

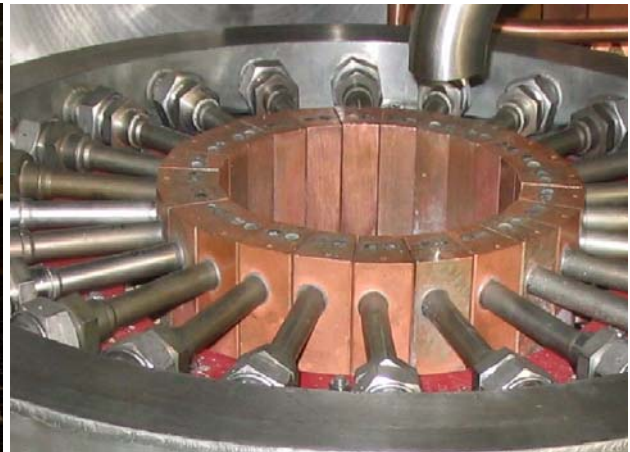


## Technology K2146: Titanium Powder Manufacturing

Titanium Powder Manufacturing is an improved method for manufacturing high grade titanium (Ti) powder with a high relative density of 96% - 98.5% and hardness value of 98 – 103 HRB compared to existing powders. The Ti powder can be used for various powder metallurgy methods such as metal injection molding (MIM) and thermal spray coating. Proprietary method enables use of titanium in numerous industrial and commercial applications where formerly costs had made it prohibitive.

This improved method for manufacturing Ti powder provides:

- High relative density of 96% - 98.5%.
- Rockwell B Hardness value of 98-103 HRB compared to existing powders.
- Manufactured in fewer steps + minimal material waste and post-processing of manufactured parts.
- Production cost savings estimated near 50% compared to traditional machining methods.
- Makes intricate designs possible & other materials can be added to make alloys as desired.
- Minimal retooling and training costs if presently using powder injection methods.
- 7 patents and 3 patent applications.
- Products being manufactured & sold to Hewlett Packard, Toyota and Samsung Electric.



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