

AMTEC RAILTEC BUILD-UP CARBON STEEL

DC REVERSE OR AC ELECTRODE



General Characteristics

Amtec Railtec is a special build-up and underlay alloy, which is non-cracking and wear resistant, used on carbon steels up to .4 carbon content. This electrode is used as an economical build-up on surfaces subject to severe impact loads and metal to metal wear. The special coating produces a fast flowing weldment with a stable arc, free from spatter and an easily removable slag. Railtec provides perfect fusion with the base metal, and the beads are smooth and non-porous. The weld metal can be machined and forged.

Hardness (RC) - 16-19

Diameter		Amps (approx.)
(Inch)	(MM)	
1/8	3.25	80-110
5/32	4.0	140-160
3/16	5.0	160-190
1/4	6.0	180-220

Procedure

Clean the welding zone free from oil, rust and other contaminants. Parent materials that are susceptible to cracking such as cast steel and higher carbon steels, should be preheated to around 250°C (500°F). Maintain a short arc when welding using stringer beads when possible, however a weave of 3 times the diameter of the core wire may be used when building up large areas. Any number of layers may be deposited on top of each other provided that the flux is well chipped off between passes to make sure that there are no slag inclusions.

Application

For build-up on gears, couplings, shafts, tractor rollers, idlers, and sprockets, track wheels, and trencher bucket segments. Ideal for welding worn surfaces of carbon steels, such as rail ends, and carbon steel switch points, or as an underlay on any type of carbon steel prior to hardsurfacing.