The Munters Thermo-T™ tubular heat exchanger recovers heat from energy-consuming processes at temperatures up to 2000°F. Heat transfer tubes are fully welded to the tube sheets, ensuring minimum cross-contamination. Integral expansion joints make the Thermo-T™ ideal for high-temperature applications. Single and multi-pass models are available with effectiveness values up to 80%.

Thermo-T™ offers fully adjustable tube size and tube spacing. Combine this with the unmatched flexibility in materials of construction and flow patterns, and Thermo-T™ is the obvious choice for your high temperature heat recovery application.

To meet unique performance or configuration requirements, both single and multi-pass models are available. The Thermo-T™ can be integrated with a plate heat exchanger (Thermo-Z™) to provide the ultimate in effectiveness, reliability and value.
Thermo-T™ Construction

The Thermo-T™ heat exchanger is designed and constructed for an industrial environment. Proper material selection is crucial to the life of a heat exchanger. Typically, Thermo-T™ is constructed with 304L, 316L, or 309S stainless steel tubes and tube sheets. These materials provide superior performance in high temperature or corrosive environments. Optional materials are available to meet specific needs.

The tubes are fully welded to the tube sheet to provide a double layer of protection against cross-contamination. The tube size and spacing are fully adjustable at the time of manufacture to meet exact performance requirements.

The inner casing is constructed of the same material as the heat transfer matrix. It is welded to the matrix at certain peripheral locations to assure an air-tight seal.

Optional Expansion Joints With Welded Outer Casing

Thermal stress is another major factor in high-temperature heat exchanger design. At high temperatures, Munters’ integral expansion joints allow the tube/sheet assembly to expand without causing excessive stress.

The outer casing remains cool because of the layer of high-temperature insulation. Therefore, it will not expand as a result of process temperature changes. The internal casing is secured to the cold outer casing by means of integral thermal expansion joints. These joints allow the inner matrix/casing assembly to move freely without undue forces being imposed on it by the rigid, cool external casing. The heat exchanger (with its cold flanges) can be installed flange-to-flange to the ductwork without the need to compensate for the thermal expansion of the heat exchanger.

Thermo-T™ Applications

- Transfer process exhaust to process makeup air
- 100% makeup air operation
- Cooling process air prior to bag house
- Transfer process exhaust to process makeup air
- Reduces peak electrical demand
- Rotary kiln
- Waste process heat to plant makeup air

Thermo-T™ Standard and Custom Engineered Construction

<table>
<thead>
<tr>
<th>Standard Construction</th>
<th>Custom Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fully welded tube bundle (.065 inch avg wall thickness)</td>
<td>• Broad selection of materials</td>
</tr>
<tr>
<td>• 1/4” thick tube sheet</td>
<td>• Insulated double-wall construction with integral thermal expansion joints</td>
</tr>
<tr>
<td>• Tubes fully welded to tube sheet</td>
<td>• Single &amp; multi-pass units</td>
</tr>
<tr>
<td>• All-welded casing (minimum 0.105 inches thick)</td>
<td>• Designed to meet user requirements</td>
</tr>
<tr>
<td>• 2” x 2” x 1/4” pre-punched flange connections</td>
<td>• Complete systems</td>
</tr>
<tr>
<td>• Highly effective counterflow pattern</td>
<td>• Tube bundle cleaning options</td>
</tr>
<tr>
<td>• Ready to be field installed and insulated</td>
<td>• High pressure construction</td>
</tr>
</tbody>
</table>

Munters Corporation
Tel: (800) 843-5360 E-mail: dhinfo@munters.com
www.munters.com

Australia Phone +61 2 8843 1580, serviceairt@munters.com.au
Austria Phone +43 1 6164298-0, service.dh@munters.at
Belgium & Luxembourg Phone +32 2 240 6688, service.dh@muntersbe.be
Brazil Phone +55 41 3317 5050, munters@com.br
Canada Phone +1 905 858 5894, dhinfo@munters.com
China Phone +86 10 8041 8000, serviceairt@munters.cn
Czech Republic Phone +420 544 211 434, serviceairt@munters.cz
Denmark Phone +45 4495 3355, service.dh@munters.dk
Finland Phone +358 40 186 3074, service.dh@munters.fi
France Phone +33 1 3411 5757, service.dh@munters.fr
Germany Phone +49 40 87 96 90-0, service.dh@munters.de
India Phone +91 20 6681 8900, service.dh@munters.in
Italy Phone +39 0183 521 377, service.dh@munters.it
Japan Phone +81 3 5970 0021, serviceairt@munters.jp
Korea Phone +82 2 761 8701, serviceairt@munters.co.kr
Mexico Phone +52 722 270 4029, service.dh@munters.com
Netherlands Phone +31 172 43 32 31, service.dh@munters.nl
Poland Phone +48 58 305 35 17, service.dh@munters.pl
Singapore Phone +65 6744 6828, serviceairt@munters.com.sg
South Africa Phone +27 11 971 9700, info@munters.co.za
Spain & Portugal Phone +34 91 640 09 02, service.dh@munters.es
Sweden & Norway Phone +46 8 626 6300, service.dh@munters.se
Switzerland Phone +41 52 3438886, service.dh@munters.ch
Thailand Phone +66 2 6422 6703, serviceairt@munters.com.sg
Turkey Phone +90 216 548 1444, serviceairt@munters.com
UAE +971 4881 3026, middle.east@munters.com
United Kingdom & Ireland Phone +44 1480 432243, service.dh@munters.co.uk
United States Phone +1 800 843 5360, dhinfo@munters.com
Vietnam Phone +84 8 3852 6838, vietnam@muntersasia.com