AMTEC PRO 3060 LOW TEMPERATURE SPRAY POWDER

CORROSION RESISTANT OVERLAY FINAL COAT

General Characteristics

Amtec PRO 3060 is a special, "inert gas atomized" nickel base powder having Chromium, Molybdenum and Silicon elements added for superior corrosion resistance and also resistance to scratching and high temperature. It is a build-up powder to be used over the initial PRO 3000 Bond Coat. It can easily bond to the initial bond coat and designed for build-up where a corrosion resistant mirror finish is required or desired. The metallurgical structure of this powder makes it the best for thin, smooth and pore-free overlays. It is excellent for a final layer on cylindrical surfaces that require a fine finish. The particle size distribution in the powder is designed to eliminate excessive fuming during the spraying process. It is a prime powder for building up where a 316L like deposit is required. Amtec PRO 3060 machines easily and finishes to a high polished surface.

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 3060 is used primarily as a final coat 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 that are worn due to loose bearing races, abrasion from packing glands, scars from bearings and bearing seals, or any area that wears from friction. If a large build-up is necessary, it is recommended that the initial build-up be done with PRO 3038 or PRO 3028, and then the final .0020 to .0030 finished with the PRO 3060. 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

Nominal Chemistry:	**Carbon 0.03, Chromium 17.0, Nickel 12.0, Molybdenum 2.5, Silicon 1.0, Iron - Balance.**
Hardness: (Rockwell B)	**83-92 Rb**
Deposit Density:	**7.6 g/cc**
Particle Size:	**-140+325 mesh**
Packaging:	**Available in 1 lb. and 5 lb. containers**