Imerys Ceramics is a world leader in manufacturing kiln cars, H and U-type firing supports applied in traditional tunnel or intermittent kilns, usually on kiln cars. Ceramic supports have played a key role in the industrialization of roof tiles manufacturing.

Our ceramic kiln furniture allows:

• a high degree of automation of the roof tiles handling;
• a very good dimensional (size, flatness) reproducibility of the roof tiles, thanks to a very high accuracy and stability in the dimensions of our supports;
• a very long life-time of our supports (up to 3000 cycles depending on operating conditions), based upon a strong resistance to mechanical and thermal constraints. The mastering of the body composition of our supports is key to achieve this.

Each solution can be tailored to your needs thanks to our state-of-the-art design office.

Competence in Roofing Tile

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### OUR SOLUTIONS

<table>
<thead>
<tr>
<th>U-CASSETTE</th>
<th>Characteristics</th>
</tr>
</thead>
</table>
| • Upright firing of roof tiles  
• Automated handling process of tiles  
• Firing temperature up to 1150°C  
• Firing cycle between 25 and 50h  
• Homogeneous firing of tiles |

<table>
<thead>
<tr>
<th>H-CASSETTE</th>
<th>Characteristics</th>
</tr>
</thead>
</table>
| • Flat firing of roof tiles  
• Automated handling process of tiles  
• Firing temperature up to 1150°C with shorter cycle times (10-12h)  
• Homogeneous firing of tiles thanks to the sharp control of the air flow  
• Very good flatness of tiles  
• Allows all kind of surface treatment: powder/ glaze/ engobes |

<table>
<thead>
<tr>
<th>H-CASSETTE FOR ACCESSORIES</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same characteristics as H cassettes, but customized for your accessories. Tailored design, with (or without) cordierite inserts or silicium carbide, ensure a high versatility of your cassettes. Exclusive systems of SiC pads can also be cast in your H for optimum handling and maintenance.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>KILN CAR REFRACTORIES</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full set of refractories for your kiln cars to stand heavy loads, ensure a very long life-time and a very good thermal insulation.</td>
<td></td>
</tr>
</tbody>
</table>
Imerys Ceramics considers that the body composition is a key success factor to obtain high quality products that will be able to face the most challenging operating conditions. For these reasons, we have developed a wide range of optimized compositions based on:

- a very strict selection of our raw materials ensuring a very high performance stability of our bodies. Being part of the Imerys group, a worldwide leader in industrial minerals, enables us to choose and secure the best raw materials for our bodies;

- over 30 years of technical collaborations with our customers on a wide range of applications and operating conditions.

CORDIERITE is a major component of Cordierite-Mullite kiln furniture. Cordierite has an extremely low coefficient of thermal expansion explaining the outstanding thermal shock resistance of these kiln furniture materials. Imerys Ceramics kiln furniture developed light weight cordierite formulations that allows energy savings without deteriorating the other parameter of the cordierite.

The controlled combination of Mullite, as a high temperature resistant mineral and Cordierite, enables tailoring material characteristics for a wide variety of firing profiles and application temperatures.

To ensure that these compositions will always offer the optimum performance, all important process parameters are constantly monitored and the finished products have to pass extensive control procedures under application of the highest quality standards with perfect traceability and reproducibility. All Imerys Ceramics kiln furniture units are ISO 9001 certified.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Materials</th>
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<tbody>
<tr>
<td>These materials tailored for the application in roof tiles, offer:</td>
<td>APTAKORIT ZSA2</td>
</tr>
<tr>
<td>• high thermal shock resistance</td>
<td>GREENLITE</td>
</tr>
<tr>
<td>• high resistance to abrasion</td>
<td>SC90G</td>
</tr>
<tr>
<td>• maximum application temperature of the material: 1300°C</td>
<td>SC90S</td>
</tr>
<tr>
<td>(no shaped product)</td>
<td>Typical products: H and U Cassette</td>
</tr>
</tbody>
</table>
Teams dedicated to technical ceramics manufacturing
Thanks to a global commercial structure and integrated logistics network, Imerys Ceramics is able to provide a high quality, cost-effective and reliable service to its customers, wherever they are in the world.

Serving customers worldwide

▲ Commercial office  ▲ Design office

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