SelectWear 8620-S

Hardsurfacing / Flux Shielded / Submerged Arc

FEATURES

- Deposits a low alloy steel designed for the buildup of carbon and low alloy steels, especially AISI 8620 steel.
- Provides a tough underlayment upon which subsequent hard facing layers may be deposited, particularly in steel mill roll applications.
- Excellent compressive strength, and can also be used in some low stress metal-to-metal abrasion situations.
- Typical applications include steel mill rolls, shafts, wheels, and drums.
- Unlimited layers can be deposited with proper welding procedures.
- Deposit has good machinability and will not cross crack.
- Neutral fluxes are recommended.

DIAMETERS (in (mm))

3/32 (2.4), 1/8 (3.2)

POSITIONS



FLUX

Neutral flux

POLARITY

DCEP

HARDNESS

17-24 (4 layers) HRC

TYPICAL WELD DEPOSIT CHEMISTRY (WT%)

| Flux | С | Cr | Fe | Mn | Мо | Ni | Si |
|--------------|------|------|---------|------|------|------|------|
| Neutral Flux | 0.10 | 0.64 | balance | 0.82 | 0.19 | 0.49 | 0.71 |

TYPICAL MECHANICAL PROPERTIES

| Flux | Tensile Strength ksi (MPa) | Yield Strength ksi (MPa) | Elongation (%) | Weld Condition | PWHT Temp | CVN @ -20°F (-30°C) ft-lb (J) |
|--------------|----------------------------------|--------------------------------|-------------------|-------------------|------------------|-------------------------------------|
| Neutral Flux | 94 (652) | 79 (545) | 26 | As-Welded | - | 84 (114) |
| Neutral Flux | 94 (650) | 79 (542) | 26 | PWHT | 1050°F for 2 hrs | 83 (113) |

RECOMMENDED WELDING PARAMETERS

| Diameter in (mm) | Flux | Position | WFS* in/min (m/min) | Amps | Volts | CTWD* in (mm) |
|---------------------|--------------|-------------------|------------------------|------|-------|---------------------|
| 3/32 (2.4 mm) | Neutral Flux | Flat & Horizontal | 150 (3.8) | 400 | 31 | 1 - 1 1/4 (25 - 32) |
| 1/8 (3.2 mm) | Neutral Flux | Flat & Horizontal | 115 (2.9) | 500 | 33 | 1 - 1 1/2 (25 - 38) |

* WFS = Wire Feed Speed, CTWD = Contact Tip To Work Distance



Notice: Be sure to follow all your employers safety practices, policies and procedures when using this product. Refer to CSA W117.2 and ANSI Z49.1 Safety in Welding, Cutting and Allied Processes for further information and the manufactures SDS sheet. The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. Thus the results are not guarantees for use in the field. The manufacturer disclaims any warranty of merchantability or fitness for any particular purpose with respect to its products.

PACKAGING (lbs (kgs))

33 (15) Spools, 60 (27.2) Coils, 500 (226.8) Round Drum, 800 (362.9) Hex Drum, 900 (408.2) Hex Drum *Some packaging options may not be available depending on diameter and product. Special package options may be available upon request.

STORAGE AND HANDLING

All products should be stored in original packaging, in dry conditions and handled with care. For more information refer to our website.



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