## **Standard Gerotors**

Powder Metal (PM or sintered steel) gerotors are perfectly suited for applications which have been subjected to rigorous testing & validation for many thousands of dyno hours and test miles. i.e. OEM production series engines.

PM parts are manufactured by compressing fine steel powder to a required shape and subsequently heating to fuse together. It is a very fast and low cost way to make complex parts but the material is porous and brittle in comparison to wrought billet steel.

The development and durability testing performed by OEMs ensures these parts will not fail under normal operating conditions. However, when engine performance increases problems occur...





Powdered Metal used for Sintering

**UK Designed & Manufactured** 

Sintering Furnace







**Increased Performance Engines:** 

- Higher speeds = Crank 'whip'
- High cylinder pressures = Increased Crank flex
- More bearing clearance = More crank 'whip'...
- More Torque = Higher Torsional Vibrations
  Beyond scope of stock damper



Crank nose bending from increased gas forces leads to gerotor misalignment: - increases contact loads Excessive torsional vibration 'rattles' gerotors during operation creating high impact forces - further increasing contact loads



PavPal

VISA



