DESCRIPTION
The SI20 series steam injectors from ADCA are injection condensers. They ensure low noise and vibration and rapid heating of still or flowing fluids in basins and vessels due to direct steam injection.
Steam enters through the inlet housing, passes along the centre of the heater, through holes in the inner rings, through spaces between the element plates where it condensates under light load and partly condensates under heavy load to be discharged through the serrated periphery of the element plates. Under heavy load if any steam pass through the periphery of the element plates, will do so in very small jets and will condensate in the surrounding liquid with very little noise and vibration.
Connections are female screwed.

MAIN FEATURES
Quiet operation.
Corrosion-resistant.
No moving parts.

OPTIONS:
Complete system including vacuum breaker and self operated controller.
Different capacities and design available under request.

USE:
Direct steam injection heating systems.
See IMI installation and maintenance instructions.

AVAILABLE MODELS:
SI 20-4; SI 20-5.5; SI 20-7; SI 20-8.5

SIZES:
3/4".

CONNECTIONS:
Female screwed ISO 7/1 Rp (BS21)

INSTALLATION:
Horizontal or vertical installation.

LIMITING CONDITIONS:
PMO: Max. operating pressure 8,5 bar
TMO: Max. operating temperature 180 ºC

Example: We require the injection of 950Kg/hr of steam with a pressure of 5bar. Assuming 20% pressure drop across the control valve, therefore the steam supply to the injectors will be 4bar. From the injector capacity chart we see that the 4bar injector will pass 293Kg/hr and 950 divided by 293=3,24.
Three injectors of this size will barely cope, so we recommend installing four injectors, which will meet the demand.
The pressure rating is stamped on the inlet housing (1). The SI 20 injector is made in one size and if one device does not pass sufficient steam, two or more should be fitted to a common supply pipe.
STEAM INJECTORS
SI 115

DESCRIPTION

The SI series steam injectors from ADCA are injection condensers. They ensure low noise and vibration and rapid heating of still or flowing fluids in basins and vessels due to direct steam injection.
Steam enters through the inlet housing, passes along the centre of the heater, mixing with the cool water which drawn in through radial holes.
Connections are female screwed.

MAIN FEATURES

Quiet operation.
Corrosion-resistant.
No moving parts.

OPTIONS:
Complete system including vacuum breaker and self operated controller.
Different capacities and design available under request.

USE:
Direct steam injection heating systems.
See IMI installation and maintenance instructions.

AVAILABLE MODELS:
SI-115

SIZES:
1/2”

CONNECTIONS:
Female screwed ISO 7/1 Rp (BS21)

INSTALLATION:
Horizontal installation.

LIMITING CONDITIONS:
Body design conditions: PN 25
Max. operating pressure: 17 bar
Max. recommended water temp: 95 °C

MATERIALS:
Austenitic stainless steel throughout
AISI316 / 1.4401

How to order: i.e. SI-115DN 1/2” BSP

Selection under shadow area is recommended for quietest operation

Example: We require the injection of 230Kg/hr of steam with a pressure of 5.5bar. From the injector capacity chart we see that at 5.5bar the injector will pass 110Kg/hr and 230 divided by 110=2.09.
Two injectors will barely cope, so, we recommend installing three injectors, which will meet the demand.

We reserve the right to change the design and material of this product without notice.
Produced in accordance with Article 3, paragraph 3 of the PED - European Pressure Equipment Directive - 97/23/EC.
STEAM INJECTORS
SI 125 – SI 140

DESCRIPTION
The SI series steam injectors from ADCA are injection condensers. They ensure low noise and vibration and rapid heating of still or flowing fluids in basins and vessels due to direct steam injection. Steam enters through the inlet housing, passes along the centre of the heater, mixing with the cool water which drawn in through radial holes. Connections are female screwed.

MAIN FEATURES
- Quiet operation.
- Corrosion-resistant.
- No moving parts.

OPTIONS:
- Complete system including vacuum breaker and self operated controller.
- Different capacities and design available under request.

USE:
Direct steam injection heating systems.
See IMI installation and maintenance instructions.

AVAILABLE MODELS:
- SI-125, SI-140.

SIZES:
- DN 1" and DN 11/2"

CONNECTIONS:
- Female screwed ISO 7/1 Rp (BS21)

INSTALLATION:
- Horizontal installation.

LIMITING CONDITIONS:
- Body design conditions: PN 25
- Max. operating pressure: 17 bar
- Max. recommended water temp: 95 °C

MATERIALS:
- Austenitic stainless steel throughout.
- AISI316 / 1.4401

How to order: i.e. SI-140 DN 11/2" BSP

FLOW RATE CAPACITY IN Kg/h *

<table>
<thead>
<tr>
<th>MODEL</th>
<th>SIZE</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
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<th>14</th>
<th>15</th>
<th>16</th>
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<tbody>
<tr>
<td>SI 125</td>
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<td>130</td>
<td>170</td>
<td>270</td>
<td>352</td>
<td>415</td>
<td>500</td>
<td>675</td>
<td>695</td>
<td>795</td>
<td>880</td>
<td>940</td>
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<td>1090</td>
<td>1150</td>
<td>1220</td>
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</tr>
<tr>
<td>SI 140</td>
<td>11/2&quot;</td>
<td>359</td>
<td>570</td>
<td>800</td>
<td>970</td>
<td>1120</td>
<td>1290</td>
<td>1440</td>
<td>1625</td>
<td>1810</td>
<td>1940</td>
<td>2240</td>
<td>2360</td>
<td>2590</td>
<td>2700</td>
<td>2800</td>
<td>3050</td>
<td>3200</td>
</tr>
</tbody>
</table>

* With the vessel at atmospheric pressure.

Example: We require the injection of 3500Kg/hr of steam with a pressure of 8bar. From the injector capacity table we see that at 8bar the injector SI140 will pass 1625Kg/hr and 3500 divided by 1625=2.15.
Two injectors will barely cope, so, we recommend installing three injectors, which will meet the demand.