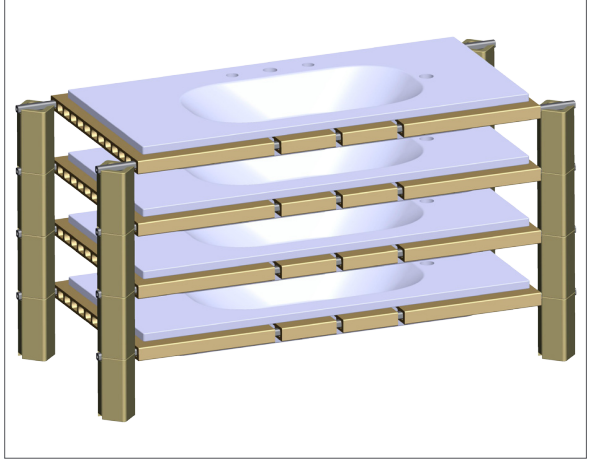
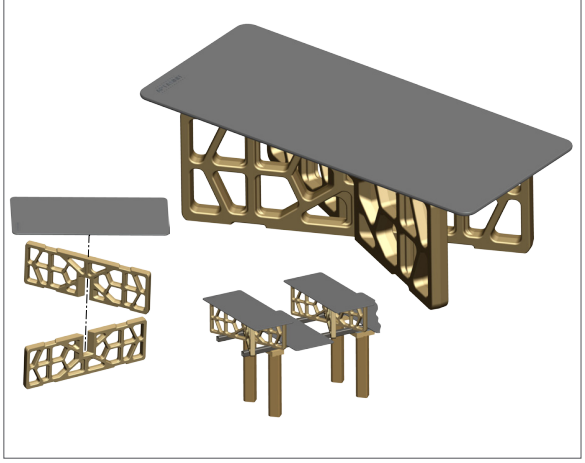
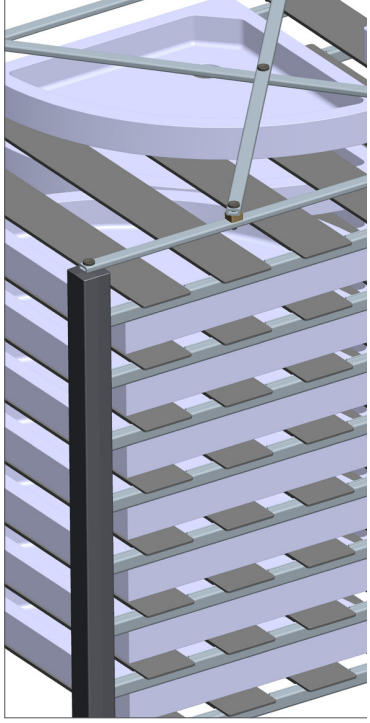
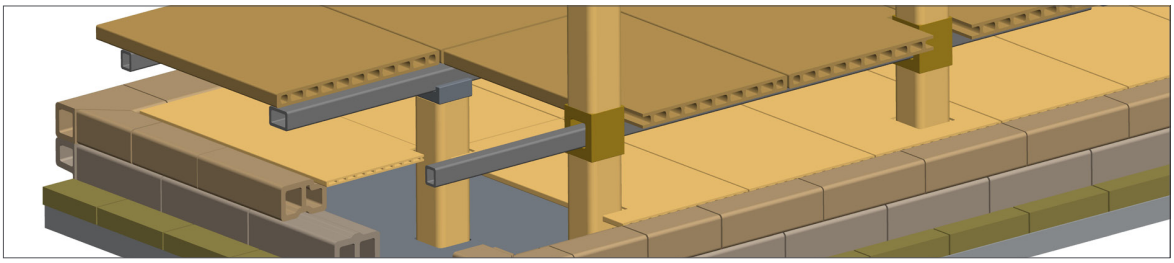





Extended experience in Sanitaryware

Imerys Ceramics is a leader in supplying the sanitaryware industry with kiln furniture solutions. From your first installation to the optimization of existing lines, **Imerys Ceramics** is a partner of choice to meet your technical and business challenges.

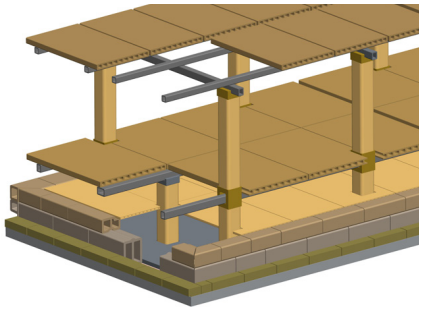
Kiln furniture is a key component of the sanitaryware production process. It has a significant impact on:

- the productivity of your kiln: an optimized design, adapted to your product mix, is essential to have a high loading rate of your firing line;
- the quality of your products: precise and stable geometrical dimensions of kiln furniture are essential to produce high quality sanitaryware pieces;
- the energy consumption: our expertise in both cordierite and silicium carbide allows us to design bending resistant structures in keeping the weight to its minimum;
- the maintenance cost: simple, stable, light and dry assemblies help to reduce globally the cost of kiln furniture.

Leveraging on our high quality materials, cordierite, silicium carbide or mullite, a wide range of shaping processes (extrusion, pressing, injection moulding and casting) along with high design capabilities, **Imerys Ceramics** has developed high performing and complete set of solutions for the sanitaryware industry. Whatever your need is: new installation, optimization, maintenance or development of new pieces out of traditional standards, we are able to design and deliver full kiln furniture systems, for both tunnel kilns and shuttle kilns: kiln car refractory system, superstructures and stools (supports).

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

OUR SOLUTIONS

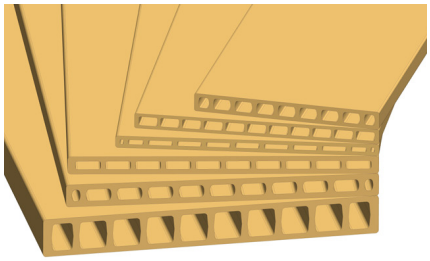


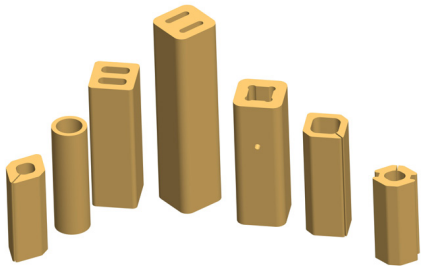
KILN CAR

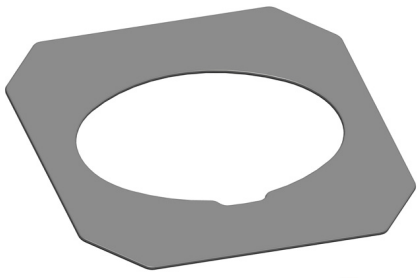
Characteristics

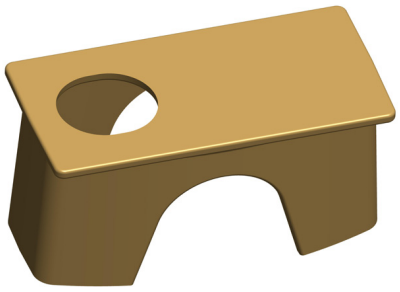
- Low thermal mass
- Complete protection of all steel components against heat
- Easy dry assembling design allowing:
  - time sparing at first installation;
  - stable geometry over cycles;
  - low maintenance costs.

SUPERSTRUCTURE









Characteristics

Cordierite / Extruded Batts

- Low thermal mass
- Long life-time
- High flatness, precise and stable geometric dimensions
- High resistance to bending even at high temperature
- Engobe coating on demand to avoid sticking effects

Cordierite / Extruded Props - Pressed or Cast Caps & Shoes

- Low thermal mass
- Long life-time
- Precise and stable geometric dimensions
- High resistance to loading

SiC Beams

- Low thermal mass
- Long life-time
- Precise and stable geometric dimensions
- Extremely high resistance to loading and bending
- Special designs on request

Cordierite / Cast Stools / Supports

- Low thermal mass
- Long life-time
- High flatness, precise and stable geometric dimensions adapted to your products ensuring a high level of compactness in your kiln
- High resistance to bending even at high temperature
- Engobe coating on demand, to avoid sticking effects

RSiC / NSiC / Lavi setters and batts

- Extremely long life-time
- Bending free performance along the cycles
- Very high mechanical strength
- Low thermal mass
- High loading capacity

ADEQUATE COMPOSITIONS FOR SANITARYWARE

CORDIERITE is a major component of Cordierite-Mullite kiln furniture. It has an extremely low coefficient of thermal expansion explaining the outstanding thermal shock resistance of these kiln furniture materials. The controlled combination of Mullite, as a high temperature resistant mineral and Cordierite, enables tailoring of material characteristics for a wide variety of firing profiles and application temperatures.

Characteristics	Materials
• High thermal shock resistance • High creep resistance • High mechanical resistance • Typical products: batts, supports	S-CORIT A APTAKORIT CME APTAKORIT MH CORMULL C1E APTAKORIT CM1 S-CORIT B CORMULL C1

MULLITE in combination with Corundum, is widely used as kiln furniture in the ceramic industry. A wide variety of Mullite-Corundum kiln furniture materials is commercially available, applied for firing ceramics in temperatures ranging from 1380°C up to 1700°C. We combine acute raw material selection and precise processing to produce kiln furniture materials with highest performances for standard and special applications.

Characteristics	Materials
• Typical products: rollers	E59 KF25E

SILICON CARBIDE products are developed on a customized basis to meet customers' specific needs. The use of high purity raw materials and precise process parameters ensure the high quality and consistency of **Imerys Ceramics** kiln furniture materials: high strength, even at high temperatures, low thermal expansion, very high thermal conductivity, corrosion resistance under highest temperatures, very high hardness and resistance to wear.

Characteristics	Materials
• Silicon infiltrated SiC: the outstanding creep resistance at high temperatures allows heavy loads up to 1350°C. • Typical products: beams	SC 90S
• Recrystallized SiC: the outstanding creep resistance at high temperatures allows heavy loads up to 1600°C depending on atmosphere. • Typical products: hand basin support, wash basin setters, batts, caps, connectors	SC 100RG
• Nitride bonded SiC: the outstanding creep resistance at high temperatures allows heavy loads up to 1550°C and provides excellent oxidation resistance. • Typical products: columns, wash basin setters, batts, caps, connectors	APTASINIT

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

IMERYS Ceramics

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