



## **AMTEC PRO 3038 LOW TEMPERATURE SPRAY POWDER MACHINABLE BUILD-UP FINAL COAT**

### **General Characteristics**

---

Amtec PRO 3038 is a special “inert gas atomized” inconel® powder used as a build-up over the initial PRO 3000 Bond Coat. It can easily bond to the initial bond coat and is a general purpose, build-up powder that has good resistance to oxidation and has excellent wear resistance and very low shrinkage. The particle size distribution in the powder is designed to eliminate fuming during the spraying process. It can be used as an all around coating where both wear and corrosion are problems. It is a prime powder for building up of extremely worn areas, and has excellent machinability.

### **Procedure**

---

Follow the operating instructions for the Amtec PRO TORCH exactly for easy and successful results. Do not overheat the part being built up over 500°F, or the powder may crystallize and the process may fail. Use a 500°F Tempel Stick to check your heat input, and if it gets to the above temperature range, let the part rotate in the lathe until it cools, then continue with the build-up. If the initial bond coat has been applied, then the final coat must be done immediately. If the part is left overnight, then re-machining will be necessary, so it is important to finish the project started.

### **Application**

---

Amtec PRO 3038 is used primarily as a build-up on any type of shafting material except pure copper. It must be applied only after the initial bonding powder has been applied. The low temperature spray process was designed primarily to rebuild worn areas on shafts. Areas are worn due to loose bearing races, abrasion from packing glands, scars from bearings and bearing seals, or any area that wears from friction. The amazing thing about the low temperature process is that a worn shaft can be placed in a lathe, prepared, sprayed, machined, and put back in service in less than one-half hour, and the part never gets warmer than 500°F.

### **Typical Properties**

---

<b>Nominal Chemistry:</b>	<b>Carbon .02, Chromium 14.0, Iron 10.0, Silicon 1.0, Nickel – Balance.</b>
<b>Hardness: (Rockwell B)</b>	<b>74-82 Rb</b>
<b>Deposit Density:</b>	<b>7.4 g/cc</b>
<b>Particle Size:</b>	<b>-140+325 mesh</b>
<b>Melting Temperature:</b>	<b>2540°F</b>
<b>Packaging:</b>	<b>Available in 1 lb. and 5 lb. containers</b>

---

**CONFIDENTIAL INFORMATION**

**Subject to change without notice**