Insulating shields OSC

Technical description:

The OSC type shields are multilayer heat-insulating material used as heat insulation of any type of machines, devices, equipment and transmitting systems and installations where there is contact with high temperatures and we want to limit the flow and loss of heat. Particularly frequent they are used as insulation of feed cylinders, valves, pumps, compensators, cubicles, generating sets and other devices of irregular shape. The OSC shields can also be used as insulation of exhaust systems in big internal combustion engines. Shape and thickness of insulation are selected individually on basis of either construction data provided by an ordering party or measurements carried out at a customer’s site. The shields are available in four types which differ in thermal and chemical resistance of used materials.

Properties and merits:

- energy saving on the level 30 – 40% (e.g. at insulation of feed cylinders)
- reduction of temperature up to 70% (OSC 500 shield at 400° C temperature of a device)
- adjusting the temperature of devices to requirements of EH&S regulations
- reduction of noise level
- high life-span and chemical resistance
- possibility of repeated disassembly with purpose to maintain the machines
- execution in accordance with size of each element of installation

EXAMPLE WHEN USED ON FEED CYLINDERS:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installed electrical power of heating elements</td>
<td>80 kW</td>
</tr>
<tr>
<td>Average electrical power without insulation</td>
<td>16 kW</td>
</tr>
<tr>
<td>Average electrical power with insulation</td>
<td>11,2 kW (30% saving)</td>
</tr>
<tr>
<td>Average time of use during 1 year</td>
<td>6000 h</td>
</tr>
<tr>
<td>Energy consumption savings during 1 year</td>
<td>4,8 kW x 6000 h = 28800 kWh</td>
</tr>
</tbody>
</table>

Energy saving up to 40%!
**Technical parameters:**

<table>
<thead>
<tr>
<th>TYPE</th>
<th>OSC 1100</th>
<th>OSC 500</th>
<th>OSC 200</th>
<th>OSC 300 CH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum instantaneous temperature of outside layer in °C</td>
<td>1200</td>
<td>650</td>
<td>300</td>
<td>350</td>
</tr>
<tr>
<td>Maximum temperature of continuous running of outside layer in °C</td>
<td>1100</td>
<td>500</td>
<td>200</td>
<td>300</td>
</tr>
<tr>
<td>Minimum temperature of application in °C</td>
<td>-100</td>
<td>-100</td>
<td>-100</td>
<td>-100</td>
</tr>
<tr>
<td>Thermal conductivity W/mk</td>
<td>0,26</td>
<td>0,14</td>
<td>0,07</td>
<td>0,10</td>
</tr>
<tr>
<td>- in 1000 °C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- in 500 °C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- in 200 °C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- in 300 °C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss after roasting in %</td>
<td>max. 10</td>
<td>max. 3</td>
<td>max. 3</td>
<td>max. 3</td>
</tr>
<tr>
<td>Shrinkage of surface in%</td>
<td>max. 5</td>
<td>max. 3</td>
<td>max. 3</td>
<td>max. 3</td>
</tr>
<tr>
<td>Colour of outside coating</td>
<td>grey</td>
<td>grey</td>
<td>grey</td>
<td>brown</td>
</tr>
<tr>
<td>Standard way of fastening</td>
<td>non-flammable Velcro</td>
<td>non-flammable Velcro</td>
<td>non-flammable Velcro</td>
<td>non-flammable Velcro</td>
</tr>
<tr>
<td>Standard thickness of insulation in w mm</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>25</td>
</tr>
</tbody>
</table>