

Flux (Pipemill)

Classification

| | | |
|--------------------------|-----------|-------------------|
| Flux 995N | EN 760 : | S A AB 1 67 AC H5 |
| Flux/Wire | AWS A5.23 | EN 756 : TR |
| 995N / LNS 140A | | S 4T 2 AB S2Mo |
| 995N / LNS140 TB (LA 81) | F9A2-EG-G | S 5T 5 AB Sz |

General description

Flux designed for longitudinal multi-arc welding pipemill station

High end pipemill applications up to X80

Outstanding welding characteristics and bead profile

Better results on pipe thickness over 12mm

Nitrogen controlled weld metal providing good impact toughness on arctic grade pipes

Very low diffusible hydrogen level in the weld deposit

Chemical composition (w%)

| Base material | Wire grade | C | Mn | Si | P | S | Mo | Ti | B | N |
|---------------|------------------|------|------|------|--------|--------|-----|-------|-------|-------|
| X65 | LNS 140A | 0.07 | 1.45 | 0.3 | <0.025 | <0.025 | 0.2 | - | - | 0.005 |
| X80 | LNS 140TB (LA81) | 0.06 | 1.6 | 0.35 | <0.025 | <0.025 | 0.2 | 0.015 | 0.002 | 0.004 |

Remark: the chemical composition from butt welds in pipe depends on the chemical composition of base material.

Proced : tandem AC/AC application on X65 plate 12,7 mm thick.

Mechanical properties, typical, all weld metal

| Wire grade | Condition | Yield strength (N/mm ²) | Tensile strength (N/mm ²) | Elongation (%) | Impact ISO-V(J) | | | | Hardness HV30 | |
|------------------|-----------|--|--|-------------------|-----------------|-------|-------|-------|------------------|---------|
| | | | | | -20°C | -40°C | -50°C | -60°C | | |
| Proced. 1 | | | | | | | | | | |
| LNS 140A (L-70) | AW | 580 | 680 | 30 | | | | | | 230 |
| LNS 140TB (LA81) | AW | 630 | 700 | 27 | 115 | 75 | 50 | | | 235 |
| Proced. 2 | | | | | | | | | | |
| LNS 140TB(LA81) | AW | 600 | 720 | 25 | 100 | 65 | | 45 | | 220-235 |

AW : As welded

Remark: the mechanical properties from butt welds in pipe depends on the chemical composition of base material.

Proced1: tandem in 12,5mm X65; Proced2: multiwire weld (4/5 wires) in 19-25mm X65

995N: rev. EN 22

Liability: All information in this data sheet is based on the best available knowledge, is subject to change without notice and can only be considered as suitable for general guidance **Fumes:** Consult information on Welding Safety Sheet, available upon request

Suggestions for use

One run on each side in one or multi wire systems for high welding speed and excellent mechanical properties.

Materials to be welded

| STEEL / STANDARD | TYPE | Two-run | |
|---|-----------------------------|-----------|----------------|
| | | LNS 140TB | LNS140A (L-70) |
| Ship plates | | | |
| A, B, D, E | A to E | x | x |
| | A 32 to FH40 | x | x |
| General Structural steel | | | |
| EN 10137 | 500 to 550 A & AL | x | x |
| EN 10025 part 3/part 4 | S275 to S460 all qualities | x | x |
| EN 10149 | S315 to S850 all qualities | x | x |
| EN 10025 part 2 | S185 to S355 all qualities | x | x |
| | E295 to E360 | x | x |
| Boiler & pressure vessel steel | | | |
| EN 10028 | P235 to P460G all qualities | x | x |
| | P235 to P275 | | x |
| | A37 to A52 all qualities | x | x |
| | PF24 to PF36 all qualities | x | x |
| | P265 to P460 all qualities | x | x |
| | A37 to A52, CP | x | x |
| | X42 to X70 | x | x |
| | X42 to X80 | x | |

Flux characteristics

| | |
|-------------------------------|-------------|
| Current type | DC(+/-), AC |
| Basicity (Boniszewski) | 1,3 |
| Solidification speed | medium |
| Density (kg/dm ³) | 1 |
| Grain size | 2-20 |

Packaging and available sizes

| Unit | Net weight (kg) |
|------------------------|-----------------|
| Bag | 25 |
| Sahara ReadyBag™ (SRB) | 25 |
| Big Bag | 500 |
| Big Bag | 600 |