

LNM 304L

CLASSIFICATION

| | | | | | |
|-------------|----------|---------|---|--------|--------|
| AWS A5.9 | ER308L | A-Nr | 8 | Mat-Nr | 1.4316 |
| ISO 14343-A | G 19 9 L | F-Nr | 6 | | |
| | | 9606 FM | 5 | | |

GENERAL DESCRIPTION

Solid wire with extra low carbon for welding austenitic CrNi-steels
High resistance to intergranular corrosion and oxidizing environments

WELDING POSITIONS (ISO/ASME)



PA/1G



PB/2F



PC/2G



PD/4F



PE/4G



PF/3Gu

SHIELDING GASES (ACC. ISO 14175)

| | |
|-----|---|
| M11 | Mixed gas Ar+ 0.5-5% CO ₂ + 0.5-5%H ₂ |
| M12 | Mixed gas Ar+ 0.5-5% CO ₂ |
| M13 | Mixed gas Ar+ 0.5-3% O ₂ |

CHEMICAL COMPOSITION (W%) TYPICAL WIRE

| C | Mn | Si | Cr | Ni | Mo |
|------|-----|-----|----|----|-----|
| 0.01 | 1.6 | 0.4 | 20 | 10 | 0.3 |

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

| | Shielding gas | Condition | 0.2% proof strength | Tensile strength | Elongation | Impact ISO-V(J) | |
|----------------|---------------|-----------|----------------------|----------------------|------------|-----------------|--------|
| | | | (N/mm ²) | (N/mm ²) | (%) | +20°C | -196°C |
| Typical values | M12 | AW | 390 | 590 | 35 | 120 | 50 |

EXAMPLES OF MATERIALS TO BE WELDED

| Steel grades | EN 10088-1/-2 | EN 10213-4 | Mat. Nr | ASTM/ACI A240/A312/A351 | UNS |
|--|---------------|------------------|---------|----------------------------|--------|
| Extra low carbon [C < 0.03%] | | | | | |
| | X2CrNi19-11 | | 1.4306 | (TP)304 L | S30403 |
| | X2CrNi18-10 | | 1.4311 | CF-3 | J92500 |
| | | | | (TP)304LN | S30453 |
| | | | | 302, 304 | S30400 |
| Medium carbon [C > 0.03%] | | | | | |
| | X4CrNi18-10 | | 1.4301 | (TP)304 | S30409 |
| | | GX5CrNi19 10 | 1.4308 | CF-8 | J92600 |
| Ti-,Nb stabilized | | | | | |
| | X6CrNiTi18-10 | | 1.4541 | (TP)321 | S32100 |
| | | | | (TP)321H | S32109 |
| | X6CrNiNb18-10 | | 1.4550 | (TP)347 | S34700 |
| | | GX5 CrNiNb 19 10 | 1.4552 | CF-8C | J92710 |

PACKAGING AND AVAILABLE SIZES

| Diameter (mm) | 1.0 | 1.2 |
|--------------------------------------|-----|-----|
| 15 kg spool BS300 | X | X |
| Other sizes and packaging on request | | |

LNM 304L:rev. C-EN25-03/01/17