

# **Brazing Alloy Strip** for Carbide Tool Manufacturing, Electrical Copper Bus Bar Applications, Pre-Form Shape Stampings, and More.

Turn to the **BRAZING Pros** 

# INTRODUCING:

# SINGLE AND TRIMETAL BRAZING STRIP

### Over 100 Years of Expertise, Experience and Performance Included

For results-driven performance, you can trust the experts at Harris Products Group for all of your brazing needs. For over 100 years, Harris has been manufacturing quality brazing alloys and equipment that have been proven to perform for generations. That's why Harris Products Group is the global leader in production brazing.

The people who trust us are not just using our products. They appreciate the feeling of confidence knowing that they are using brazing products that have demonstrated proven performance time and time again for over a century. With our history of excellence, Harris Products Group's brazing strip is the proven choice for industry leaders in carbide tool manufacturing.

### The Benefits of Strip and Trimetal

Our pre-formed brazing alloys are designed to improve your operational efficiency.

On every application, you will get:

- A consistent size and shape
- The proper amount of filler metal
- A uniform distribution of the braze alloy
- · Correct positioning on each production piece

Not only does this make your operations more efficient, but it also helps reduce your alloy expenditures.



## **PHOSCOPPER STRIP**

# For standard copper to copper or copper to brass, PhosCopper is available in rods, wires or strip.

The phosphorous content determines the precise melting temperature and performance of the alloy. The high purity of our PhosCopper results in  $\pm$  6°F /  $\pm$  3.3°C of the specified liquidus temperature, assuring consistent brazing performance with every application and a significant reduction in rejects in brazing operations.

In addition to industry leading chemistry tolerances, Harris also tightly controls the thickness and width tolerances to ensure the shape meets our customer specifications.





USED IN Power transmission engines, distribution boards and with copper bus bars.

PhosCopper Strip	Minimum	Maximum
Thickness	0.15 mm (0.005")	0.80 mm (0.031")
Width	5 mm (0.196")	45 mm (1.77")
Package Size*	MDF Spool - 0.7Kg (1.5 lbs.)	MDF Spool - 1.5Kg (3.3 lbs.)
	Coil - Any size	Coil - 20Kgs (44 lbs.)
Minimum and Maximum Order Quantities	0.7Kg (1.5lbs.)	Any quantity

PhosCopper is available in 5% (Stay-Silv® 5) and 15% (Stay-Silv® 15)

\*Bigger package sizes available and min/max may change depending on strip size

# **HIGH SILVER STRIP**

**Used for brazing carbide and diamond tools to steel and available in rods, wires and strips**, Safety-Silv<sup>®</sup> high silver strip has a low brazing temperature, good fluidity, wettability and high tensile strength. Because Harris utilizes only pure base metals, you can expect consistency in product quality, composition, chemistry, dimensions and performance.

#### High Silver Strip options available:

25 (BAg-37)	30T (BAg-34)	49N
25T	34T	50N
30 (BAg-20)	38T (BAg-34)	56T

49Mn (BAg-22) 50N (BAg-24) 56T (BAg-7) pictured





High Silver Strip	Minimum	Maximum
Thickness	0.15 mm (0.005")	0.45 mm (0.017")
Width	5 mm (0.196")	45 mm (1.77")
Package Size*	MDF Spool - 0.7Kg (1.5 lbs.)	MDF Spool - 1.5Kg (3.3 lbs.)
	Coil - Any size	Coil - 20Kgs (44 lbs.)
Minimum and Maximum Order Quantities	0.7Kg (1.5lbs.) (1.5lbs. or 22.5 t.o.z)	Any quantity

\*Bigger package sizes available and min/max may change depending on strip size

# **HIGH SILVER TRIMETAL STRIP**

High silver trimetal (also referred to as Trimet) strip is designed to absorb the vibration when a tool is in operation which reduces the occurrence of cracks in the carbide segments.

Harris<sup>®</sup> high silver trimetal strip has similar chemical composition to Safety-Silv<sup>®</sup> 49M, so it has a low brazing temperature, good fluidity, wettability and high tensile strength. However, it has an intermediate copper layer between two high silver layers. The addition of the



copper layer reduces the residual cooling tensile caused by the different expansion rates between the base metal (usually steel) and the segments (usually tungsten carbide).

Harris High Silver Trimetal Strip packaging is specially designed for automatic continuous brazing.



High Silver Trimetal Strip	Minimum	Maximum
Thickness	0.30mm (0.011")	0.40mm (0.015")
Width	2.50mm (0.098")	45mm (1.77")
Package Size*	MDF Spool - 0.7Kg (1.5 lbs.)	MDF Spool - 2Kg (4.4 lbs.)
	Coil - Any size	Coil - 20Kgs (44 lbs.)
Minimum and Maximum Order Quantities	0.7Kg (1.5lbs.) (1.5lbs. or 22.5 t.o.z)	Any quantity

\*Bigger package sizes available and min/max may change depending on strip size



## Orders: 1.800.733.4043

### **THE HARRIS PRODUCTS GROUP**

www.harrisproductsgroup.com



A LINCOLN ELECTRIC COMPANY

# THE ALLOYS YOU TRUST. THE FORM YOU NEED. THE QUALITY YOU EXPECT.

- High purity metals
- Tightly controlled tolerances
- Rigorous quality control
- Stocking programs available
- Large selection for a wide range of applications including washers, discs and shims



### Harris Alloys Are Available in a Variety of Thicknesses and Widths

**THICKNESS** Thicknesses range from 0.15 mm (0.005") to 0.80 mm (0.031")

WIDTH Widths range from 2.50 mm (0.098") to 45 mm (1.77")

# **ABOUT** THE HARRIS PRODUCTS GROUP

The Harris Products Group has been manufacturing quality braze filler metals in the United States for over 100 years. We are leaders in developing brazing and soldering products to meet the industry needs for new metal joining methods. Certified to ISO 9001 and ISO 14000 standards, we have developed proprietary manufacturing technology to ensure the highest standards of quality and traceability.

Our experienced sales and technical personnel are trained to assist our customers in producing sound, cost effective brazed assemblies. Our international presence means we can assist in our customer's operation anywhere in the world. Harris is backed by the financial strength and technical resources of The Lincoln Electric Company -

THE GLOBAL LEADER IN WELDING SYSTEMS AND FILLER METALS.



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