



## **WEAR PLATE PHYSICAL PROPERTIES**

Lamina wear strips are made from C1018 molthrop quality extra fine grain cold rolled steel electroplated with a bronze alloy consisting of approximately 89% copper and 11% tin. The hardness is R/C 24 to 28. Lamina bronze has a natural lubricity and is ideal when used against hardened steel. We do recommend any good grade of cling oil suitable for machine way applications.

The thickness of the bronze on the wear strips are .008 to .010. By using this thickness the bronze does not funnel out under heavy loads. The strength of the steel backing keeps surface distortion to a minimum. Because most precision tool slide applications require either reworking or replacement if they develop so much as a .003 wear, Lamina-Bronze thickness is more than adequate.

The superior wear properties of Lamina Bronze is not affected in working temperatures up to 400° F.

## **TOLERANCES**

Lamina FP strips are finish ground top and bottom with milled sides. The thickness tolerance is normally held to +.000 -.002. (Thickness tolerance of +.000 -.001 can be furnished at an additional cost. Please specify when this tolerance is required.) The width tolerance is +.000 -.060.

Lamina side strips (SP 200) are finish ground on all four sides with thickness tolerance held to -.018 to -.020 and width tolerance to +.000 -.005. All plates regardless of thickness have ground surfaces that are parallel within .001 as measured in a length of 96 inches.

## **SIZES**

FP 100 series wear strips consist of 9 standard thicknesses available in 15 widths, making 130 different inch sizes. Nine metric thicknesses and 13 metric widths add an additional 112 sizes. All Lamina wear strips are available in maximum 96 inch lengths or cut exactly to your size requirements with no cutting charge.

## **MODIFICATIONS**

Lamina wear strips can be ordered with oil grooves milled to your print. When making your own oil grooves or drilled and tapped holes be sure to use sharp high-speed cutting tools to prevent distortion. Scraping if necessary should be done with a carbide scraper. Grinding plates for fitting purposes is possible on a magnetic chuck. Lamina wear strips are magnetic on all four surfaces. However, the same care should be exercised as with any other cold rolled steel base material. If excessive stock removal is required (not recommended) straightening may be necessary. When removing stock by grinding, we recommend wet instead of dry grinding. Lamina will also make the wear strips with plating on more than one surface.

## **ADVANTAGES**

- Stocked in lengths up to 8 feet long
- Many widths and thicknesses available
- Elimination of grinding (completely finished)
- Less handling
- Close tolerances
- Consistent quality control
- Low friction: Co-efficient of friction .2518
- Copper-tin alloy resists corrosion
- Copper-tin alloy is a natural lubricant surface
- Excellent wear resistance
- High load factor 2700 PSI
- High hardness (R/C 24 to 28)
- No galling or snow balling
- Free-running
- Non-seizing
- Non-abrasive
- Magnetic — can be held on magnetic chuck
- Lower cost
- Makes you more competitive in your market
- High acceptance by industry — over 35 years of proven quality