OXY-THERM® TITAN™
Compact flame oxy-fuel burner

- High temperature oxy-fuel flame reduces fuel consumption
- Sealed, self-cooling design minimizes air infiltration and maintenance
- Wide variety of capacities and large turndown ratio (8:1) provide precise process temperature control
- Compact flame geometry for easy integration in most processes
- Clean combustion with any fuel gas
- Ignition flexibility with air or oxygen pilots
- Typical applications include ladle heating, reheat furnaces, rotary hearths, forge furnaces, reaction furnaces, and any high temperature, sealed process
Product description

The OXY-THERM® TITAN™ burner provides a more compact flame profile than other OXY-THERM® burners. Its flame length and mounting design make it ideal for applications requiring higher capacities in vertical fired applications requiring a “down-fired” mounting such as ladle preheating. It is also an excellent burner for rotary melters, waste incinerators and process heaters.

Oxygen enters the burner housing and exits around the fuel nozzle where it mixes with the fuel. The oxygen-fuel flame discharges through the refractory block throat and develops a tightly wrapped compact flame pattern.

Available OXY-THERM® TITAN™ sizes

OXY-THERM® TITAN™ burners are available in two sizes: 1-1/2” and 2”. Each size may be customized to your capacity needs. Standard refractory block material is suitable for furnace temperatures up to 3000°F. Optional materials for more challenging environments are available upon request.
Dimensions and weights

1) 1/4” NPT combustion oxygen pressure tap
2) Fuel gas inlet
3) 3/8” NPT gas inlet
4) 3/8” NPT air inlet
5) 3” NPT combustion oxygen inlet
6) 1/4” NPT fuel gas pressure tap
7) 3/4” NPT coupling location for optional flame sensing device

NOTE: Burner is displayed with an air-gas pilot. An oxygen-fuel pilot is available. Refer to “Specifications of OXY-THERM® TITAN™ Burners” for more information.

Dimensions in inches unless stated otherwise

<table>
<thead>
<tr>
<th>Burner size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D Ø</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>J Ø</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1/2”</td>
<td>26.68</td>
<td>9.06</td>
<td>17.62</td>
<td>15.5</td>
<td>18.0</td>
<td>13.2</td>
<td>9.0</td>
<td>18.0</td>
<td>1-1/2”</td>
</tr>
<tr>
<td>2”</td>
<td>29.5</td>
<td>9.06</td>
<td>20.44</td>
<td>15.5</td>
<td>18.0</td>
<td>13.7</td>
<td>9.0</td>
<td>18.0</td>
<td>2”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Burner part</th>
<th>Weight lbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1/2” burner assembly [1]</td>
<td>185</td>
</tr>
<tr>
<td>2” burner assembly [1]</td>
<td>195</td>
</tr>
<tr>
<td>1-1/2” burner block</td>
<td>125</td>
</tr>
<tr>
<td>2” burner block</td>
<td>115</td>
</tr>
</tbody>
</table>

[1] Assembly includes the burner block
Typical emissions

Exact emissions performance may vary in your application. Contact MAXON for information on installation specific estimates. No guarantee of emissions is intended or implied.

Read “Specifications of OXY-THERM® TITAN™ burners” for more detailed information on OXY-THERM® TITAN™ burners.