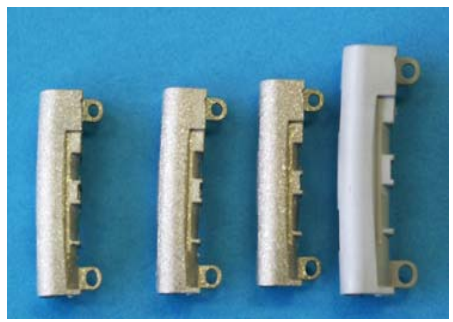
Application in MIM Examples

- Medical Technology
- Automotive Industry
- Dental Technology

- Precision Mechanics
- Electrical Industry
- Sports Industry

- Aerospace Industry
- Watch/Fashion Industry
- Environmental Technology



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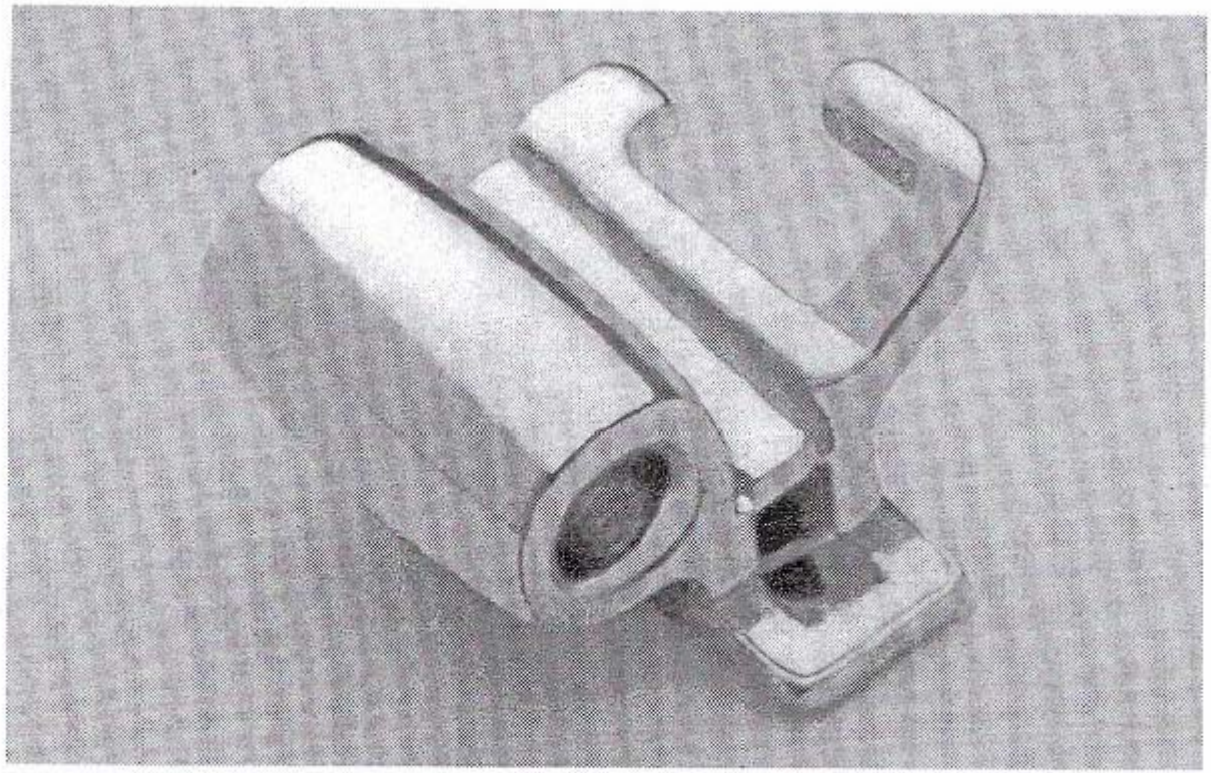
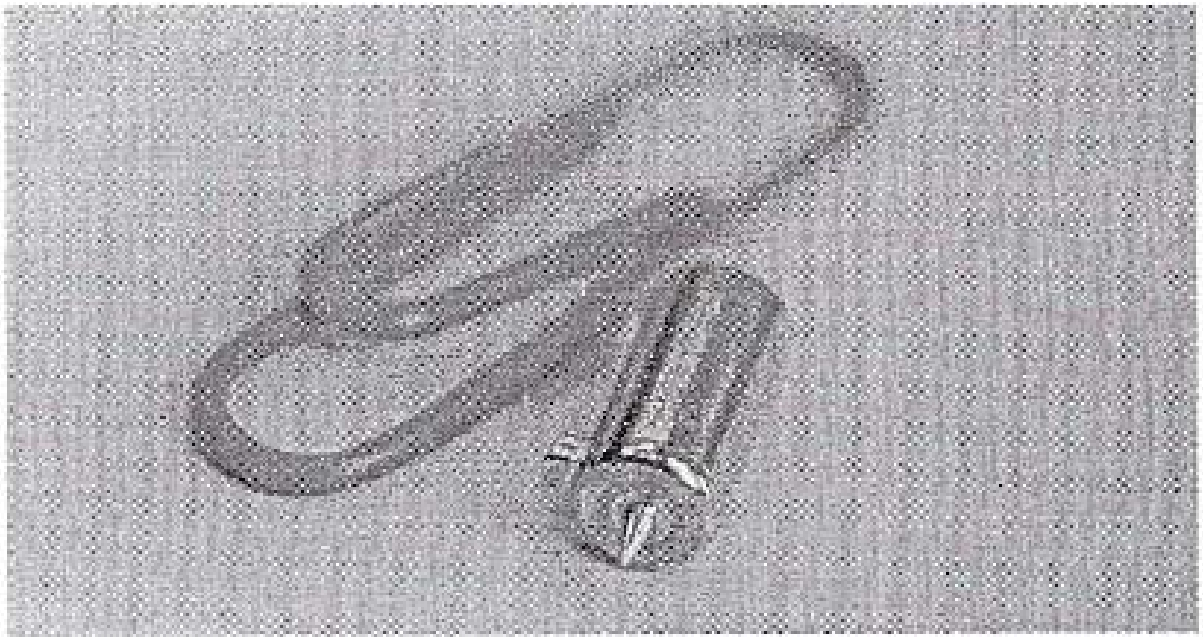
Orthodontics



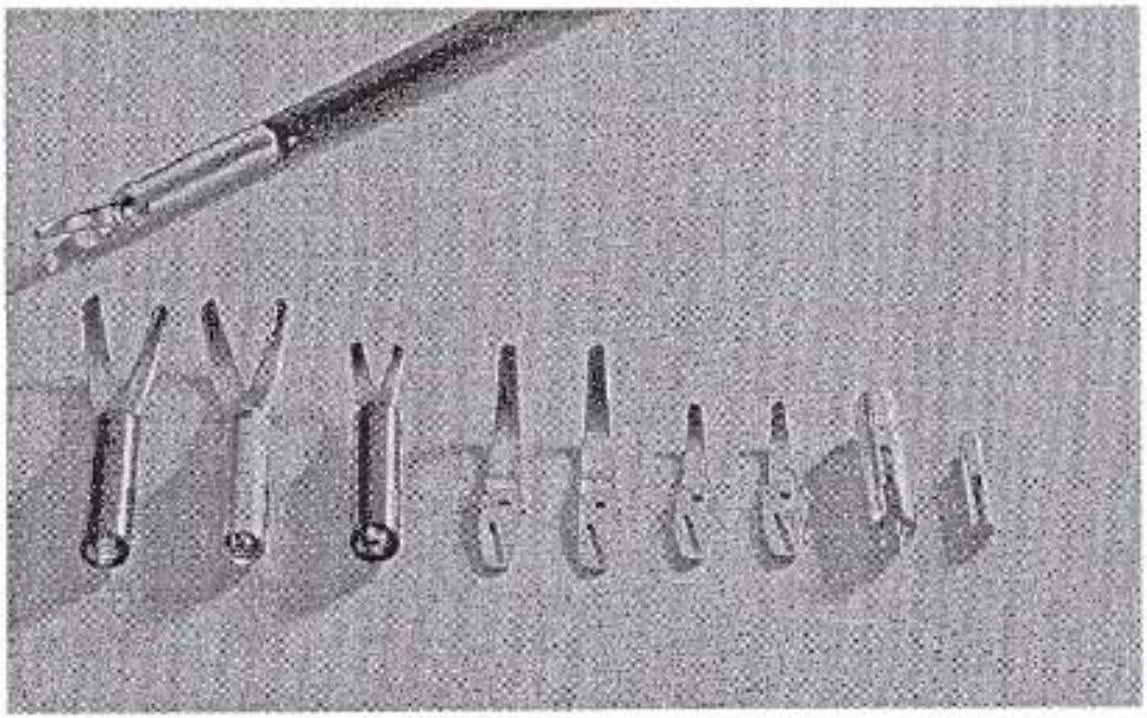
Orthodontic bracket for dental care formed out of stainless steel using PIM (photograph courtesy of Unitek).

Automotive: Airbag Firing Pin



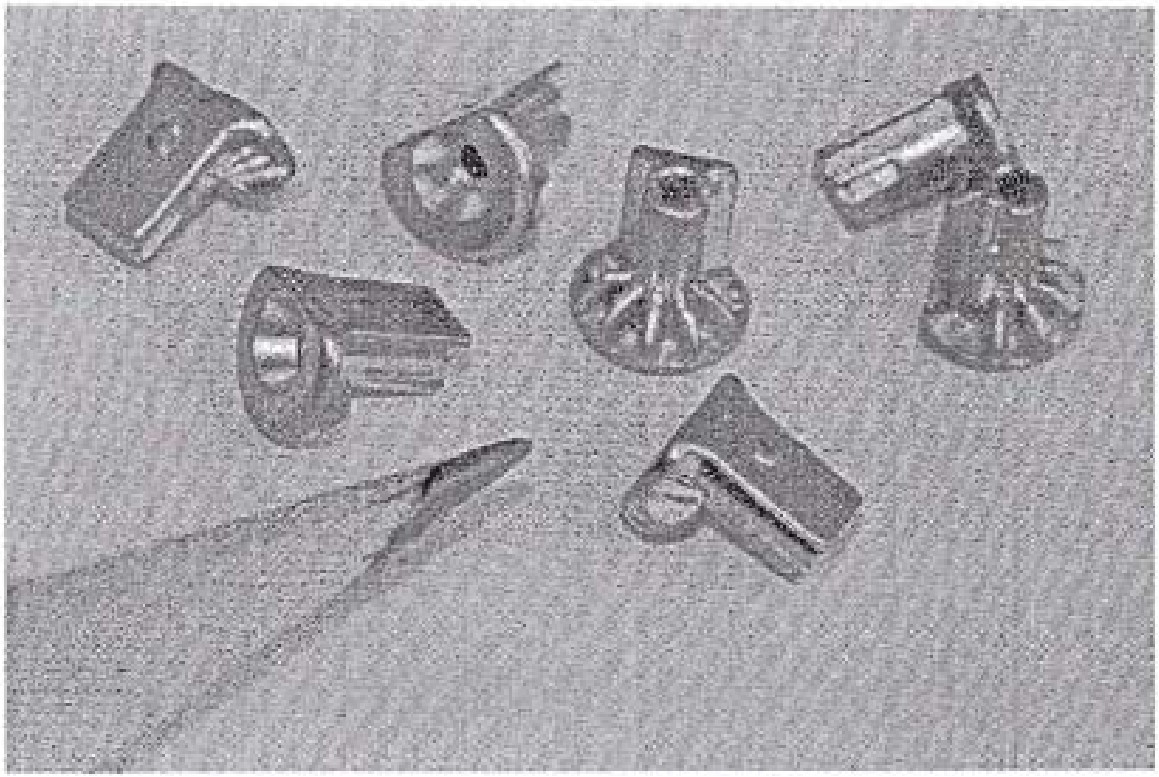
A PIM airbag actuator that initiates the rapid chemical reaction responsible for filling an airbag in an automobile crash (component courtesy of Mu-Jen Yang).

Medical: Laparoscopy Scissors



Surgical scissor parts formed by PIM from stainless steel for laparoscopic surgical procedures (picture courtesy of Metal Powder Industries Federation).

Consumer: Toothbrush Gear



PIM gears from stainless steel for an electric toothbrush.

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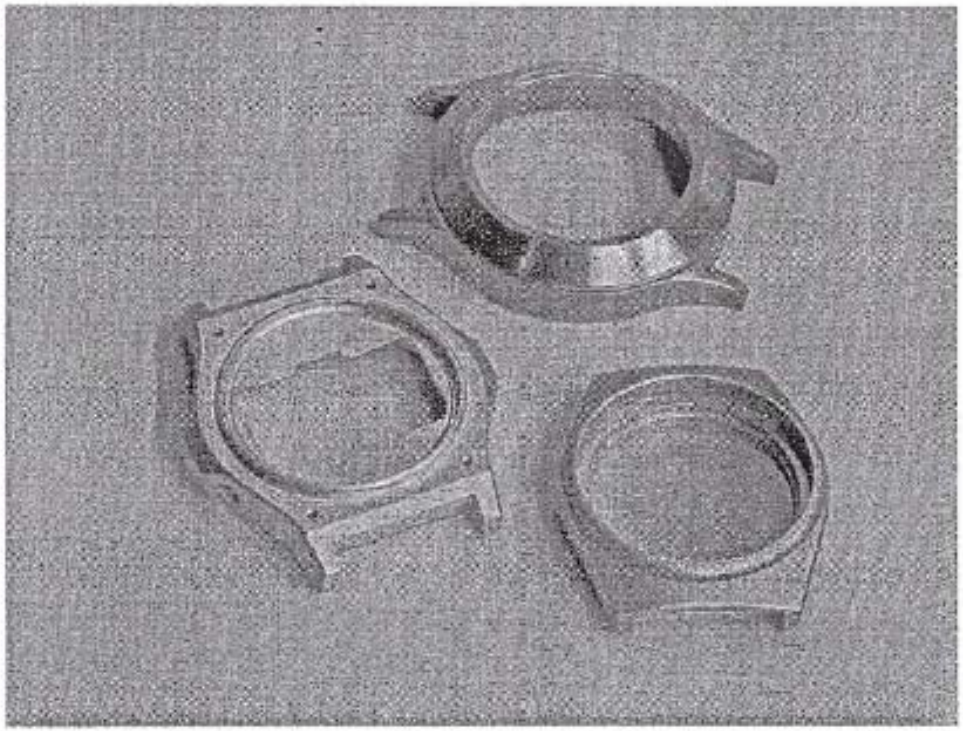
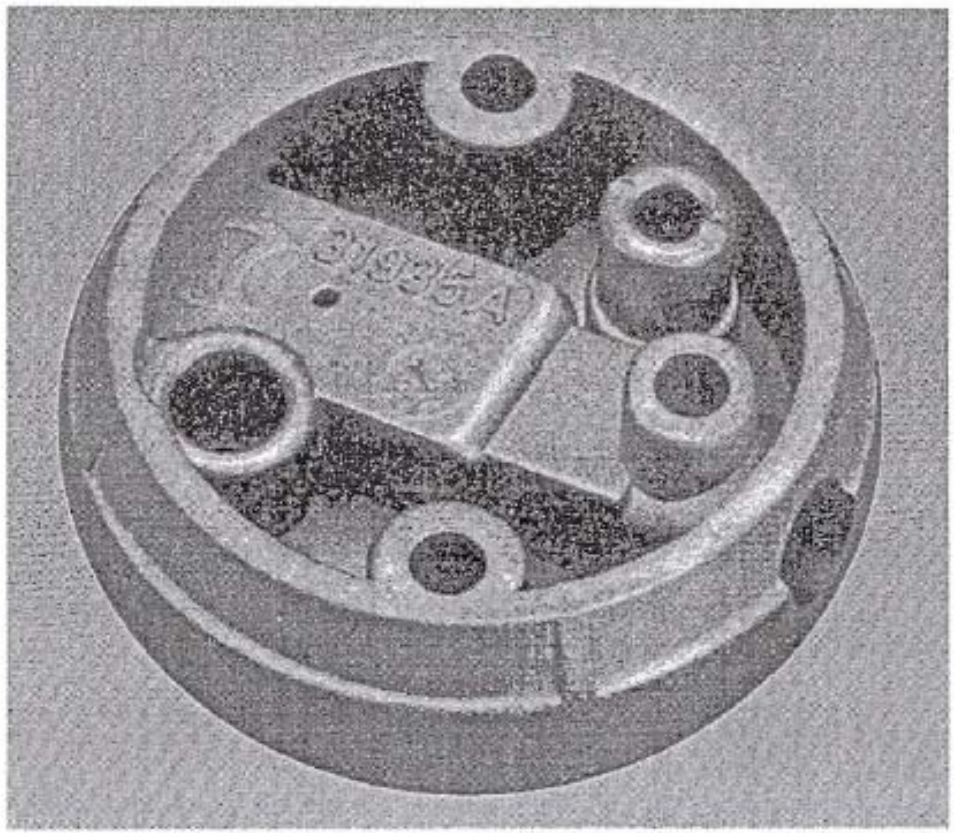
Consumer: Watch Cases



Watch cases from PIM stainless steels for a variety of watch makers and designs (components courtesy of Timex, Arburg, and Advanced Materials Technologies).

Automotive: Burner Chamber Cover



A stainless steel (316L) PIM burner cover for use on cars and trucks (redrawn with permission of GKN Sinter Metals).

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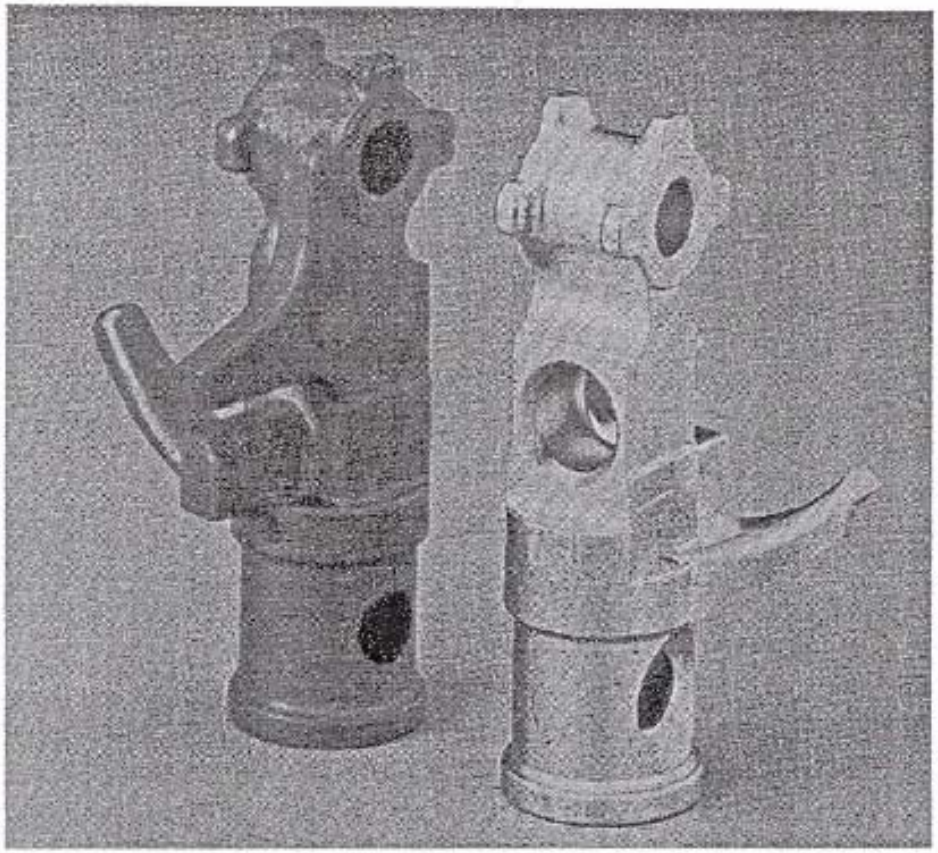
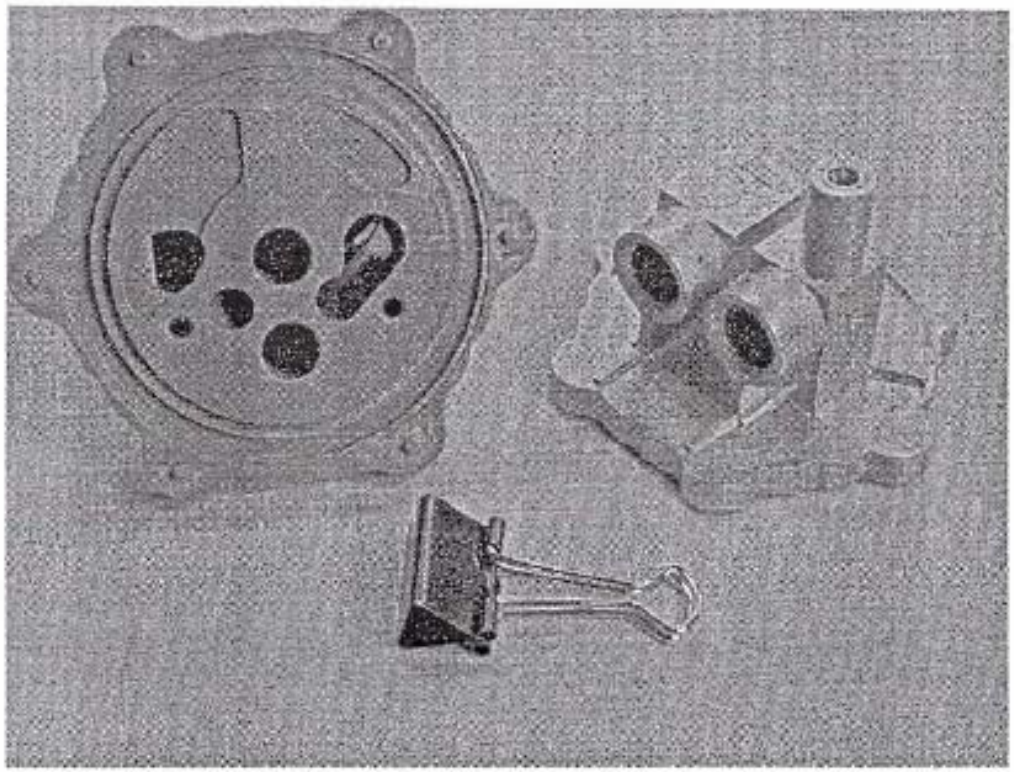
Automotive: Steering System Clevis



Steering system clevis formed from a low alloy steel (picture courtesy of Metal Powder Industries Federation).

Industrial: Pump Body



Pump body formed from 316L stainless steel by PIM showing the bottom on a molded body and a perspective view on a sintered body (components courtesy of Phillips Metal Injection Molding).

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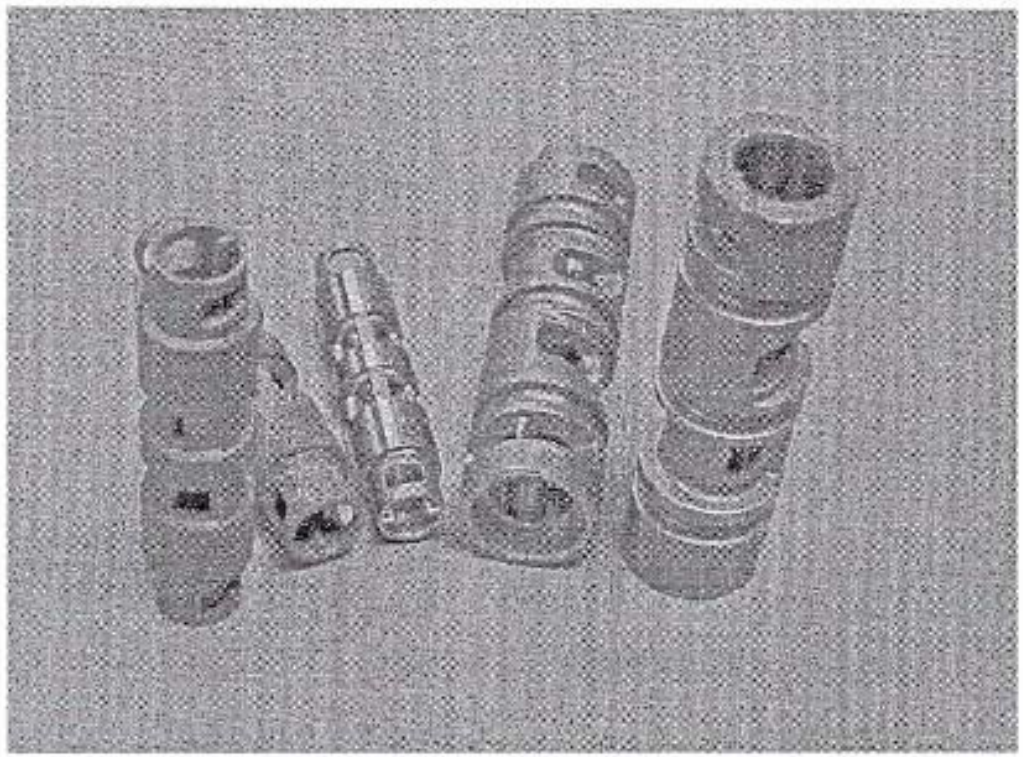
Consumer: Shower Valve



Shower valve system consisting of a stem and spool formed by PIM from a stainless steel (picture courtesy of Parmatech).

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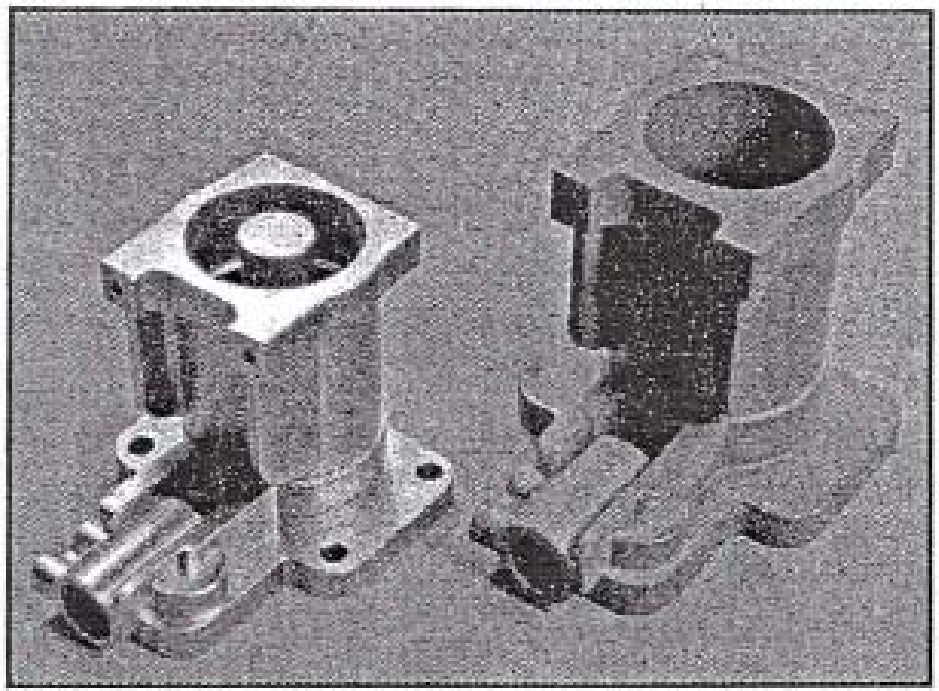
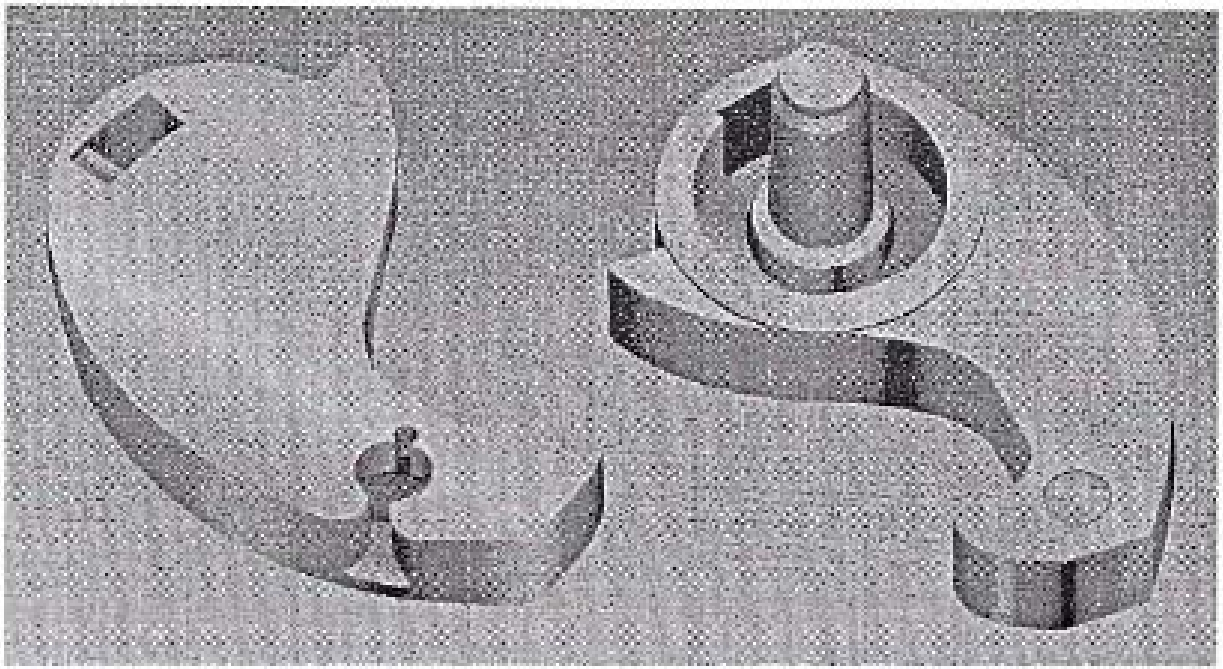
Instrumentation: Solenoid Valve Body



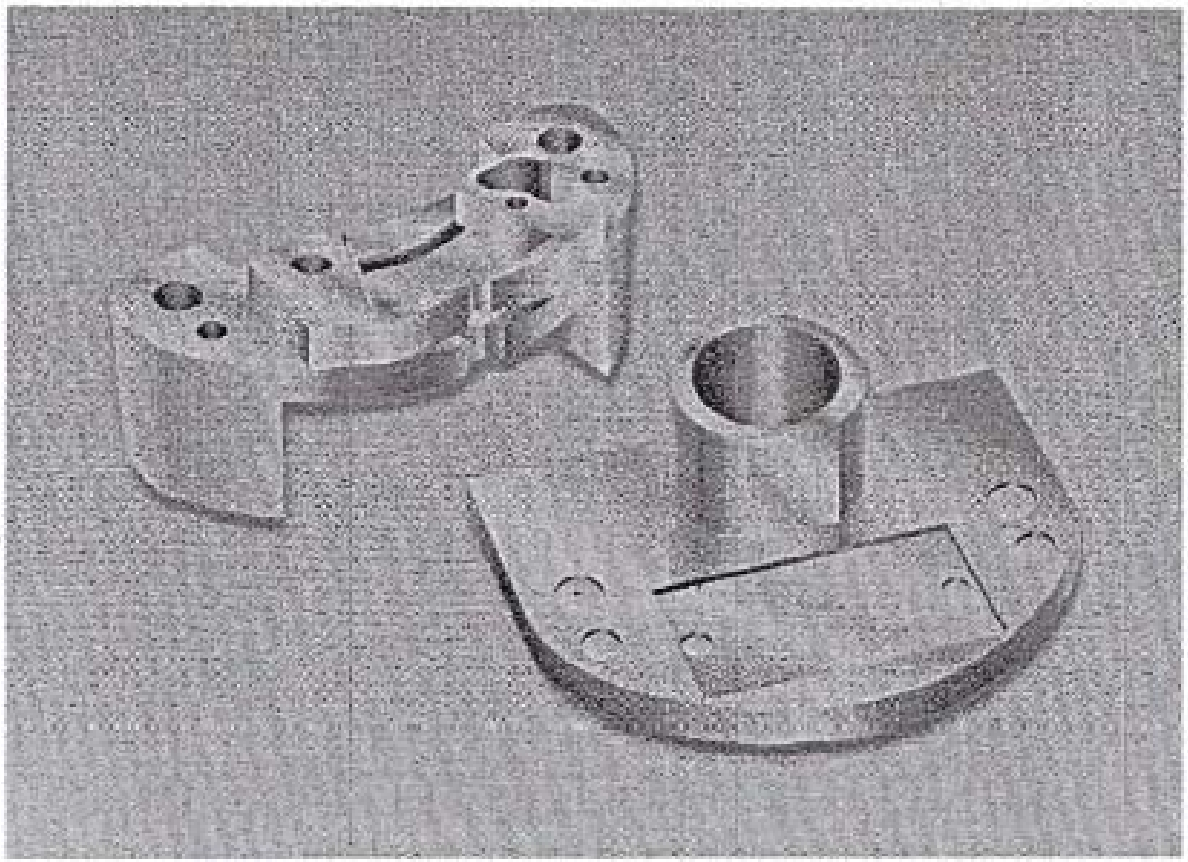
A valve body in the green condition (right) and after sintering with the addition of a post and a few drilled holes (left). The sintered version is smaller in size, but similar in shape (photograph courtesy of Kay Leong Lim).

Automotive: Convertible Roof Clip



Top and bottom views of a PIM low alloy steel convertible roof clip in the as-molded condition (component courtesy of Arburg and GKN Sinter Metals).

Automotive: Cruise Control Sensor Mount



A PIM nickel-iron steel sensor mount for cruise controls on an automobile.

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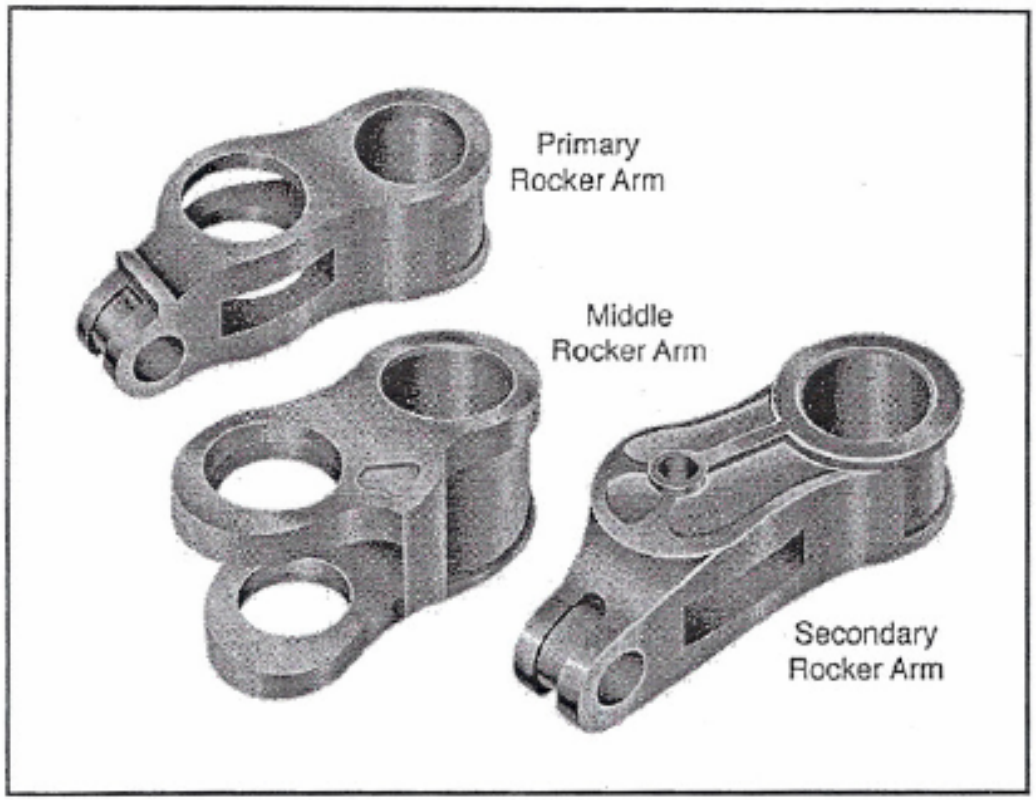
Automotive: VVT Rocker Arms



Rocker arms for a high performance engine produced via PIM (redrawn with permission of Nippon Piston Ring).

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