GKN SINTER METALS

Tech Sheet

Precision Powder Forged Connecting Rods

The Challenge:

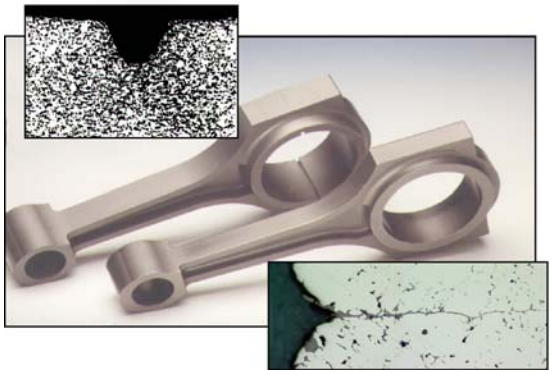
Provide superior-performing, high-strength connecting rods incorporating net-shape features that allow for design flexibility while eliminating costly machining operations.

The Solution:

GKN Sinter Metals' powder forged connecting rods feature high strength, a precise outer profile, straight through pin and crank bores with minimal machining stock, patented forged fracture splitting notch, forged datum side bore chamfers and forged oil distributing characteristics.

Higher Performance:

- Proven track record in high-stress, high performance engine applications with fatigue endurance limits exceeding 300MPa
- Patented forged fracture splitting notch provides reliable cap fracturing performance and improved crank-bore roundness
- Improved machinability maximizes finish and machining throughput

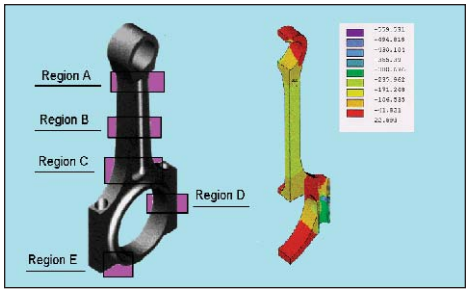


Cost Savings:

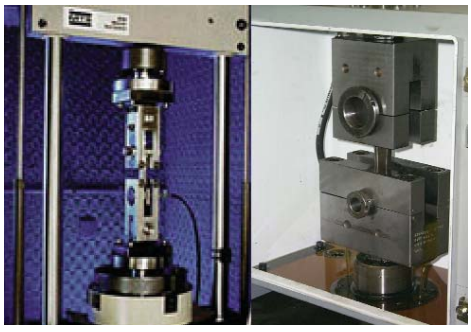
- GKN's net-shape manufacturing of powder forged connecting rods reduces cost by minimizing process steps without sacrificing product features or performance.
- Fewer finish machining operations required - 20% less stock removal when compared to traditional forged connecting rods
- Lower capital investment and less manufacturing floor space needed for finishing operations
- Lowest **total cost** - when finish machining included

Precision:

- Precise outer profile delivers reliable datum features for consistent placement in finish machining fixtures
- Process and dimensional stability **eliminate** weight milling and weight classifying
- Consistent metallurgical properties achieved in a high-volume production environment



Product design and finite element analysis



In-house testing and validation

For more information regarding P/M solutions from the world's largest full-service supplier of precision powder metal components, please contact:

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