



# AMA ١٢٨٢NR

AWS/ASME SFA-٥,٥  
DIN ٨٥٢٩  
EN ٤٩٩

E ٨٠١٨-G-H<sup>+</sup>R  
E Y ٥٠٧٦ Mn ١ Ni B H<sup>+</sup>  
E ٥٠٦ Mn ١ Ni B<sup>+</sup>٢ H<sup>+</sup>

## Application/properties:

basic electrode with nanomaterials is resistant to moisture absorption for ٩ hours in humid environments with ٨٠٪ humidity. This electrode used for welding fine-grained steels used in pressure vessels, boilers, pipes, steel structures, dam construction and shipbuilding. Its weld is tough and crack-resistant and has low hydrogen content. The electrode has a stable and concentrated arc, thus being well-suited or positional welding. Welds are of X-ray quality.

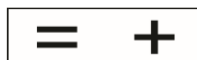
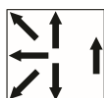
## Weld metal analysis in % (typical values):

| C    | Mn  | Si   | Ni  |
|------|-----|------|-----|
| ٠,٠٦ | ١,٦ | ٠,٥٠ | ٠,٥ |

## Mechanical Properties of all-weld metal: (single values are typical values)

| Tensile Strength<br>(N/mm <sup>٢</sup> ) | Yield Strength<br>(N/mm <sup>٢</sup> ) | Elongation<br>A٥ (%) | Impact energy (J)<br>ISO-V |       |
|------------------------------------------|----------------------------------------|----------------------|----------------------------|-------|
|                                          |                                        |                      | +٢٠°C                      | -٦٠°C |
| ٥٩٠ - ٦٩٠                                | > ٥١٠                                  | > ٢٢                 | ٢٠٠                        | ٦٠    |

| Welding Parameters |             |              |
|--------------------|-------------|--------------|
| Diameter (mm)      | Length (mm) | Amperage (A) |
| ٢,٥                | ٣٥٠         | ٦٥ - ٩٥      |
| ٣,٢٥               | ٤٥٠         | ٩٠ - ١٣٥     |
| ٤,٠                | ٤٥٠         | ١٤٠ - ١٨٠    |
| ٥,٠                | ٤٥٠         | ١٩٠ - ٢٤٠    |



## Materials:

**DIN Standard** StE٢٢٠ to StE٥٠٠; St ٣٧-٣ to St ٥٢-٣; WStE ٢٢٠ to WStE ٥٠٠; TStE ٢٥٥ to TStE ٥٠٠; StE٢٢٠.٧ TM to StE ٢٢٥.٧ TM; StE٢١٠.٧ to StE٢٢٥.٧; EStE٢٥٥ to EStE٢٢٢.

**EN Standard** S٢٥٥N to S٢٥٥N; S٢٢٥J٢Gr to S٢٥٥J٢Gr; P٢٥٥NH to P٥٠٠NH; S٢٥٥NL to S٥٠٠NL; L٢٢٥MB to L٢٥٠ MB; L٢١٠ - L٢٥٠NB; E٢٢٥ to E٢٢٥; P٢٥٥NL ١ to P٢٢٠NL ١; S٢٨٠N to S٢٢٠N; P٢٥٥NH to P٢٢٠NH; S٢٨٠NL to S٢٢٠NL; S٢٥٥NL ١ to S٢٢٠NL ١

**ASTM Standard** A٥١٢ Gr. ٢٥; A٥٢٢ Gr. ٥٥, ٢٠, ٢٥; A٢٣٣ Gr. E; A٢١٢; A٢١٨ Gr. I; A٥٢٧ Gr. ١-٣; A٢٧٨ Gr. A-D

## Remarks:

- Just Consume Dry Electrode
- Rebaking: required on ٣٠٠°C to ٣٥٠°C for ٢ hours.