

Issued October 2000
Supersedes May, 1970



SULZER METCO
The Coatings Company™

Metcoloy® #2 Wire

Technical Bulletin #10-023

Metcoloy® #2 Wire

Metcoloy #2 is a high chrome stainless steel wire manufactured exclusively for flame spraying. It has excellent wearing qualities and fair corrosion resistance. It is the best all-purpose steel for machine element work.

Metcoloy #2 is certifiable as meeting Department of Defense specification MIL-W-6712B, Table I, Stainless Steel, chrome.

Metcoloy #2 can be sprayed with any Metco metallizing gun using any fuel gas.

Applications

Use Metcoloy #2 wherever a hard coating is required, even where corrosion resistance is not necessary. It has high strength, high elongation and low shrink, with practically no tendency to crack on shafts. It has been used successfully on machine elements such as journal surfaces of all kinds, cylinder liners, pistons, valve stems, pump plungers, hydraulic rams, crankshaft bearings and many others.

Typical Composition

Carbon	.35%
Phosphorus	.02%
Sulfur	.02%
Manganese	.35%
Nickel	.5%
Chromium	13%
Silicon	.5%
Iron	Balance

Physical Properties

Melting point:	2600° F. (approx.)
Coating finish, ground:	Good
Density: gm/cc	6.74
Typical macrohardness:	Rc 33
Shrink: in./in.	.0018
Coating tensile strength - psi:	40,000

Spraying

Parameters for spraying Metcoloy #2 are shown in the Metco **Gun Instruction Manual**.

Finishing

Metcoloy #2 may be ground, or machined at low speed with carbide tools. Use the parameters in the **Flame Spray Handbook**, Vol. I, under "Finishing".

Hazards

Chromium alloy fumes are extremely hazardous. Complete respiratory protection must be provided for all personnel wherever chromium alloys are being sprayed.

The information provided in this document is for the convenience of Sulzer Metco's customers for the purpose of evaluation and proper use of the Sulzer Metco product(s) described herein. This document and the information contained herein is the property of Sulzer Metco and shall not be used, disclosed, or reproduced in whole or in part for any purpose other than for the use of said product(s). Nor shall this information be used in any way with goods not manufactured and sold by Sulzer Metco. Sulzer Metco makes no warranties, express or implied, as to the information contained herein.