

**MAFTEC®** - Mitsubishi Alumina Fiber Technology. **MAFTEC®** was developed in the 1980's by Mitsubishi Plastics Inc. for long term high or cyclic temperature operation. **MAFTEC®** "Polycrystalline Alumina Fibers" exhibit excellent thermal stability, resiliency, erosion resistance and mechanical strength at temperatures to 1600°C - 2912°F.

**MAFTEC®** is a mullite fiber. Mullite is a stable material that does not change molecularly through the temperature range, up until it melts (1850°C). The silica in **MAFTEC®** is contained within the structure of Mullite and is not allowed to form free silica. **MAFTEC®** fiber diameter averages 5 microns.

### MAFTEC® SYSTEMS

Polycrystalline Alumina Fiber (Mullite)

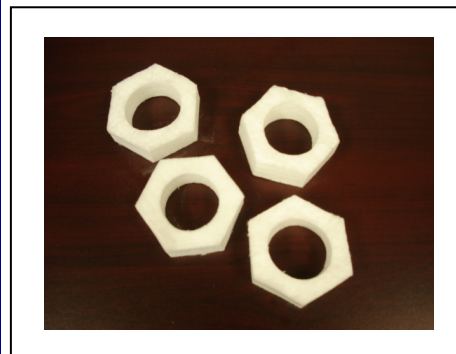
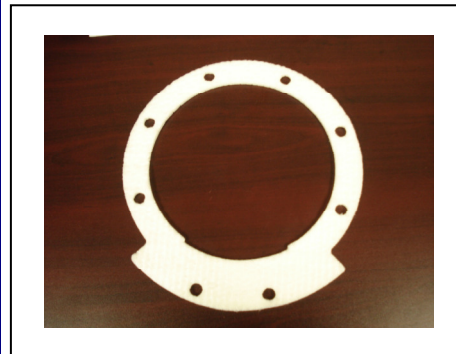
- **Service temperature range** - up to 1600°C - 2912°F continuous.
- **Extremely low shrinkage** - 1% at 1400°C - 2552°F. 1 ½% at 1600°C - 2912°F.
- **Resiliency Performance** - to 1300°C.
- **Higher Tensile Strength** - maintaining lining integrity.
- **Extreme Weight Reduction** - lining densities of 8-10#/cu.ft compared to monolithic of 150-160#/cu.ft.
- Total **Thermal Shock** Resistance
- **Installed** easily and quickly in all temperature environments.
- **Low, Low, Low shot** content due to manufacturing technology.
- **Weight** and thickness tolerances to ensure value.

### ONCE AGAIN

- **1% Shrinkage at 1400°C.**

- **Improve Safety, Quality, Cost**
- **Reduce** down time, repair and replacement cost
- **MAFTEC®** systems provide the Solution.

### GASKETS



**MAFTEC®** Gaskets are produced from **MAFTEC®** blanket or **MAFTEC®**OBM (Organic Binder Material). **MAFTEC®** OBM is blanket with a small percentage of organic binder to refine sizing and density. The integrity of the **MAFTEC®** blanket increases gasket life and performance.

**MAFTEC®** gaskets, depending on volume, can be hand cut, steel die stamped or water jet cut. Stellar Canada has the full capability to supply sheets, blankets or whatever shapes are required.

### MODULES



**MAFTEC®** Modules are produced from **MAFTEC®** blanket. Typical module sizing is 12 x 12 x preferred thickness but 12 x 24 is a standard and custom sizing can be fabricated as required. The modules are supplied with or without weld-on or "H" bracket retention systems.

The consistency and strength of **MAFTEC®** blanket combined with extremely low shrinkage permits the use of 7 or 9.33# density modules opposed to competition 10-12# modules.

Stellar Canada Inc has the full capability to supply autocad drawings to determine exact bills of material and simplify field installation.

### INDUSTRIES SERVED

- |                            |                    |                        |                           |
|----------------------------|--------------------|------------------------|---------------------------|
| ☞ Refining - Petrochemical | ☞ Non-Ferrous      | ☞ Zinc                 | ☞ Precast Manufacturing   |
| ☞ Rock Products            | ☞ Die-Casting      | ☞ Boiler Manufacturing | ☞ Mineral Processing      |
| ☞ Chemical                 | ☞ Power Generation | ☞ Primary Aluminum     | ☞ O.E.M. Furnace Builders |
| ☞ Steel                    | ☞ Incineration     | ☞ Secondary Aluminum   | ☞ Cremation               |