Application Area

The SHF source holders are designed for radiation-based measurement of applications including density, weight, interface, and continuous and point level. The most common industries for the SHF source holders include:

- Offshore
- Petrochemical
- Plastics
- Asphalt
- Chemical

Advantages

Recognizable benefits include:

- Non-lead shielding for fire resistance
- Wide range of collimation angles
- Corrosion resistant polyester powder coating
- Available with General License (United States only)
- Wide range of accessories

Function

The SHF source holders are a component of a density, level, interface, or weight gauge. The source holders is a gamma radiation device secured in a fixed position near a vessel or pipe and is responsible for directing radiation through the process material.

Technical Data

<table>
<thead>
<tr>
<th>Maximum Cs-137 Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>SH-F1A</td>
</tr>
<tr>
<td>- 2.22 GBq (60 mCi) for 50 uSv@305 mm (5 mR/hr@12&quot;)</td>
</tr>
<tr>
<td>SH-F1B</td>
</tr>
<tr>
<td>- 4.44 GBq (120 mCi) for 50 uSv@305 mm (5 mR/hr@12&quot;)</td>
</tr>
<tr>
<td>SH-F2</td>
</tr>
<tr>
<td>- 25.9 GBq (700 mCi) for 50 uSv@305 mm (5 mR/hr@12&quot;)</td>
</tr>
<tr>
<td>SH-F2B</td>
</tr>
<tr>
<td>- 55.5 GBq (1500 mCi) for 50 uSv@305 mm (5 mR/hr@12&quot;)</td>
</tr>
<tr>
<td>SH-F2C</td>
</tr>
<tr>
<td>- 74 GBq (2000 mCi) for 50 uSv@305 mm (5 mR/hr@12&quot;)</td>
</tr>
</tbody>
</table>

Fire Proof

+800 °C for 30 minutes (+1472 °F for 30 minutes)

Handle/Shutter

Rotary

Collimation Angle

0°, 15°, 30°, 45°, 60°, 75°

Temperature

-30 ... +60 °C (-34 ... +140 °F)

Weight

- SH-F1A 56 kg (129 lbs.)
- SH-F1B 56 kg (129 lbs.)
- SH-F2 59 kg (131 lbs.)
- SH-F2B 59 kg (131 lbs.)
- SH-F2C 59 kg (131 lbs.)

Materials

The shielding material is iron and tungsten.

Housing Versions

The housing is available in cast iron with polyester powder coating.
**Specifications Sheet**

**Approvals**
The source holders are regulated by the U.S. Nuclear Regulatory Commission (NRC). Compliance certificates are issued by the State of Ohio under an agreement with the NRC.

**Operation**
The SHF source holders are used to position and protect a radioactive source near a process vessel or pipe. Radiation from the source is directed through the process by an integral collimator. A radiation detector placed opposite the source holder measures radiation fluctuations caused by process condition changes. The detector correlates radiation levels to process conditions.

**Dimensions**

![Diagram of SHF Series Source Holders]

Dimensions SHF Series

1. Positioning Screw
2. Handle
3. Lifting Eye
4. Collimation Angle
5. Locking Mechanism
6. 14 mm (9/16") Diameter Mounting Holes

**Information**
You can find additional information about VEGA product offerings from our home page, www.vega-americas.com. Brochures, operating instructions, quick reference guides, specification sheets, and drawings are also available from the Downloads section of our homepage.

**Device Selection**
The Downloads section of our home page, www.vega-americas.com provides application data sheets so you can select the measuring principle or product for your particular application.

**Contact**
Please call 1-513-272-0131, Monday through Friday, 8:00 A.M.-5:00 P.M., EST (Eastern Standard Time) if you have any questions. For emergencies after hours, call the number above and follow the voice mail instructions.

All information is subject to change without notice.