SWX 110

EN ISO 14174: S A AB 1 67 AC H5
Benefits:
- carefully chosen formula provides excellent weldability and good bead appearance
- wide parameter window allows the use of high productivity procedures with optimal performance
- suitable for use in a wide range of industries and applications
- provides excellent slag removal, minimizing clean-up time and risk of inclusion
- moisture-proof packaging eliminates the need to re-dry unopened product

Typical Applications:
- general fabrication

Flux Type:
Agglomerated aluminate-basic flux

Basicity Index (Boniszewski): 1.4

Alloy Transfer: Slightly Si & Mn Alloying

Density: 1.2 kg/L

Grain Size: 0.2 – 2.0 mm/ 10 – 70 mesh

Type of Current: DCEP, AC

Typical Diffusible Hydrogen:
<5 mL/100g

Primary Flux Composition:
Al_2O_3 + MnO ..... ~35%
CaO + MgO..... ~25%
SiO_2 + TiO_2..... ~20%
CaF_2..... ~15%

Packaging Available:
- 55 lb. (25 kg) EAE Bag
- 2200 lb. (1000 kg) DoubleBag™

Commonly Used With:
- SDX EM13K
- SDX S2
- SDX S2Si-EM12K
- SDX S3Si-EH12K
- SDX S2Mo-EA2
- SDX S3Ni1Mo0.2-ENi5
- SDX S2Ni1Cu
- SubCOR™ EM12K-S
- SubCOR™ EM13K-S
- SubCOR™ EM13K-S MOD
- SubCOR™ SL 731
- SubCOR™ SL 281 Cr

SWX 120

EN ISO 14174: S A AB 1 57 AC H5
Benefits:
- moderate basicity balances good weldability and mechanical properties
- high current carrying capacity allows the use of high productivity parameters
- formulation provides uniform deposit properties when welding thick sections
- excellent slag detachment is suitable for narrow and tubular joints
- supplied in moisture-proof packaging that eliminates the need to re-dry unopened product

Typical Applications:
- wind towers
- pressure vessels
- storage tanks
- heavy equipment

Flux Type:
Agglomerated aluminate-basic flux

Basicity Index (Boniszewski): 1.9

Alloy Transfer: Slightly Mn Alloying

Density: ~1.2 kg/L

Grain Size: 0.2 – 2.0 mm/ 10 – 70 mesh

Type of Current: DCEP, AC

Typical Diffusible Hydrogen:
<5 mL/100g

Primary Flux Composition:
Al_2O_3 + MnO ..... ~35%
CaO + MgO..... ~25%
SiO_2 + TiO_2..... ~20%
CaF_2..... ~20%

Packaging Available:
- 55 lb. (25 kg) EAE Bag
- 2200 lb. (1000 kg) DoubleBag™

Commonly Used With:
- SDX EM13K
- SDX S2
- SDX S2Si-EM12K
- SDX S2Mo-EA2
- SDX S3Si-EH12K
- SubCOR™ EM12K-S
- SubCOR™ EM13K-S
- SubCOR™ EM13K-S MOD'
- SubCOR™ 92-S
- SubCOR™ SL 731

SWX 130

EN ISO 14174: S A AB 1 67 AC H5
Benefits:
- specially formulated for high-current two-run and multi-wire welding (up to 5 wires)
- excellent slag removal (almost self-peeling) helps minimize clean-up time
- provides a consistent wide, flat bead contour to help minimize coating costs
- can be used with a wide range of wires to match mechanical properties of steel grades up to X100
- supplied in moisture-proof packaging that eliminates the need to re-dry unopened product

Typical Applications:
- longitudinal pipe seams
- circumferential pipe seams
- two-run welding
- pipe mills

Flux Type:
Agglomerated aluminate-basic flux

Basicity Index (Boniszewski): 1.5

Alloy Transfer: Slightly Si & Mn Alloying

Density: 1.2 kg/L

Grain Size: 0.2 – 2.0 mm/ 10 – 70 mesh

Type of Current: DCEP, AC

Typical Diffusible Hydrogen:
<5 mL/100g

Primary Flux Composition:
Al_2O_3 + MnO ..... ~30%
CaO + MgO..... ~25%
SiO_2 + TiO_2..... ~20%
CaF_2..... ~15%

Packaging Available:
- 55 lb. (25 kg) EAE Bag
- 2200 lb. (1000 kg) DoubleBag™

Commonly Used With:
- SDX S2
- SDX S2Si-M12K
- SDX S3Si-EH12K
- SDX S2Mo-EA2
- SDX S3Mo-EA4
- SDX S3TiB
- SDX S3MoTiB
- SubCOR™ EM12K-S
- SubCOR™ EM13K-S
- SubCOR™ EM13K-S MOD
- SubCOR™ SL 735 1W-5W

SWX 135

EN ISO 14174: S A AB 1 67 AC H5
Benefits:
- specially formulated for high-current two-run and multi-wire welding (up to 3 wires)
- excellent slag removal (almost self-peeling) helps minimize clean-up time
- provides a consistent wide, flat bead contour to help minimize coating costs
- supplied in moisture-proof packaging that eliminates the need to re-dry unopened product

Typical Applications:
- spiral pipe seams
- pipe mills

Flux Type:
Agglomerated aluminate-basic flux

Basicity Index (Boniszewski): 1.3

Alloy Transfer: Slightly Si & Mn Alloying

Density: 1.2 kg/L

Grain Size: 0.2 – 2.0 mm/ 10 – 70 mesh

Type of Current: DCEP, AC

Typical Diffusible Hydrogen:
<5 mL/100g

Primary Flux Composition:
Al_2O_3 + MnO ..... ~35%
CaO + MgO..... ~20%
SiO_2 + TiO_2..... ~25%
CaF_2..... ~15%

Packaging Available:
- 55 lb. (25 kg) EAE Bag
- 2200 lb. (1000 kg) DoubleBag™

Commonly Used With:
- SDX S2
- SDX S2Si-EM12K
- SDX S2Mo-EA2
- SDX S3Mo-EA4
- SDX S3TiB
- SDX S3MoTiB
- SubCOR™ EM12K-S
- SubCOR™ EM13K-S
- SubCOR™ EM13K-S MOD
- SubCOR™ SL 735 1W-5W

SWX 140

EN ISO 14174: S A FB 1 57 AC H5
Benefits:
- moderate basicity balances good weldability and mechanical properties
- high current carrying capacity allows the use of high productivity parameters
- formulation provides uniform deposit properties when welding thick sections
- excellent slag detachment is suitable for narrow and tubular joints
- supplied in moisture-proof packaging that eliminates the need to re-dry unopened product

Typical Applications:
- offshore
- shipbuilding
- pressure vessels
- pipe double jointing

Flux Type:
Agglomerated fluoride-basic flux

Basicity Index (Boniszewski): 2.0

Alloy Transfer: Slightly Mn Alloying

Density: ~1.2 kg/L

Grain Size: 0.2 – 2.0 mm/ 10 – 70 mesh

Type of Current: DCEP, AC

Typical Diffusible Hydrogen:
<5 mL/100g

Primary Flux Composition:
Al_2O_3 + MnO ..... ~30%
CaO + MgO..... ~25%
SiO_2 + TiO_2..... ~20%
CaF_2..... ~20%

Packaging Available:
- 55 lb. (25 kg) EAE Bag
- 2200 lb. (1000 kg) DoubleBag™

Commonly Used With:
- SDX EM13K
- SDX S2
- SDX S2Si-EM12K
- SDX S2Mo-EA2
- SubCOR™ EM12K-S
- SubCOR™ EM13K-S
- SubCOR™ EM13K-S MOD
- SubCOR™ 92-S
- SubCOR™ 100F3-S
- SubCOR™ SL 735 1W-5W
- SubCOR™ SL 840 HC
- SubCOR™ SL 741

SWX 150

EN ISO 14174: S A FB 1 55 AC H5
Benefits:
- formulated to provides uniform deposit properties when welding thick sections
- high basicity performance provides excellent toughness for demanding applications
- suitable for use with many wires intended for high-strength low-alloy steels
- supplied in moisture-proof packaging that eliminates the need to re-dry unopened product

Typical Applications:
- offshore structures
- offshore wind towers
- civil construction
- boiler & pressure vessels
- nuclear applications
- double-jointing
- high-strength high-toughness applications

Flux Type:
Agglomerated fluoride-basic flux

Basicity Index (Boniszewski): 3.3

Alloy Transfer: None

Density: 1.1 kg/L

Grain Size: 0.2 – 2.0 mm/ 10 – 70 mesh

Type of Current: DCEP, AC

Typical Diffusible Hydrogen:
<5 mL/100g

Primary Flux Composition:
Al_2O_3 + MnO ..... ~20%
CaO + MgO..... ~35%
SiO_2 + TiO_2..... ~15%
CaF_2..... ~25%

Packaging Available:
- 50 lb. (22 kg) EAE Bag

Commonly Used With:
- SDX
  - EM13K, S2Si-EM12K, S3Si-EH12K, S4-EH14, S2Mo-EA2, S2Ni1-ENi1, S2Ni2-ENi2, S3Ni1Mo0.2-ENi5, S3Ni1Mo-EF3, S3Ni2.5CrMo, CrMo1-EB2R, CrMo2-EB3R
- SubCOR™
  - EM12K-S, EM13K-S, EM13K-S MOD, 92-S, F2-S, 100F3-S, 120-S, N1-S, B2-S
- SubCOR™ SL
  - 731, 741, 742, P1, P1 MOD, P11, P12 MOD, P36, P22, P24, P5, P9, P91, P92

SWX 160

SWX 160
EN ISO 14174: S A FB 1 55 AC H5
Benefits:
- specially formulated for low residual (tramp) element content; excellent for applications requiring low X-factor
- high-basicity flux offers very high impact toughness; suitable for use in demanding applications
- intended for use with a wide variety of Hobart low-alloy wires.
- supplied in moisture-proof packaging that eliminates the need to re-dry unopened product

Typical Applications:
- pressure vessels
- nuclear applications
- high-strength low-alloy steels
- chrome-moly steels
- offshore fabrication

Flux Type:
Agglomerated fluoride-basic flux

Basicity Index (Boniszewski): 2.7

Alloy Transfer: None

Density: ~1.1 kg/L

Grain Size: 0.2 – 2.0 mm/ 10 – 70 mesh

Type of Current: DCEP, AC

Typical Diffusible Hydrogen: <5 mL/100g

Primary Flux Composition:
Al_2O_3+ MnO ..... ~20%
CaO + MgO..... ~35%
SiO_2 + TiO_2..... ~15%
CaF_2..... ~25%

Commonly Used With:
- SDX S3Si-EH12K
- SDX CrMo1-EB2R
- SDX CrMo2-EB3R
- SDX S3Ni2.5CrMo
- SubCOR™ 120-S
- SubCOR™ SL 742
- SubCOR™ SL P91

Packaging Available:
- 55 lb. (25 kg) EAE Bag

HA-495

Benefits:
- active flux formulation provides excellent bead appearance and wetting action, even when welding at very high travel speeds
- active flux formula provides excellent resistance to porosity caused by rust or mill scale
- excellent slag removal helps reduce clean up time to improve productivity

Typical Applications:
- single or double-pass fillet welds
- multi-pass welding [1" (25 mm) max.]
- thin-wall tanks & pressure vessels
- light structural
- railcar

Flux Type:
Agglomerated active flux

Basicity Index (Boniszewski): ~0.8

Alloy Transfer: Si & Mn Alloying

Grain Size: 0.2 – 1.6 mm/ 12 – 65 mesh

Type of Current: DCEP, AC

Typical Composition:
Al_2O_3 + TiO_2 ..... ~60%
CaO + MgO + CaF ..... ~20%
SiO_2 ..... ~5%
MnO + FeO ..... ~15%

Packaging Available
- 55 lb. (25 kg) Bag

Commonly Used With:
- SubCOR™ EM12K-S
- SubCOR™ EM13K-S

HN-511

Benefits:
- highly basic flux provides very good weld metal toughness for demanding service
- provides very good weldability and slag removal compared to other high-basicity fluxes

Typical Applications:
- structural & bridge fabrication
- offshore structures
- shipbuilding
- heavy equipment

Flux Type:
Agglomerated basic flux

Basicity Index (Boniszewski): ~4

Alloy Transfer: Slightly Si & Mn Alloying

Grain Size: 0.2 – 1.6 mm/ 12 – 65 mesh

Type of Current: DCEP, AC

Typical Composition:
Al_2O_3 + TiO_2 ..... ~20%
CaO + MgO + CaF ..... ~68%
SiO_2 ..... ~7%
MnO + FeO ..... <1%

Packaging Available
- 55 lb. (25 kg) Bag

Commonly Used With:
- SubCOR™ EM13K-S
- SubCOR™ EM13K-S MOD
- SubCOR™ N1-S
- SubCOR™ 92-S
- SubCOR™ B2-S
- SubCOR™ B3-S
- SubCOR™ F2-S
- SubCOR™ 4130 SR
- SubCOR™ 100F3-S
- SubCOR™ 120-S

HN-590

Benefits:
- moderate basicity balances good mechanical properties and good welding characteristics
- provides good slag removal for reduced clean-up time, and minimized risk of inclusion in narrow-groove applications
- provides good resistance to cracking and porosity to help minimize risk of part rework during welding or in service.

Typical Applications:
- structural & bridge fabrication
- high-strength low-alloy (HSLA) steels
- quench & tempered (Q&T) steels

Flux Type:
Agglomerated basic flux

Basicity Index (Boniszewski): ~1.7

Alloy Transfer: Slightly Si & Mn Alloying

Grain Size: 15 – 60 mesh

Type of Current: DCEP, AC

Typical Composition:
Al_2O_3 + TiO_2 ..... ~35%
CaO + MgO + CaF ..... ~38%
SiO_2 ..... ~10%
MnO + FeO ..... ~15%

Packaging Available
- 55 lb. (25 kg) Bag

Commonly Used With:
- SubCOR™ EM12K-S
- SubCOR™ EM13K-S
- SubCOR™ EM13K-S MOD
- SubCOR™ W-S
- SubCOR™ N1-S
- SubCOR™ 92-S
- SubCOR™ F2-S
- SubCOR™ 100F3-S

SWX 010

Benefits:
- a backing powder intended for use with copper supports
- specially formulated to allow one-sided welding with consistent and smooth root pas reinforcement profile
- excellent slag detachability
- non-alloying: has no influence on weld metal properties
- supplied in re-sealable moisture-proof cans

Typical Applications:
- single-sided welding
- shipbuilding
- spiral pipe mills

Flux Type:
Agglomerated backing flux

Alloy Transfer: None

Density: ~1.1 kg/L

Grain Size: 0.2 – 2.0 mm/ 10 – 70 mesh

Primary Flux Composition:
Al_2O_3 + MnO ..... ~15%
CaO + MgO..... ~50%
SiO_2 + TiO_2..... ~30%
CaF_2..... ~0%

Packaging Available:
- 44 lb. (20 kg) Steel Can