

Hot-pressed Boron Nitride/silica composites

The technology involves a choice of BN powder with correct purity, oxygen content and extent of crystallization, choice of high purity silica powder with required particle size and crystallinity, processing of composite powder with required composition with optimized milling parameters. The technology also involves the hot pressing of the homogenized powder with optimized parameters. The product stands as an cost effective indigenize replacement for imported M26 grade BN.

Salient Features

It has isotropic properties, higher mechanical strength and lower erosion rate (~20%) compared to imported material.

Applications:

- Electric propulsion thrusters
- High voltage electrical insulators
- Dielectric applications of glass and silica based substrates

Technology transfer from ISRO

ISRO is willing to offer the knowhow of this technology to suitable entrepreneurs/industries in India. Capable manufacturing industries interested in acquiring this knowhow may write with details of their present activities, requirements and plans for implementation, infrastructure and technical expertise available with them, their own market assessment, if any, and plans for diversification to the address given below.

For further details, please contact:

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