

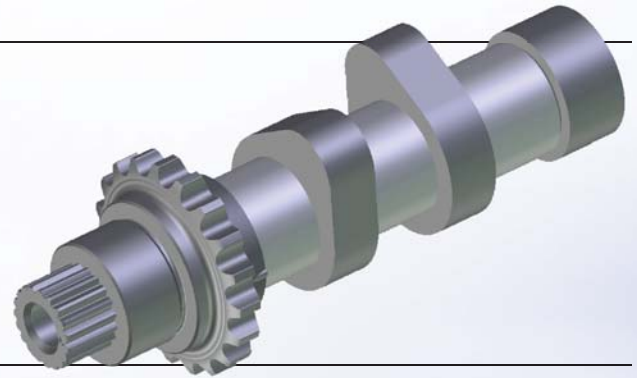


## PM Components for Assembled Camshafts

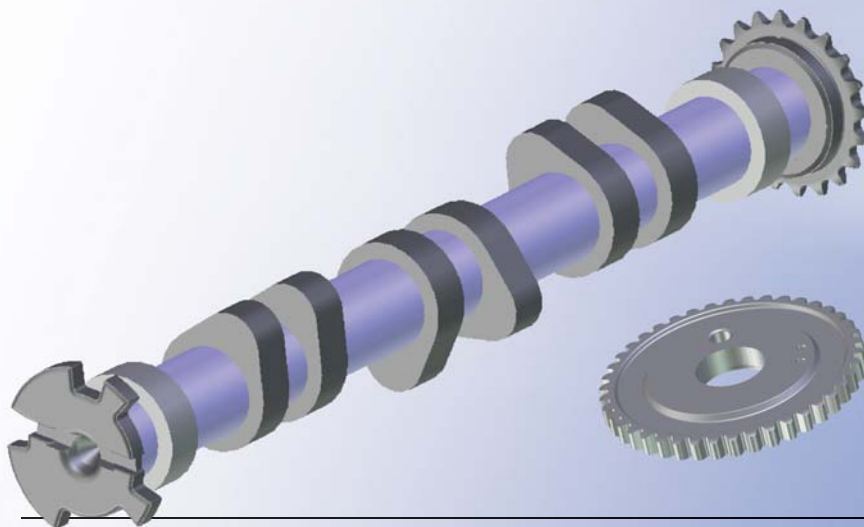
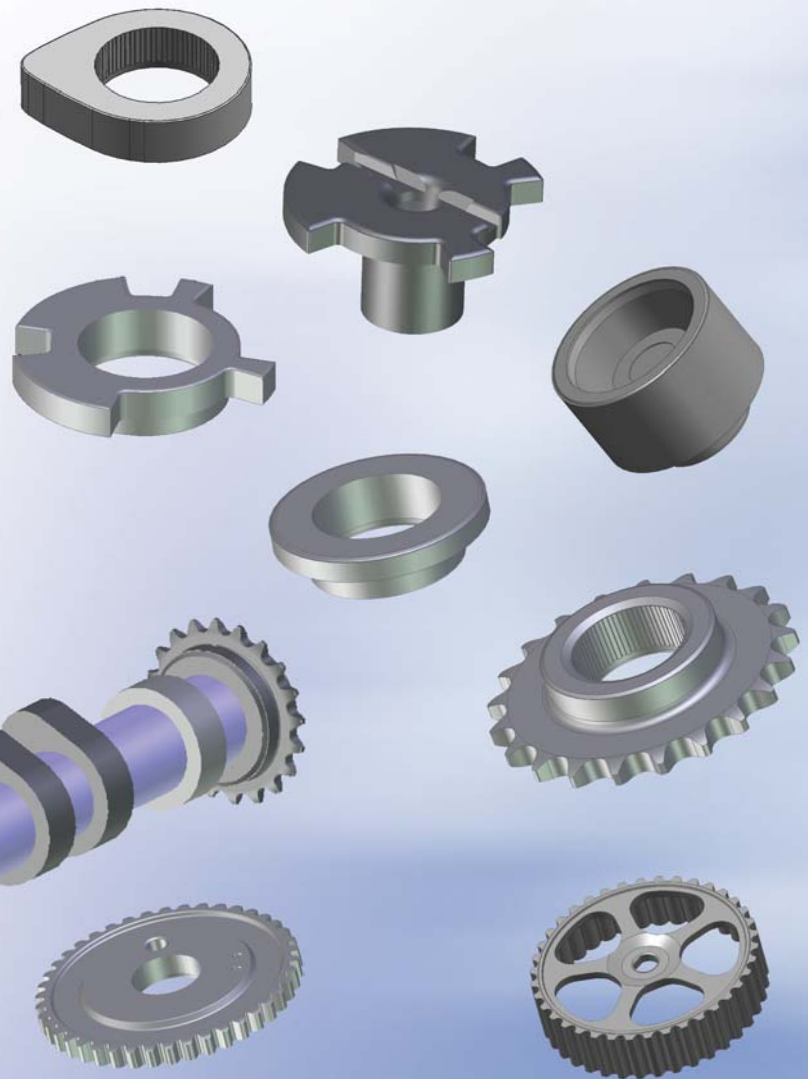
Prod. Group No. 1500, 1200, 1999, 1260, 1180



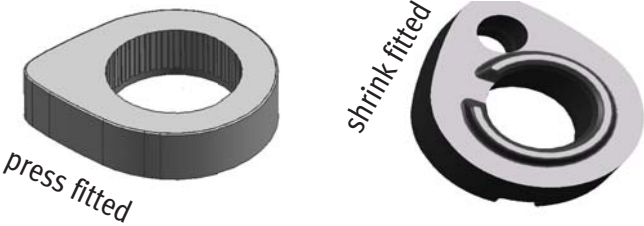
High performance components for automotive, two-wheeled and industrial applications



- Cam Lobes
- Sprockets
- Washer
- Pulleys
- Sensor Rings
- Transmitter



## PM Components for Assembled Camshafts



### Cam Lobes

- Near net shape (no or only reduced grinding)
- Material used PMET49C6E
- UTS > 1000 MPa
- Hardness > 450 HV30
- Density > 7.3 g/cm<sup>3</sup>

### Transmitter

- Multi level press technology
- Exposed to alternating, high torque (>75 Nm)
- Combination of 2 functions (pump drive & sensor ring)
- Integration of positioning aid possible





### Washer / Sensor Rings


- Tight tolerances on edges and chamfers
- Ready to assemble design
- Soft magnetic properties deliverable


### Sprockets

- Highly wear resistant through case/ induction/ sinter hardening or ion-nitrating
- Integrated bearing seat or center holes

### Pulleys

- Better surface condition by steam treatment
- Integrated bearing seat or center holes





### Zero Backlash Gears

- Reduced noise emission
- Densified spline for highest wear resistance
- Hardness > 650 HV5
- Surface density > 7.7 g/cm<sup>3</sup>