



# SYNCO THERMAL SPRAY WIRES





# SYNCO THERMAL SPRAY POWDER

## 1. Alloy 625 Wire

Alloy 625 is a non magnetic, corrosion and oxidation resistant, nickel based alloy. Excellent corrosion resistance. \* Wire spray coating can withstand many corrosive environments. In alkaline, salt water, fresh water, and neutral salts and in air almost no attack occurs. \* Provides resistance to oxidizing environments

## 2. Babbitt Wire

Babbitt Wire of (70, 30)/ (80, 20) in 1.6mm/2mm available. Automatic Wire Flame Spray Equipment is used to apply this coating. Particularly suitable for coating on capacitors, resistors, panels etc. \* Produces dense coatings which are suitable for high speed and heavy duty bearings. \* Bearing Reclamation.

## 3. Molybdenum Wire 99% Purity

It is frequently used as a bond coat on parts such as Synchro Rings/industrial Gears/Clutch Parts etc due to its very good bond strength between the surface of base metal and sprayed metal. Though molybdenum is a costly wire, the sprayed thickness required for excellent bonding is only 0.015". It has low friction characteristics and is wear resistant. Available in 2mm and 3.17mm sizes.

## 4. Monel 400\*

High strength and toughness from cryogenic temperatures to 1800 degrees F (980 degrees C), good oxidation resistance, exceptional fatigue strength, and good corrosion resistance. \* Chemical and pollution control equipment, ash pit seals, nuclear reactors, marine equipment, ducting, thrust reverser assemblies, fuel nozzles, afterburners, spray bars. \* Excellent finishing.

## 5. NiAl 95/5\*

Dimensional Restoration. \* Good Bond Strength. \* Oxidation and Abrasion Resistant. \* Self Bonding Material. \* Excellent Bonding. Available in 1.6mm

## 6. Pure Zinc Wire\*

Steel Protection against corrosion in aggressive atmospheric conditions. \* Electrical conductivity. \* Available in 1.6mm and 3.12mm. This wire can be sprayed using Synco Flame Spray System.

## 7. SS 316L

Produces corrosion resistant work hard enable finish. Excellent machinability. \* Dimensional Restoration \* Good Corrosion Resistance.

## 2.8 SS 420

Coatings are highly wear resistant and show good corrosion resistance and anti frictional qualities, final machining by wet grinding. Available in 1/8" and 1, 6 mm, other diameter on request. C Mn Si Cr Fe <.5 1 <1 13-14 bal.



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### 2.9 SS 80

High carbon steel for reclamation of machine element parts requiring hard surfaces. Finish by wet grinding Available in 1/8" and 1, 6 mm, other diameter on request. C Mn Si Fe .8 .55 .21 bal

### 2.10 SS440

Coatings are highly wear resistant and show very good corrosion resistance. This is recommended for applications that require good wear resistance and very good corrosion qualities. C Mn Si Cr Ni Mo Fe .44 <1 <117, 5 11, 2 bal

### 2.11 SIL 8016(Stainless Steel Wire)

High carbon steel for reclamation of machine element parts requiring hard surfaces. Finish by wet grinding Available in 1/8" and 1, 6 mm, other diameter on request. C Mn Si Fe .8 .55 .21 bal

### 2.12 SS 440 Wire

Coatings are highly wear resistant and show very good corrosion resistance. This is recommended for applications that require good wear resistance and very good corrosion qualities. C Mn Si Cr Ni Mo Fe .44 <1 <1 17, 5 1 1, 2 bal.

### 2.13 Ni Al 80/20 Wire

Produces coatings which resist corrosive gases and oxidation in temperatures up to 980 Deg C. Used as bond coat for ceramic materials. Coatings are machine able.

### 2.14 NiCrAl

Cr 20%, Al 7% and Ni Bal Resistant to Oxidation and corrosion at high temperature. Undercoat for ceramics topcoat. Recommended for salvage and build-up of miss machined parts or worn machine parts.

### 2.15 NiAlMo

Mo 5.0%, Al 5.5% Ni bal Recommended for salvage and build-up of both machinable and grindable carbon steels. Good resistance against wear and particles. Used for high strength and low shrink coatings.

### 2.16 Synco Alcr3 Wire

Fe-Cr-Al It is an Arc spray wire providing very dense coatings and high bonding strength, a wire for multipurpose arc spray applications. It can be used as a bonding layer as well as final (single) coating. It is highly corrosion and heat resistant (+1000 Deg C). Coatings can be machined. Tensile Strength 600-800 Mpa. Melting Point 1500 Deg C.

### 2.17 Synco S23 Wire

This is a solid wire used for Arc Spray applications. Coatings are highly wear and corrosion resistant. Good antifrictional properties. An all purpose stainless steel coating wire. Finished by wet grinding only. For bearing applications and general wear applications this is a universal spraying wire (bond coating required). Tensile strength- 32-33 Mpa. Melting Point-1500 Deg C Hardness 40-43 Rc.



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Other Nickel Wires available with us:

- 1) Synco 60-10 Ni Cr Fe.
- 2) Synco 80-20 Ni-Cr.
- 3) Monel Ni Mo.
- 4) Synco 82 Hastelloy Type.

Other Stainless Steel Wires

- 1) Synco S33-Fe-17Cr
- 2) Synco S53 FeCrNiMn
- 3) Synco S163 FeCrNiMo
- 4) Synco S 183 FeCrNiMoNbMn

Other Carbon Steel Wires

- 1) Synco S203 FeMn
- 2) Synco S253 Fe-Cr
- 3) Synco 5003 Fe-C-Cr
- 4) Synco 6003 Fe-C-Cr-Mo-W

## SYNCO INDUSTRIES LIMITED

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