

# International Advanced Research Centre for Powder Metallurgy & New Materials (ARCI)

Balapur P.O., Hyderabad – 500005, Telangana, India



## Compaction Processing of Ceramic Spools

### Overview

High purity alumina are compaction processed into alumina spools for high temperature applications. Centre produces spools on a continuous basis as per the orders from In-house and overseas.

### Key Features

- Density greater than 99% of theoretical
- Complex die design
- Uniaxial compaction
- Optimised sintering schedule
- High electrical resistance and moderate thermal shock



*Digital photograph of uniaxial press used for pulleys compaction*

### Potential Applications

- Heating elements winding pulleys
- High temperature furnace fixtures



*Digital photograph of ceramic pulley*

### Intellectual Property Development Indices (IPDI)

- IPDI level: 10

Status	1	2	3	4	5	6	7	8	9	10
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### Centre for Ceramic Processing (CER)

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