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Postalloy® 207 is a high alloy, work-hardening austenitic manganese steel hardfacing electrode. It can be used equally well for joining and buildup/surfacing of carbon, low alloy and manganese steels. Weld deposits made with Postalloy® 207 are a modified chromium-manganese chemistry providing an excellent combination of weld metal strength and ductility. Work-hardens rapidly under repeated impact. The yield strength is higher than ordinary manganese alloys providing greater resistance to mushrooming when subjected to compressive loads and repeated impact. Ideal as a cushioning or buffer layer on manganese steel parts that must be rebuilt on a repetitive basis. Since it will not embrittle until 1000°F (538°C), it will act as an insulator to the manganese base metal in helping it keep below 500°F (260°C) during the welding operation.

## Specifications

### Product Type

Flux-coated electrode: Work-hardening austenitic manganese steel hardfacing electrode  
Also available as a semi-automatic wire - Postalloy® 2865-FCO.

### Weld Deposit Properties

Tensile Strength: 130,000 psi  
Yield Strength: 95,000 psi  
Elongation: 35%  
Hardness as deposited: 20Rc  
Work hardens in service to: 45-55Rc  
Machinability: Poor  
Deposits cannot be flame-cut

## Applications

Fabricating manganese steels  
Manganese to mild or low alloy steels  
Sizing screens  
Grizzly bars  
Steel mill wobblers

## Postalloy® 207 Welding Parameters

Current: AC or DC Reverse

Diameter	Amps
1/8" (3.1mm)	90-135
5/32" (4.0mm)	125-160
3/16" (4.8mm)	150-225

### Welding Procedure

Clean weld area. Do not preheat manganese steels. Maintain a short to medium arc. Direct the arc on deposited weld metal depositing 3 to 4 inches at a time (75mm-100mm). Interpass temperatures on manganese steel should not exceed 500°F (260°C) by skip-welding. Skip welding is advisable on large parts. Peening while hot helps shape the deposit and reduce stress. Cool slowly.

## Packaging Options

Diameter	Standard Packaging
1/8" (3.1mm)	Resealable Plastic Box
5/32" (4.0mm)	Resealable Plastic Box
3/16" (4.8mm)	Resealable Plastic Box

