

AMTEC 65 CHROMIUM-NIOBIUM HARDSURFACING

DC REVERSE OR AC ELECTRODE

General Characteristics

Amtec 65 is a unique combination of carbides in a homogeneous deposit that is used for extreme abrasion resistance. This electrode is a combination of chromium, molybdenum, vanadium, niobium and tungsten with a high carbon content that allows it to form a tight carbide structure that offers the ultimate combination of abrasion resistance and high temperature hardness retention. Amtec 65 maintains its hardness up to 1600°F (860°C), and the electrode produces a deposit that leaves very little slag which means more deposit for the money. Has metal recovery of over 190%.

Procedure

Clean the weld zone of all contaminants and remove previous hardsurfacing deposits by using Amtec 8 gouging rod. Another method would be to overlay previous hardsurfacing with Amtec 207, to give a good base to put additional hardsurfacing onto. Use a medium arc gap for best results. A 2 layer deposit is recommended where possible to give the best possible wear resistance. Do not exceed the 2 layer deposit due to the chance of weld deposit cracking. Deposits should be put down in stringer beads or large dot pattern. This electrode will cross check to stress relieve itself. This is normal with high hardness electrodes. Crack sensitive material should be preheated to 750-903°F (400-500°C) prior to welding.

Application

For final overlays on parts operating under extremely severe conditions such as fine particle abrasion found in the cement and brick industries. Excellent for sliding mineral wear with low to medium shock loads. Used on items handling hot coke, slag, and sinter-handling equipment. This electrode is for extreme abrasion and will take little impact.

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| Hardness (RC) 1st Pass | 64-66 |
| 2nd Pass | 66-68 |
| Wear Coefficient | 0.5% |

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|------------------------|-------------|-------------|-------------|
| Diameter (Inch) | 1/8 | 5/32 | 3/16 |
| (mm) | 3.25 | 4.0 | 5.0 |

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|-----------------------|----------------|----------------|-----------------|
| Amps (approx.) | 105-135 | 130-170 | 170- 240 |
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Subject to change without notice

Tip Color – Gold
Amtec 65 Imprint