



Exclusive Product Line that Combines
the Best in Toughness and Wear Resistance
for the Rail Industry

ManTrak 1N



- All position electrode for build-up, overlay and joining on manganese steels
- Excellent weldability with minimum fuming and low spatter
- Deposits are highly resistant to fatigue related compression and to battering wear

Versatile, all position nickel-manganese electrode used for heavy build-up, overlay and joining on Manganese steel trackwork.

It is highly resistant to fatigue-related compression and to battering wear and exhibits excellent weldability with minimum fuming and little, if any, spatter.

TECHNICAL DATA

Typical Values	
Hardness:	AD: 85-95 HRB WH: 45-50 HRC
Tensile Strength:	115,000 psi (793 N/mm ²)
Elongation:	45%
Current polarity:	AC/DC Reverse

DIAMETER	AMPS
1/8" (3.2 mm)	100-150
5/32" (4.0 mm)	150-200
3/16" (4.8mm)	200-250
1/4" (6.4 mm)	240-300

PROCEDURE FOR USE

PREPARATION:

Clean weld area. Remove cracked and fatigued metal, including prior weld deposits by using ChamferTrode® (AC/DC) or by grinding. Surfaces should be cleaned of all grease, dirt and scale.

TECHNIQUE:

To maintain low heat input, "skip" welding or "back-step" welding techniques could be used. Craters should be back-whipped.

POST-WELDING:

Allow parts to cool slowly.

TYPICAL APPLICATIONS

Applications include manganese railroad frogs, frog inserts and crossings.

