



| Structure | STEEL GRADES | | | | | | | | | | | | CWH | Md30 | PRE | USAGE | | | | | | | | |
|------------|--------------|------------|-------------|----------|--------|-------|-------|-------|-------|--------|---------|----------|---------|------|------|--------|---------|--------------|--------|------------------|----------------|-------|----|--|
| | EN. Nr | TYPE / AWS | Designation | FAGERSTA | | | | | | | | | | | | Nohara | Welding | Cold heading | Spring | High temperature | Bright forming | Spoke | | |
| | | | | C | Si | Mn | Cr | Ni | Mo | N | Others | | | | | | | | | | | | °C | |
| % | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % | | | | | | |
| Ferritic | | 409 Cb | | R 108.10 | 0.030 | 0.60 | 0.60 | 11.30 | 0.35 | 0.10* | 0.040* | Nb 0.50 | | | | 12 | • | | | | | | | |
| | 1.4512 | 409 Ti | | R 109.11 | 0.030* | 0.50 | 0.55 | 11.30 | 0.50* | 0.10* | 0.040* | Ti 0.75 | | | | 12 | • | | • | | | | | |
| | 1.4016 | 430 | | R 250.11 | 0.020* | 0.30 | 0.70 | 16.40 | 0.30* | 0.10* | 0.030* | | | | | 17 | • | | | | • | | | |
| | 1.4016 | 430 | | R 250.17 | 0.050 | 0.40 | 0.50 | 16.80 | 0.30* | 0.50* | 0.050* | | | | | 17 | • | | | | | • | | |
| | 1.4016 | 430 | | R 250.30 | 0.020* | 0.30 | 0.70 | 16.40 | 0.30* | 0.10* | 0.050 | | | | | 17 | • | | | | | • | | |
| | | 430 LCb | | R 258.10 | 0.020* | 0.40 | 0.50 | 18.20 | 0.30* | 0.30* | 0.024* | Nb 0.45 | | | | 20 | • | | | | | | | |
| | | 439 Ti | | R 259.12 | 0.020* | 0.70 | 0.70 | 17.50 | 0.25* | 0.10* | 0.025* | Ti 0.40 | | | | 18 | • | | | | | | | |
| | 446 | | R 270.70 | 0.050 | 0.50 | 1.00 | 23.90 | 0.50* | 0.54* | 0.085 | | | | | 27 | | | | | | | | | |
| Austenitic | 1.4301 | 302 | | R 320.14 | 0.050 | 0.40 | 0.75 | 17.80 | 8.60 | 0.60* | 0.035 | | | 120 | -1 | 19 | • | | | | | | | |
| | 1.4301 | 304 | | R 350.19 | 0.030 | 0.40 | 1.50 | 18.20 | 8.20 | 0.60* | 0.050* | | | 108 | 9 | 20 | • | | | | • | • | | |
| | 1.4303 | 305 | | R 390.21 | 0.015* | 0.40 | 0.55 | 17.70 | 11.20 | 0.60* | 0.030* | | | 91 | -47 | 19 | • | | | | | | | |
| | 1.4307 | 304 L | | R 350.20 | 0.025* | 0.45 | 1.20 | 18.50 | 9.75 | 0.60* | 0.030* | | | 90 | -25 | 20 | • | | | | | | | |
| | 1.4307 | 304 L | | R 350.43 | 0.020* | 0.50 | 1.15 | 18.30 | 8.50 | 0.60* | 0.060* | | | 93 | 2 | 20 | • | | | | | • | | |
| | 1.4310 | 302 | | R 300.15 | 0.100 | 1.10 | 1.25 | 16.80 | 7.70 | 0.65 | 0.045 | | | 149 | -5 | 20 | | | • | | | | | |
| | 1.4310 | 302 | | R 300.20 | 0.052 | 0.45 | 1.20 | 17.40 | 8.25 | 0.60* | 0.050 | | | 128 | 4 | 19 | | | • | | | | • | |
| | 1.4310 | 302 | | R 300.31 | 0.100 | 0.90 | 1.25 | 17.30 | 8.20 | 0.60* | 0.030* | | | 139 | -8 | 19 | | | • | | | | | |
| | 1.4310 | 302 | | R 320.17 | 0.070 | 0.45 | 1.25 | 18.35 | 8.10 | 0.60 | 0.040 | | | 130 | -10 | 20 | | | • | | | | | |
| | 1.4372 | 201 | | R 520.12 | 0.090 | 0.45 | 5.90 | 17.00 | 5.30 | 0.60* | 0.070 | | | | | 20 | | | | | | | • | |
| | 1.4401 | 316 | | R 420.18 | 0.050 | 0.35 | 1.55 | 16.80 | 10.70 | 2.10 | 0.060* | | | 102 | -85 | 24 | | | • | | | | | |
| | 1.4404 | 316 L | | R 425.10 | 0.020* | 0.35 | 1.55 | 16.80 | 11.20 | 2.10 | 0.050* | | | 92 | -90 | 24 | | | • | | | | • | |
| | 1.4436 | 316 L | | R 440.10 | 0.030* | 0.50 | 1.55 | 16.80 | 11.60 | 2.60 | 0.050* | | | 91 | -103 | 26 | | | • | | | | | |
| | 1.4539 | 385 | 904 L | R 840.70 | 0.015* | 0.35 | 1.75 | 20.00 | 25.00 | 4.50 | 0.050 | Cu 1.50 | | | | 35 | • | | | | • | | | |
| | 1.4541 | 321 | | R 359.10 | 0.030 | 0.50 | 1.15 | 17.80 | 9.20 | 0.60* | 0.020* | Ti 0.35 | | | 94 | 5 | 19 | | | • | | | | |
| | 1.4547 | | 254 SMO | R 847.10 | 0.018* | 0.35 | 0.45 | 19.90 | 17.90 | 6.10 | 0.200 | Cu 0.70 | | | | 44 | | | | • | | | | |
| | 1.4567 | 304 Cu | 302 HQ | R 575.21 | 0.015* | 0.40 | 0.55 | 17.90 | 9.70 | 0.40* | 0.025* | Cu 3.50 | | | | 19 | | | • | | | | | |
| | 1.4571 | 316 Ti | | R 429.15 | 0.030* | 0.40 | 1.75 | 16.60 | 10.60 | 2.10 | 0.030* | Ti 0.20 | | | 94 | -58 | 24 | | | | | | | |
| | 1.4578 | 316 Cu | | R 545.11 | 0.030* | 0.35 | 0.55 | 17.00 | 10.80 | 2.20 | 0.040* | Cu 3.20 | | | | 25 | | | • | | | | | |
| | 1.4828 | | | R 323.10 | 0.045 | 1.95 | 1.20 | 19.30 | 11.70 | 0.60* | 0.030 | | | | 93 | -130 | 21 | | | | | | • | |
| | 1.4835 | | 253 MA | R 327.10 | 0.075 | 1.60 | 0.50 | 21.00 | 10.20 | 0.30* | 0.165 | Ce 0.055 | | | | 26 | | | | | | | • | |
| | | 314 | | R 823.11 | 0.030* | 2.70 | 1.75 | 23.50 | 19.40 | 0.60* | 0.060* | | | | | 26 | | | | | | | • | |
| | 1.4841 | 314 | | R 823.13 | 0.020* | 2.25 | 1.75 | 24.30 | 20.70 | 0.50* | 0.050* | | | | | 26 | | | | | | | • | |
| | 1.4845 | 310 S | | R 820.10 | 0.045 | 0.65 | 1.50 | 24.70 | 19.40 | 0.60* | 0.050* | | | | | 26 | | | | | | | • | |
| | 1.4864 | | | R 860.10 | 0.030* | 1.25 | 1.80 | 15.30 | 33.50 | 0.60* | 0.070 | | | | | 18 | | | | | | | • | |
| | 1.4886 | 330 | | R 860.13 | 0.030* | 1.25 | 0.75 | 18.50 | 34.50 | 0.50* | 0.060* | | | | | 21 | | | | | | | • | |
| | | | Incoloy DS | R 863.13 | 0.030* | 2.30 | 1.20 | 18.00 | 36.50 | 0.50* | 0.070 | | | | | 21 | | | | | | | • | |
| | | 330 Cb | 35-19 Cb | R 868.11 | 0.025* | 1.85 | 0.50 | 19.50 | 34.50 | 0.30* | 0.060* | Nb 0.87 | | | | 21 | | | | | | | • | |
| | | 18 8 SiMn | 307 | R 526.18 | 0.070 | 0.90 | 6.90 | 19.10 | 8.80 | 0.30* | 0.045 | | | | | 21 | | | | • | | | | |
| | | 18 8 SiMn | 307 | R 526.70 | 0.080 | 0.87 | 7.00 | 18.20 | 8.00 | 0.34* | 0.060* | S 0.009 | | | | 20 | | | | • | | | | |
| | 19 12 3 Nb | ER 318 | | R 448.11 | 0.040 | 0.40 | 1.80 | 19.30 | 11.60 | 2.60 | 0.040 | S 0.011 | Nb 0.62 | | | 29 | | | | • | | | | |
| | 19 12 3 SiNb | ER 318 Si | | R 448.12 | 0.035 | 0.75 | 1.35 | 18.90 | 11.80 | 2.70 | 0.050 | S 0.011 | Nb 0.65 | | | 28 | | | | • | | | | |
| | 19 12 3 L | ER 316 L | | R 466.10 | 0.015* | 0.40 | 1.75 | 18.30 | 12.20 | 2.60 | 0.040 | S 0.010 | | | | 27 | | | | • | | | | |
| | 19 12 3 L | E 316 L | | R 466.70 | 0.018* | 0.12 | 1.75 | 18.40 | 11.45 | 2.65 | 0.040 | S 0.011 | | | | 28 | | | | • | | | | |
| | 19 12 3 L | ER 316 L | | R 466.71 | 0.018* | 0.40 | 1.75 | 18.60 | 12.30 | 2.60 | 0.030 | S 0.010 | | | | 28 | | | | • | | | | |
| | 19 12 3 LSi | ER 316 LSi | | R 466.72 | 0.023* | 0.90 | 1.80 | 18.35 | 12.25 | 2.60 | 0.050 | S 0.011 | | | | 28 | | | | • | | | | |
| | 19 13 4 L | ER 317 L | | R 476.25 | 0.020* | 0.40 | 1.50 | 18.80 | 13.70 | 3.60 | 0.050 | S 0.010 | | | | 31 | | | | • | | | | |
| | 19 9 NbSi | ER 347 Si | | R 358.16 | 0.035 | 0.85 | 1.30 | 19.40 | 9.80 | 0.30* | 0.040 | S 0.010 | Nb 0.60 | | | 21 | | | | • | | | | |
| | 19 9 Nb | ER 347 | | R 358.22 | 0.050 | 0.47 | 1.80 | 19.60 | 9.20 | 0.30* | 0.030 | S 0.009 | Nb 0.60 | | | 21 | | | | • | | | | |
| | 19 9 H | ER 308 | | R 326.12 | 0.050 | 0.40 | 1.80 | 20.25 | 9.25 | 0.30* | 0.050 | S 0.010 | | | | 23 | | | | • | | | | |
| | 19 9 L | ER 308 L | | R 366.10 | 0.015* | 0.40 | 1.80 | 19.70 | 10.20 | 0.20* | 0.050 | S 0.011 | | | | 21 | | | | • | | | | |
| | 19 9 L | ER 308 L | | R 366.19 | 0.020* | 0.20* | 1.80 | 19.90 | 10.10 | 0.24* | 0.050 | | | | | 21 | | | | • | | | | |
| 19 9 L | E 308 L | | R 366.70 | 0.012* | 0.12 | 1.80 | 20.00 | 10.00 | 0.10* | 0.040 | S 0.008 | | | | 21 | | | | • | | | | | |
| 19 9 L | ER 308 L | | R 366.71 | 0.023* | 0.40 | 1.80 | 19.70 | 10.10 | 0.30* | 0.055 | S 0.011 | | | | 22 | | | | • | | | | | |
| 19 9 LSi | ER 308 LSi | | R 366.72 | 0.023* | 0.90 | 1.80 | 19.85 | 10.35 | 0.30* | 0.065 | S 0.011 | | | | 22 | | | | • | | | | | |
| 23 12 L | ER 309 L | | R 806.20 | 0.018* | 0.42 | 1.80 | 23.50 | 13.70 | 0.30* | 0.080 | S 0.010 | | | | 26 | | | | • | | | | | |
| 23 12 LSi | ER 309 LSi | | R 806.24 | 0.025* | 0.90 | 1.60 | 23.30 | 13.80 | 0.30* | 0.120 | S 0.010 | | | | 27 | | | | • | | | | | |
| 23 12 2 L | 309 LMo | P5 | R 816.10 | 0.015* | 0.37 | 1.50 | 21.50 | 15.00 | 2.70 | 0.060 | | | | | 31 | | | | • | | | | | |
| 25 20 | E 310 | | R 826.20 | 0.100 | 0.45 | 1.75 | 25.90 | 20.80 | 0.30* | 0.060* | | | | | 27 | | | | • | | | | | |
| 25 20 | ER 310 | | R 826.70 | 0.120 | 0.40 | 1.75 | 25.90 | 20.80 | 0.30* | 0.060* | | | | | 27 | | | | • | | | | | |
| Duplex | 1.4162 | | 2101 | R 617.10 | 0.030 | 0.70 | 5.00 | 21.50 | 1.50 | 0.30 | 0.220 | Cu 0.30 | | | 28 | | | | | | | • | | |
| | 1.4362 | | 2304 | R 630.10 | 0.015 | 0.45 | 0.95 | 22.50 | 4.70 | 0.25 | 0.110 | Cu 0.20 | | | 26 | | | | | | | | | |
| | 1.4362 | | 2304 | R 630.21 | 0.015 | 0.45 | 0.95 | 22.50 | 4.70 | 0.25 | 0.110 | Cu 0.20 | | | 26 | | | | | | | | | |
| | 1.4662 | | 2209 | R 646.21 | 0.013* | 0.50 | 1.60 | 23.00 | 8.75 | 3.15 | 0.160 | | | | | | | | | | | | | |