compliance with Marine Equipment Directive (MED) 96/98/EC as modified by Commission Directives 98/85/EC, 2001/53/EC and 2002/75/EC |
| SOLAS                     | International convention for Safety Of Life At Sea 1974 and amendments of November 1981, June 1983. Consolidated Edition 2004      |

### Other documents

| Reference      | Title |
|----------------|-------|
| Not applicable |       |

**Total General Specifications**

| Reference     | Title                                   |
|---------------|-----------------------------------------|
| GS EP HVA 000 | List of HVAC specifications             |
| GS EP HVA 100 | Basis of design                         |
| GS EP HVA 212 | Fire Damper(s) Pneumatically Actuated   |
| GS EP HVA 801 | Terminology, definitions, abbreviations |

**3. Definitions**

Part (of hood): for different reasons (construction, transportation, handling, installation, ...) the hood can be composed of modules which are juxtaposed and connected together to constitute the hood. Each module must be regarded as a *part*.

**4. Construction**

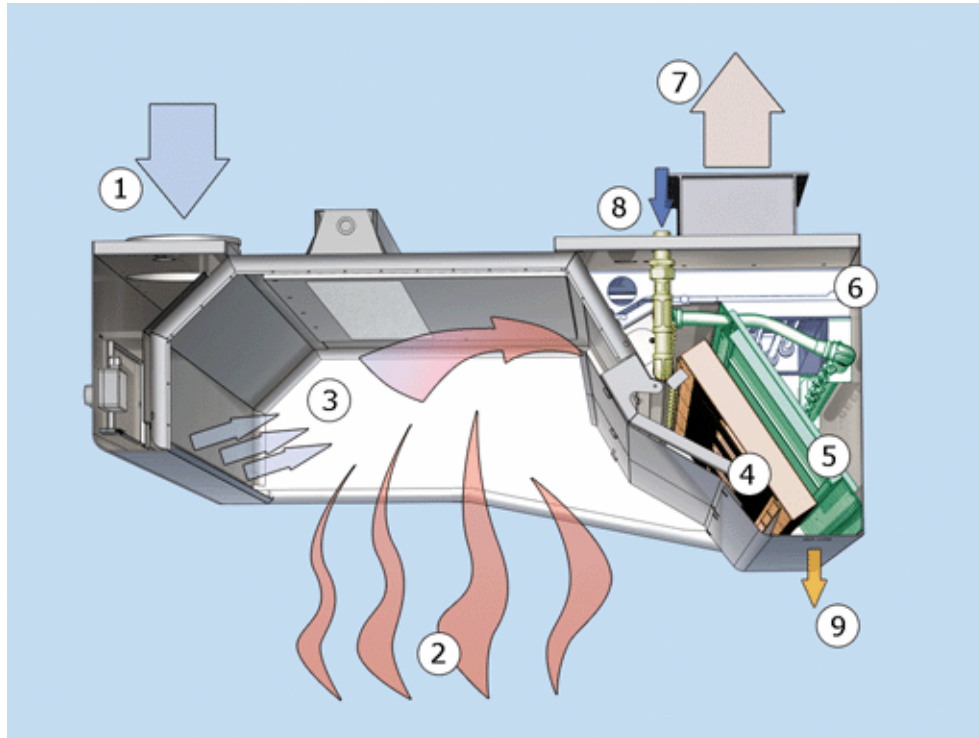
GS EP HVA 010 is not applicable for this equipment.

All parts shall be constructed of stainless steel sheet AISI 304 (thickness 1.25-2.0 mm) with a polished finish. The inside corners of the hood shall be rounded for easy cleaning according to USPHS requirements. The joints at the lower edges of the device shall be welded watertight. All visible screws shall be thumb screw type. The hood shall be equipped with a drain connection for removing the dirty water. A service hatch shall be foreseen in hood (each part of hood) for easy access above the hood. Passivation and polishing of welding shall be done at end of construction. The surface of hood (inner and outer) shall be polished after construction.

The sizes of hood (length and width) shall be at least 200 mm more, (on each side), than the length and width of the complete cooking island.

The hood shall be designed to avoid the build-up of grease deposits, in accordance with USPHS requirements.

Main description:



1. Air supply to the capture jet plenum
2. Grease and vapours rising from the cooking appliances
3. Grease and vapours are directed into the hood by Capture Jet technology
4. First filtration stage
5. Second filtration stage
6. Remaining grease eliminated with Halton's Capture Ray ultraviolet light technology
7. Exhaust air containing small amounts of Ozone which further cleans the ducts downstream
8. Washing system
9. Drain connection.

#### 4.1 Filtration

A two filtration stages concept shall be designed. The filtration stages shall include a combination of KSA filter (developed by Halton Marine) and a fine filter. Filters material shall be stainless steel AISI 304.