

DIRECT METAL LASER SINTERING

STAINLESS STEEL 17-4PH

PRODUCT SPECIFICATIONS

PRODUCT DESCRIPTION:

Protolabs' Stainless Steel 17-4PH material is used in our Direct Metal Laser Sintering process. It is available in micro-resolution.

APPLICATIONS:

Used in our micro-resolution DMLS process, Protolabs' Stainless Steel 17-4PH allows for production quality metal parts with the finest features and tightest tolerances in the industry. 17-4PH is a martensitic precipitation hardening stainless steel that is known for its hardness and corrosion resistance. Applications include medical, aerospace, and mechanical components. To increase mechanical properties, 17-4PH can be hardened with heat treatment. H900 heat treatment will be standard, but parts can be left in the annealed condition upon request.

KEY PRODUCT BENEFITS

- Heat treated for full hardness and strength
- High hardness
- Corrosion resistant

PROPERTIES:

| Standard | Ultimate Tensile Strength (ksi) | 0.2% Yield (ksi) | Elongation (%) | Hardness (HRC) |
|----------|---------------------------------|------------------|----------------|----------------|
| AMS5604G | 190 | 170 | 8 | 40–47 HRC |