

# Material Product Data Sheet

## Nickel Chromium Molybdenum Alloy Wire for Welding Overlay

### Welding Products: Metco 8622

#### 1 Introduction

Metco™ 8622 is a solid wire specially designed for welding systems. The composition of this wire is similar to Inconel 622, having a chemistry of nickel with chromium, molybdenum and tungsten as principle alloying elements. It is used to produce weld deposits on substrate alloys of similar or dissimilar compositions such as nickel-chromium-molybdenum alloys, carbon steels, stainless steels, low alloy steels, etc.

Metco 8622 offers an excellent corrosion resistance in oxidizing and reducing media. It also provides superior resistance to pitting, stress and crevice corrosion.

#### 1.1 Typical Uses and Applications:

Metco 8622 is used as a corrosion resistant overlay on structures such as:

- Boiler water walls
- Interior walls of continuous and batch pulp digesters

#### Quick Facts

Classification	Wire, nickel-based
Chemistry	NiCrMo
Manufacture	Drawn
Form	Solid wire
Purpose	Corrosion resistance
Process	Welding – TIG and MIG



## 2 Material Information

### 2.1 Chemical Composition

Product	Weight Percent (nominal)						
	Ni	Cr	Mo	Fe	W	Co	Mn
Metco 8622	Balance	21	14	2.5	3.0	2.0	0.5

### 2.2 Available Wire Diameters and Other Properties

Product	Wire Diameter	Similar To:
Metco 8622	1.14 mm (0.045 in)	Inconel 622

### 2.3 Key Selection Criteria

- Excellent corrosion resistance in both oxidizing and reducing environments.
- Superior resistance to pitting and crevice corrosion.

### 2.4 Related Products

- Oerlikon Metco also produces Metco 8622 sized for thermal spray applications. This can be helpful for jobs where both thermal spray coatings and weld overlay build-up deposits will be used.
- Other Oerlikon Metco thermal spray wires proven for boiler and digester applications include Metco 8625 (solid wire similar to Inconel 625), Metco 8500 (solid wire; Ni-45Cr) and Metco 8452 (cored wire; Ni-50Cr).

## 3 Commercial Information

### 3.1 Ordering Information and Availability

Product	Order No.	Wire Diameter	Package Size	Availability	Distribution
Metco 8622	1078226	1.14 mm (0.045 in)	30 lb (approx. 13.5 kg) spool	Special Order	Global

### 3.2 Handling Recommendations

- Store in the original container in a dry location.

### 3.3 Safety Recommendations

See the SDS 50-1553 (Safety Data Sheet) in the version localized for the country where the material will be used. SDS are available from the Oerlikon web site at [www.oerlikon.com/metco](http://www.oerlikon.com/metco) (Resources – Safety Data Sheets).

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