



MPP POWDER METALLURGY GEARS



ADVANTAGES OF POWDER METALLURGY GEARS

- Provides true involute tooth profile and full fillet radius
- Eliminates or reduces machining costs as PM Gears may be produced net or near net shape
- Scrap/Waste is reduced as typical PM gears utilize 97% of raw material
- P/M is a green technology. Reduced energy costs
- Incorporate geometry options to reduce weight or produce shapes not practical to machine
- PM Gears interconnected porosity provides excellent sound and vibration dampening
- Gearing can be combined with other mechanical features such as Keyways, Cams, ratchets, alternative gear geometries, and compound/multi-level Gears

CAPABLE OF FORMING A WIDE RANGE OF GEARS

- Helical Gears up to 30 degree
- Spur Gears
- Bevel Gears
- Internal Gears
- Pinion Gears
- Crown Gears



MULTIPLE MATERIAL OPTIONS

- MPP HP1 - High Performance Steel
- Nickel Steels - Medium to Heavy Duty
- Copper Steels - Medium Strength
- Stainless Steels – Ferritic and Austenitic
- Brass - Decorative and corrosion resistant





HEAT TREAT OPTIONS

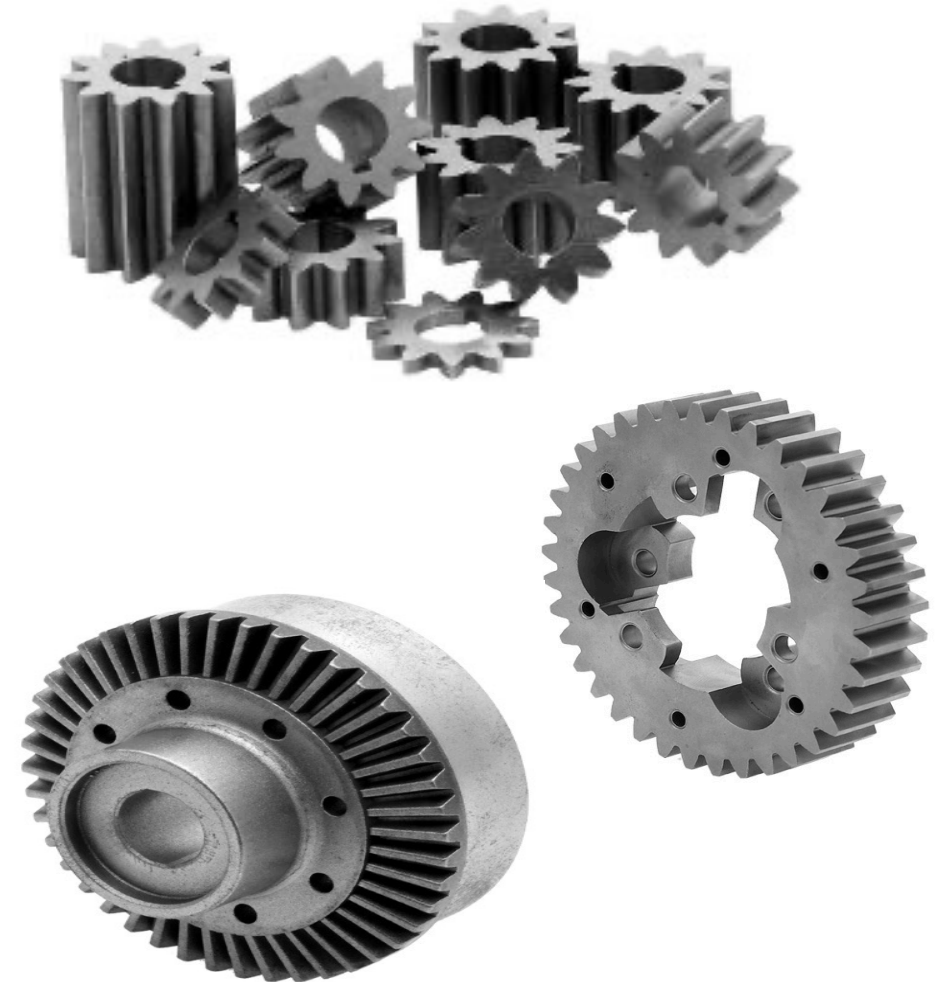
- Conventional Heat Treatment
- Carburizing Heat Treat
- Induction Heat Treat
- Steam Treat
- Sinter hardening alloys





FINISHING PROCESSES

- OD/ID Grinding
- Fine Grinding & lapping
- Hard Turning
- Milling
- Drilling
- Multiple Machining Centers





APPLICATIONS

- Hydraulic Gear Pumps & Motors
- Industrial and Agricultural Pumps
- Automotive Dual Clutch Transmission Gears
- Hydrostatic Transmission Lawn Tractors
- Electric Motors, Actuators, Solenoids
- Power Tools



Hydrostatic Transmission Lawn Tractor

Thank You!