



Shaft Keyway Crack

Weld metal with high toughness, high strength & ductility for joining dissimilar steels

Typical Applications:

Joining dissimilar steels, dies, tools, springs, machinable build-up & overlay.

Outstanding Features:

- Refined grain structure with improved strength and ductility.
- Superior crack resistance.
- Spray type metal transfer.
- Joining steels of unknown composition.
- Machinable built up and overlay.

Recommendation:

Frigid arc coating plus high alloy core generates highly ionized arc for spray transfer of weld metal. Addition of special micro alloying elements produces refined grain structure. Recommended for similar and dissimilar steels. Suitable for joining steels of different section thickness.

Procedure:

Clean weld area. Bevel heavy sections. Tilt electrode 10° - 15° in direction of travel. Burn-off rate is rapid and uniform permitting rapid advance with no "sticking" or "drifting". Restrict weaving to 2-3 X electrode diameter. Peen to relieve stresses. Slag releases easily. Restrict Preheat to 150°C max.

Recommended Amperages:

Size (mm)	I - Range	II - Range
2.50	60-70	45-60
3.15	80-100	70-80
4.00	120-145	100-120
5.00	170-200	145-170

Tensile Strength: 850 MPa (1,20,000 psi)