



An employee of Stellar Industries in Millbury, Mass., readies beryllia ceramic plates from Brush Ceramic Products for metal deposition. After metalization, Stellar will produce laser diode submounts from these materials. (below center)

Medical

- Advance in medical technology is fueling growth for high performance materials
- Aging of the baby boom generation will require greater levels of medical services and related demand for instruments and devices

TMI: Providing Specialty Metals to a Critical Market

Recent developments in cardiac implant components are leading to new opportunities for technologically advanced specialty metals producers. Technical Materials, Inc., already a leader in producing highly reliable specialty metals for a wide range of other industries, is gearing up to capitalize on this and other medical applications.

To meet this market's critical needs, TMI has developed specialized equipment for electron beam welding, milling and cladding of materials such as niobium, titanium and specialty stainless steels. Applications range from state-of-the-art surgical instruments to disposable medical test devices.

TMI offers medical customers extensive manufacturing and quality capabilities and technological support.

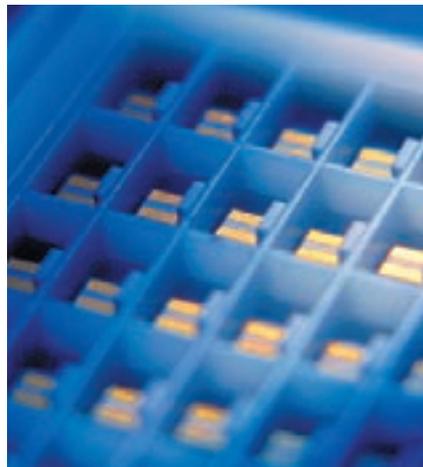
Brush Wellman Ceramics for High Tech Laser Applications

In diverse markets such as medical, military and entertainment, demand is climbing for solid state laser equipment that is smaller, more powerful and precise.

Brush Ceramic Products, the world leader in the manufacture of laser bore products for the gas laser industry, is leveraging its materials expertise into the solid state sector. Pressed ceramic plate materials from Brush provide a key enabler for the solid state technology's increasing thermal and electrical frequency requirements.

Manufacturers such as Stellar Industries produce solid state laser submounts from pressed beryllia ceramic plates supplied by Brush Ceramic Products in Tucson, Arizona. The submounts require extremely high thermal conductivity and also double in function to electrically isolate the laser diode from a metallic heat sink.

"As refinements in solid state technology continue to evolve and additional segments of the gas laser industry convert to solid state, ceramic materials from Brush will play a greater and more critical role in our Company's success," commented Ron Visser, President, Stellar Industries.



The medical profession relies on components, devices and instruments made with TMI specialty metals and beryllia ceramics from Brush Ceramic Products.