

# STAINLESS STEELS

## Advamet® or Advacat® 440 Datasheet

Advamet® is a wax/polymer binder system;

Advacat® is a POM based (catalytic) binder system.

Both systems are compliant to MIPF Standard 35: MIM-440

### Typical Chemical Composition (post Sinter)

| C (%)    | Cr (%) | Mo (%)   | Si (%)  | Mn (%)  | Ni (%)  | Nb (%)  | Fe (%)  |
|----------|--------|----------|---------|---------|---------|---------|---------|
| 0.9-1.25 | 16-18  | 0.75 max | 1.0 max | 1.0 max | 0.6 max | 3.5 max | balance |

Other elements not to exceed 1.0% combined.

All percentages are in weight percent.

### Typical Mechanical Properties

| Nominal Typical Values | Density              | UTS   | YS    | Elongation |
|------------------------|----------------------|-------|-------|------------|
|                        | (g/cm <sup>3</sup> ) | (ksi) | (ksi) | (in./in.)  |
| Heat-treated*          | 7.5                  | 190   | 170   | <1         |

\*austenized, oil quenched and tempered at 325°F (160°C) for 2 hours

Actual results depend on processing – sintering and heat treatment cycles – used.



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