

# LISTADO DE REFERENCIAS DE MATERIALES

## ACERO AL CARBON

| USA      | Japón                | Alemania |          | Inglaterra |     | Francia   | Italia     | España            | Suecia | China |
|----------|----------------------|----------|----------|------------|-----|-----------|------------|-------------------|--------|-------|
| AISI/SAE | JIS                  | W-nr.    | DIN      | BS         | EN  | AFNOR     | UNI        | UNE               | SS     | GB    |
| A570.36  | STKM 12A<br>STKM 12C | 1.0038   | RSt.37-2 | 4360 40 C  | –   | E 24-2 Ne | –          | –                 | 1311   | 15    |
| 1015     | –                    | 1.0401   | C15      | 080M15     | –   | CC12      | C15, C16   | F.111             | 1350   | 15    |
| 1020     | –                    | 1.0402   | C22      | 050A20     | 2C  | CC20      | C20, C21   | F.112             | 1450   | 20    |
| 1213     | SUM22                | 1.0715   | 9SMn28   | 230M07     | 1A  | S250      | CF9SMn28   | F.2111<br>11SMn28 | 1912   | Y15   |
| 12L13    | SUM22L               | 1.0718   | 9SMnPb28 | –          | –   | S250Pb    | CF9SMnPb28 | 11SMnPb28         | 1914   | –     |
| –        | –                    | 1.0722   | 10SPb20  | –          | –   | 10PbF2    | CF10Pb20   | 10SPb20           | –      | –     |
| 1215     | –                    | 1.0736   | 9SMn36   | 240M07     | 1B  | S300      | CF9SMn36   | 12SMn35           | –      | Y13   |
| 12L14    | –                    | 1.0737   | 9SMnPb36 | –          | –   | S300Pb    | CF9SMnPb36 | 12SMnP35          | 1926   | –     |
| 1015     | S15C                 | 1.1141   | Ck15     | 080M15     | 32C | XC12      | C16        | C15K              | 1370   | 15    |
| 1025     | S25C                 | 1.1158   | Ck25     | –          | –   | –         | –          | –                 | –      | 25    |
| A572-60  | –                    | 1.8900   | StE380   | 4360 55 E  | –   | –         | FeE390KG   | –                 | 2145   | –     |
| 1035     | –                    | 1.0501   | C35      | 060A35     | –   | CC35      | C35        | F.113             | 1550   | 35    |
| 1045     | –                    | 1.0503   | C45      | 080M46     | –   | CC45      | C45        | F.114             | 1650   | 45    |
| 1140     | –                    | 1.0726   | 35S20    | 212M36     | 8M  | 35MF4     | –          | F210G             | 1957   | –     |
| 1039     | –                    | 1.1157   | 40Mn4    | 150M36     | 15  | 35M5      | –          | –                 | –      | 40Mn  |
| 1335     | SMn438(H)            | 1.1167   | 36Mn5    | –          | –   | 40M5      | –          | 36Mn5             | 2120   | 35Mn2 |
| 1330     | SCMn1                | 1.1170   | 28Mn6    | 150M28     | 14A | 20M5      | C28Mn      | –                 | –      | 30Mn  |
| 1035     | S35C                 | 1.1183   | Cf35     | 060A35     | –   | XC38TS    | C36        | –                 | 1572   | 35Mn  |
| 1045     | S45C                 | 1.1191   | Ck45     | 080M46     | –   | XC42      | C45        | C45K              | 1672   | Ck45  |
| 1050     | S50C                 | 1.1213   | Cf53     | 060A52     | –   | XC48TS    | C53        | –                 | 1674   | 50    |
| 1055     | –                    | 1.0535   | C55      | 070M55     | 9   | –         | C55        | –                 | 1655   | 55    |
| 1060     | –                    | 1.0601   | C60      | 080A62     | 43D | CC55      | C60        | –                 | –      | 60    |
| 1055     | S55C                 | 1.1203   | Ck55     | 070M55     | –   | XC55      | C50        | C55K              | –      | 55    |
| 1060     | S58C                 | 1.1221   | Ck60     | 080A62     | 43D | XC60      | C60        | –                 | 1678   | 60Mn  |
| 1095     | –                    | 1.1274   | Ck101    | 060A96     | –   | XC100     | –          | F.5117            | 1870   | –     |
| W1       | SK3                  | 1.1545   | C105W1   | BW1A       | –   | Y105      | C36KU      | F.5118            | 1880   | –     |
| W210     | SUP4                 | 1.1545   | C105W1   | BW2        | –   | Y120      | C120KU     | F.515             | 2900   | –     |

## ALEACIONES

| USA           | Japón                    | Alemania |            | Inglaterra   |      | Francia | Italia             | España     | Suecia | China     |
|---------------|--------------------------|----------|------------|--------------|------|---------|--------------------|------------|--------|-----------|
| AISI/SAE      | JIS                      | W-nr.    | DIN        | BS           | EN   | AFNOR   | UNI                | UNE        | SS     | GB        |
| A573-81       | SM400A, SM400B<br>SM400C | 1.0144   | St.44.2    | 4360 43 C    | –    | E28-3   | –                  | –          | 1412   | –         |
| –             | SM490A, SM490B<br>SM490C | 1.0570   | St52-3     | 4360 50 B    | –    | E36-3   | Fe52BFN<br>Fe52CFN | –          | 2132   | –         |
| 5120          | –                        | 1.0841   | St52-3     | 150M19       | –    | 20MC5   | Fe52               | F.431      | 2172   | –         |
| 9255          | –                        | 1.0904   | 55Si7      | 250A53       | 45   | 55S7    | 55Si8              | 56Si7      | 2085   | 55Si2Mn   |
| 9262          | –                        | 1.0961   | 60SiCr7    | –            | –    | 60SC7   | 60SiCr8            | 60SiCr8    | –      | –         |
| ASTM 52100    | SUJ2                     | 1.3505   | 100Cr6     | 534A99       | 31   | 100C6   | 100Cr6             | F.131      | 2258   | Gr15, 45G |
| ASTM A204Gr.A | –                        | 1.5415   | 15Mo3      | 1501-240     | –    | 15D3    | 16Mo3KW            | 16Mo3      | 2912   | –         |
| 4520          | –                        | 1.5423   | 16Mo5      | 1503-245-420 | –    | –       | 16Mo5              | 16Mo5      | –      | –         |
| ASTM A350LF5  | –                        | 1.5622   | 14Ni6      | –            | –    | 16N6    | 14Ni6              | 15Ni6      | –      | –         |
| ASTM A353     | –                        | 1.5662   | X8Ni9      | 1501-509-510 | –    | –       | X10Ni9             | XBNI09     | –      | –         |
| 3135          | SNC236                   | 1.5710   | 36NiCr6    | 640A35       | 111A | 35NC6   | –                  | –          | –      | –         |
| 3415          | SNC415(H)                | 1.5732   | 14NiCr10   | –            | –    | 14NC11  | 16NiCr11           | 15NiCr11   | –      | –         |
| 3415, 3310    | SNC815(H)                | 1.5752   | 14NiCr14   | 655M13       | 36A  | 12NC15  | –                  | –          | –      | –         |
| 8620          | SNCM220(H)               | 1.6523   | 21NiCrMo2  | 805M20       | 362  | 20NCD2  | 20NiCrMo2          | 20NiCrMo2  | 2506   | –         |
| 8740          | SNCM240                  | 1.6546   | 40NiCrMo22 | 311-Type 7   | –    | –       | 40NiCrMo2(KB)      | 40NiCrMo2  | –      | –         |
| –             | –                        | 1.6587   | 17CrNiMo6  | 820A16       | –    | 18NCD6  | –                  | 14NiCrMo13 | –      | –         |
| 5015          | SCr415(H)                | 1.7015   | 15Cr3      | 523M15       | –    | 12C3    | –                  | –          | –      | 15Cr      |

| USA                   | Japón               | Alemania |                          | Inglaterra           |     | Francia            | Italia                       | España      | Suecia | China              |
|-----------------------|---------------------|----------|--------------------------|----------------------|-----|--------------------|------------------------------|-------------|--------|--------------------|
| AISI/SAE              | JIS                 | W-nr.    | DIN                      | BS                   | EN  | AFNOR              | UNI                          | UNE         | SS     | GB                 |
| 5140                  | SCr440              | 1.7045   | 42Cr4                    | —                    | —   | —                  | —                            | 42Cr4       | 2245   | 40Cr               |
| 5155                  | SUP9(A)             | 1.7176   | 55Cr3                    | 527A60               | 48  | 55C3               | —                            | —           | —      | 20CrMn             |
| —                     | SCM415(H)           | 1.7262   | 15CrMo5                  | —                    | —   | 12CD4              | —                            | 12CrMo4     | 2216   | —                  |
| ASTM A182<br>F11, F12 | —                   | 1.7335   | 13CrMo4 4                | 1501-620Gr27         | —   | 15CD3.5<br>15CD4.5 | 14CrMo45                     | 14CrMo45    | —      | —                  |
| ASTM A182<br>F.22     | —                   | 1.7380   | 10CrMo910                | 1501-622<br>Gr31, 45 | —   | 12CD9<br>12CD10    | 12CrMo9<br>12CrMo10          | TU.H        | 2218   | —                  |
| —                     | —                   | 1.7715   | 14MoV63                  | 1503-660-440         | —   | —                  | —                            | 13MoCrV6    | —      | —                  |
| —                     | —                   | 1.8523   | 39CrMoV13 9              | 897M39               | 40C | —                  | 36CrMoV12                    | —           | —      | —                  |
| 9840                  | —                   | 1.6511   | 36CrNiMo4                | 816M40               | 110 | 40NCD3             | 38NiCrMo4(KB)                | 35NiCrMo4   | —      | —                  |
| 4340                  | —                   | 1.6582   | 34CrNiMo6                | 817M40               | 24  | 35NCD6             | 35NiCrMo6(KB)                | —           | 2541   | 40CrNiMoA          |
| 5132                  | SCr430(H)           | 1.7033   | 34Cr4                    | 530A32               | 18B | 32C4               | 34Cr4(KB)                    | 35Cr4       | —      | 35Cr               |
| 5140                  | SCr440(H)           | 1.7035   | 41Cr4                    | 530M40               | 18  | 42C4               | 41Cr4                        | 42Cr4       | —      | 40Cr               |
| 5115                  | —                   | 1.7131   | 16MnCr5                  | (527M20)             | —   | 16MC5              | 16MnCr5                      | 16MnCr5     | 2511   | 18CrMn             |
| 4130                  | SCM420<br>SCM430    | 1.7218   | 25CrMo4                  | 1717CDS110<br>708M20 | —   | 25CD4              | 25CrMo4(KB)                  | 55Cr3       | 2225   | 30CrMn             |
| 4137<br>4135          | SCM432<br>SCCRM3    | 1.7220   | 34CrMo4                  | 708A37               | 19B | 35CD4              | 35CrMo4                      | 34CrMo4     | 2234   | 35CrMo             |
| 4140<br>4142          | SCM 440             | 1.7223   | 41CrMo4                  | 708M40               | 19A | 42CD4TS            | 41CrMo4                      | 42CrMo4     | 2244   | 40CrMoA            |
| 4140                  | SCM440(H)           | 1.7225   | 42CrMo4                  | 708M40               | 19A | 42CD4              | 42CrMo4                      | 42CrMo4     | 2244   | 42CrMo<br>42CrMnMo |
| —                     | —                   | 1.7361   | 32CrMo12                 | 722M24               | 40B | 30CD12             | 32CrMo12                     | F.124.A     | 2240   | —                  |
| 6150                  | SUP10               | 1.8159   | 50CrV4                   | 735A50               | 47  | 50CV4              | 50CrV4                       | 51CrV4      | 2230   | 50CrVA             |
| —                     | —                   | 1.8509   | 41CrAlMo7                | 905M39               | 41B | 40CAD6<br>40CAD2   | 41CrAlMo7                    | 41CrAlMo7   | 2940   | —                  |
| L3                    | —                   | 1.2067   | 100Cr6                   | BL3                  | —   | Y100C6             | —                            | 100Cr6      | —      | CrV, 9SiCr         |
| —                     | SKS31<br>SKS2, SKS3 | 1.2419   | 105WCr6                  | —                    | —   | 105WC13            | 100WCr6<br>107WCr5KU         | 105WCr5     | 2140   | CrWMo              |
| L6                    | SKT4                | 1.2713   | 55NiCrMoV6               | BH224/5              | —   | 55NCDV7            | —                            | F.520.S     | —      | 5CrNiMo            |
| ASTM A353<br>2515     | —                   | 1.5662   | X8Ni9                    | 1501-509             | —   | —                  | X10Ni9                       | XBNI09      | —      | —                  |
| —                     | —                   | 1.5680   | 12Ni19                   | —                    | —   | Z18N5              | —                            | —           | —      | —                  |
| —                     | —                   | 1.6657   | 14NiCrMo134              | 832M13               | 36C | —                  | 15NiCrMo13                   | 14NiCrMo131 | —      | —                  |
| D3<br>ASTM D3         | SKD1                | 1.2080   | X210Cr12                 | BD3                  | —   | Z200C12            | X210Cr13KU<br>X250Cr12KU     | X210Cr12    | —      | Cr12               |
| D2                    | SKD11               | 1.2601   | X153CrMoV12              | BD2                  | —   | —                  | X160CrMoV12                  | —           | —      | Cr12MoV            |
| A2                    | SKD12               | 1.2363   | X100CrMoV5               | BA2                  | —   | Z100CDV5           | X100CrMoV5                   | F.5227      | 2260   | Cr5Mo1V            |
| H13<br>ASTM H13       | SKD61               | 1.2344   | X40CrMoV51<br>X40CrMoV51 | BH13                 | —   | Z40CDV5            | X35CrMoV05KU<br>X40CrMoV51KU | X40CrMoV5   | 2242   | 40CrMoV5           |
| —                     | SKD2                | 1.2436   | X210CrW12                | —                    | —   | —                  | X215CrW121KU                 | X210CrW12   | 2312   | —                  |
| S1                    | —                   | 1.2542   | 45WCrV7                  | BS1                  | —   | —                  | 45WCrV8KU                    | 45WCrSi8    | 2710   | —                  |
| H21                   | SKD5                | 1.2581   | X30WCrV93                | BH21                 | —   | Z30WCV9            | X28W09KU                     | X30WCrV9    | —      | 30WCrV9            |
| —                     | —                   | 1.2601   | X165CrMoV12              | —                    | —   | —                  | X165CrMoV12KU                | X160CrMoV12 | 2310   | —                  |
| W210                  | SKS43               | 1.2833   | 100V1                    | BW2                  | —   | Y1105V             | —                            | —           | —      | V                  |
| T4                    | SKH3                | 1.3255   | S 18-1-2-5               | BT4                  | —   | Z80WKCV            | X78WCo1805KU                 | HS18-1-1-5  | —      | W18Cr4VCo5         |
| T1                    | SKH2                | 1.3355   | S 18-0-1                 | BT1                  | —   | Z80WCV             | X75W18KU                     | HS18-0-1    | —      | —                  |
| —                     | SCMnH/1             | 1.3401   | G-X120Mn12               | Z120M12              | —   | Z120M12            | XG120Mn12                    | X120MN12    | —      | —                  |
| HW3                   | SUH1                | 1.4718   | X45CrSi93                | 401S45               | 52  | Z45CS9             | X45CrSi8                     | F.322       | —      | X45CrSi93          |
| D3                    | SUH3                | 1.3343   | S6-5-2                   | 4959BA2              | —   | Z40CSD10           | 15NiCrMo13                   | —           | 2715   | —                  |
| M2                    | SKH9, SKH51         | 1.3343   | S6/5/2                   | BM2                  | —   | Z85WDCV            | HS6-5-2-2                    | F.5603      | 2722   | —                  |
| M7                    | —                   | 1.3348   | S 2-9-2                  | —                    | —   | —                  | HS2-9-2                      | HS2-9-2     | 2782   | —                  |
| M35                   | SKH55               | 1.3243   | S6/5/2/5                 | BM35                 | —   | 6-5-2-5            | HS6-5-2-5                    | F.5613      | 2723   | —                  |

# LISTADO DE REFERENCIAS DE MATERIALES

## ACERO INOXIDABLE (FERRITICO, MARTENSITICO)

| USA      | Japón    | Alemania |               | Inglaterra |     | Francia          | Italia        | España | Suecia | China          |
|----------|----------|----------|---------------|------------|-----|------------------|---------------|--------|--------|----------------|
| AISI/SAE | JIS      | W-nr.    | DIN           | BS         | EN  | AFNOR            | UNI           | UNE    | SS     | GB             |
| 403      | SUS403   | 1.4000   | X7Cr13        | 403S17     | —   | Z6C13            | X6Cr13        | F.3110 | 2301   | Ocr13<br>1Cr12 |
| —        | —        | 1.4001   | X7Cr14        | —          | —   | —                | —             | F.8401 | —      | —              |
| 416      | SUS416   | 1.4005   | X12CrS13      | 416S21     | —   | Z11CF13          | X12CrS13      | F.3411 | 2380   | —              |
| 410      | SUS410   | 1.4006   | X10Cr13       | 410S21     | 56A | Z10C14           | X12Cr13       | F.3401 | 2302   | 1Cr13          |
| 430      | SUS430   | 1.4016   | X8Cr17        | 430S15     | 60  | Z8C17            | X8Cr17        | F.3113 | 2320   | 1Cr17          |
| —        | SCS2     | 1.4027   | G-X20Cr14     | 420C29     | 56B | Z20C13M          | —             | —      | —      | —              |
| —        | SUS420J2 | 1.4034   | X46Cr13       | 420S45     | 56D | Z40CM<br>Z38C13M | X40Cr14       | F.3405 | 2304   | 4Cr13          |
| 405      | —        | 1.4003   | —             | 405S17     | —   | Z8CA12           | X6CrAl13      | —      | —      | —              |
| 420      | —        | 1.4021   | —             | 420S37     | —   | Z8CA12           | X20Cr13       | —      | 2303   | —              |
| 431      | SUS431   | 1.4057   | X22CrNi17     | 431S29     | 57  | Z15CNi6.02       | X16CrNi16     | F.3427 | 2321   | 1Cr17Ni2       |
| 430F     | SUS430F  | 1.4104   | X12CrMoS17    | —          | —   | Z10CF17          | X10CrS17      | F.3117 | 2383   | Y1Cr17         |
| 434      | SUS434   | 1.4113   | X6CrMo17      | 434S17     | —   | Z8CD17.01        | X8CrMo17      | —      | 2325   | 1Cr17Mo        |
| CA6-NM   | SCS5     | 1.4313   | X5CrNi134     | 425C11     | —   | Z4CND13.4M       | (G)X6CrNi304  | —      | 2385   | —              |
| 405      | SUS405   | 1.4724   | X10CrAl113    | 403S17     | —   | Z10C13           | X10CrAl112    | F.311  | —      | Ocr13Al        |
| 430      | SUS430   | 1.4742   | X10CrAl118    | 430S15     | 60  | Z10CAS18         | X8Cr17        | F.3113 | —      | Cr17           |
| HNV6     | SUH4     | 1.4747   | X80CrNiSi20   | 443S65     | 59  | Z80CSN20.02      | X80CrSiNi20   | F.320B | —      | —              |
| 446      | SUH446   | 1.4762   | X10CrAl124    | —          | —   | Z10CAS24         | X16Cr26       | —      | 2322   | 2Cr25N         |
| EV8      | SUH35    | 1.4871   | X53CrMnNiN219 | 349S54     | —   | Z52CMN21.09      | X53CrMnNiN219 | —      | —      | 5Cr2Mn9Ni4N    |
| S44400   | —        | 1.4521   | X1CrMoTi182   | —          | —   | —                | —             | —      | 2326   | —              |
| —        | —        | 1.4922   | X20CrMoV12-1  | —          | —   | —                | X20CrMoNi1201 | —      | 2317   | —              |
| 630      | —        | 1.4542   | —             | —          | —   | Z7CNU17-04       | —             | —      | —      | —              |

## ACERO INOXIDABLE (AUSTENITICO)

| USA            | Japón            | Alemania |                  | Inglaterra |     | Francia       | Italia         | España                     | Suecia     | China         |
|----------------|------------------|----------|------------------|------------|-----|---------------|----------------|----------------------------|------------|---------------|
| AISI/SAE       | JIS              | W-nr.    | DIN              | BS         | EN  | AFNOR         | UNI            | UNE                        | SS         | GB            |
| 304L           | SUS304L          | 1.4306   | X2CrNi1911       | 304S11     | —   | Z2CN18.10     | X2CrNi18.11    | —                          | 2352       | Ocr19Ni10     |
| 304            | SUS304           | 1.4350   | X5CrNi189        | 304S11     | 58E | Z6CN18.09     | X5CrNi1810     | F.3551<br>F.3541<br>F.3504 | 2332       | Ocr18Ni9      |
| 303            | SUS303           | 1.4305   | X12CrNiS188      | 303S21     | 58M | Z10CNF18.09   | X10CrNiS18.09  | F.3508                     | 2346       | 1Cr18Ni9MoZr  |
| —              | SUS304L          | —        | —                | 304C12     | —   | Z3CN19.10     | —              | —                          | 2333       | —             |
| 304L           | SCS19            | 1.4306   | X2CrNi189        | 304S12     | —   | Z2CrNi1810    | X2CrNi18.11    | F.3503                     | 2352       | —             |
| 301            | SUS301           | 1.4310   | X12CrNi177       | —          | —   | Z12CN17.07    | X12CrNi1707    | F.3517                     | 2331       | Cr17Ni7       |
| 304LN          | SUS304LN         | 1.4311   | X2CrNiN1810      | 304S62     | —   | Z2CN18.10     | —              | —                          | 2371       | —             |
| 316            | SUS316           | 1.4401   | X5CrNiMo1810     | 316S16     | 58J | Z6CND17.11    | X5CrNiMo1712   | F.3543                     | 2347       | Ocr17Ni11Mo2  |
| —              | SCS13            | 1.4308   | G-X6CrNi189      | 304C15     | —   | Z6CN18.10M    | —              | —                          | —          | —             |
| —              | SCS14            | 1.4408   | G-X6CrNiMo1810   | 316C16     | —   | —             | —              | F.8414                     | —          | —             |
| —              | SCS22            | 1.4581   | G-X5CrNiMoNb1810 | 318C17     | —   | Z4CNDNb1812M  | XG8CrNiMo1811  | —                          | —          | —             |
| 316LN          | SUS316LN         | 1.4429   | X2CrNiMoN1813    | —          | —   | Z2CND17.13    | —              | —                          | 2375       | Ocr17Ni13Mo   |
| 316L           | —                | 1.4404   | —                | 316S13     | —   | Z2CND17.12    | X2CrNiMo1712   | —                          | 2348       | —             |
| 316L           | SCS16<br>SUS316L | 1.4435   | X2CrNiMo1812     | 316S13     | —   | Z2CND17.12    | X2CrNiMo1712   | —                          | 2353       | Ocr27Ni12Mo3  |
| 316            | —                | 1.4436   | —                | 316S13     | —   | Z6CND18-12-03 | X8CrNiMo1713   | —                          | 2343, 2347 | —             |
| 317L           | SUS317L          | 1.4438   | X2CrNiMo1816     | 317S12     | —   | Z2CND19.15    | X2CrNiMo1816   | —                          | 2367       | O0Cr19Ni13Mo  |
| UNS V<br>0890A | —                | 1.4539   | X1NiCrMo         | —          | —   | Z6CNT18.10    | —              | —                          | 2562       | —             |
| 321            | SUS321           | 1.4541   | X10CrNiTi189     | 321S12     | 58B | Z6CNT18.10    | X6CrNiTi1811   | F.3553<br>F.3523           | 2337       | 1Cr18Ni9Ti    |
| 347            | SUS347           | 1.4550   | X10CrNiNb189     | 347S17     | 58F | Z6CNNb18.10   | X6CrNiNb1811   | F.3552<br>F.3524           | 2338       | 1Cr18Ni11Nb   |
| 316Ti          | —                | 1.4571   | X10CrNiMoTi1810  | 320S17     | 58J | Z6CNDT17.12   | X6CrNiMoTi1712 | F.3535                     | 2350       | Cr18Ni12Mo2T  |
| 318            | —                | 1.4583   | X10CrNiMoNb1812  | —          | —   | Z6CNDNb1713B  | X6CrNiMoNb1713 | —                          | —          | Cr17Ni12Mo3Mb |

| USA              | Japón  | Alemania         |               | Inglaterra |          | Francia                            | Italia        | España | Suecia       | China      |
|------------------|--------|------------------|---------------|------------|----------|------------------------------------|---------------|--------|--------------|------------|
| AISI/SAE         | JIS    | W-nr.            | DIN           | BS         | EN       | AFNOR                              | UNI           | UNE    | SS           | GB         |
| 309              | SUH309 | 1.4828           | X15CrNiSi2012 | 309S24     | —        | Z15CNS20.12                        | X6CrNi2520    | —      | —            | 1Cr23Ni13  |
| 310S             | SUH310 | 1.4845           | X12CrNi2521   | 310S24     | —        | Z12CN2520                          | X6CrNi2520    | F.331  | 2361         | OCr25Ni20  |
| 308              | SCS17  | 1.4406           | X10CrNi18.08  | —          | 58C      | Z1NCDU25.20                        | —             | F.8414 | 2370         | —          |
| —                | —      | 1.4418           | X4CrNiMo165   | —          | —        | Z6CND16-04-01                      | —             | —      | —            | —          |
| 17-7PH           | —      | 1.4568<br>1.4504 | —             | 316S111    | —        | Z8CNA17-07                         | X2CrNiMo1712  | —      | —            | —          |
| NO8028<br>S31254 | —      | 1.4563           | —             | —          | —        | Z1NCDU31-27-03<br>Z1CNDU20-18-06AZ | —             | —      | 2584<br>2378 | —          |
| 321              | SUS321 | 1.4878           | X12CrNiTi189  | 321S32     | 58B, 58C | Z6CNT18.12B                        | X6CrNiTi18 11 | F.3523 | —            | 1Cr18Ni9Ti |

## ■ TERMORESISTENTES ALEADO

| USA       | Japón  | Alemania |                 | Inglaterra |    | Francia     | Italia       | España | Suecia | China |
|-----------|--------|----------|-----------------|------------|----|-------------|--------------|--------|--------|-------|
| AISI/SAE  | JIS    | W-nr.    | DIN             | BS         | EN | AFNOR       | UNI          | UNE    | SS     | GB    |
| 330       | SUH330 | 1.4864   | X12NiCrSi3616   | —          | —  | Z12NCS35.16 | —            | —      | —      | —     |
| HT, HT 50 | SCH15  | 1.4865   | G-X40NiCrSi3818 | 330C11     | —  | —           | XG50NiCr3919 | —      | —      | —     |

## ■ FUNDICION GRIS

| USA         | Japón | Alemania |             | Inglaterra  |    | Francia  | Italia | España | Suecia | China |
|-------------|-------|----------|-------------|-------------|----|----------|--------|--------|--------|-------|
| AISI/SAE    | JIS   | W-nr.    | DIN         | BS          | EN | AFNOR    | UNI    | UNE    | SS     | GB    |
| —           | —     | —        | —           | —           | —  | —        | —      | —      | 0100   | —     |
| No 20 B     | FC100 | —        | GG 10       | —           | —  | Ft 10 D  | —      | —      | 0110   | —     |
| No 25 B     | FC150 | 0.6015   | GG 15       | Grade 150   | —  | Ft 15 D  | G15    | FG15   | 0115   | HT150 |
| No 30 B     | FC200 | 0.6020   | GG 20       | Grade 220   | —  | Ft 20 D  | G20    | —      | 0120   | HT200 |
| No 35 B     | FC250 | 0.6025   | GG 25       | Grade 260   | —  | Ft 25 D  | G25    | FG25   | 0125   | HT250 |
| No 40 B     | —     | —        | —           | —           | —  | —        | —      | —      | —      | —     |
| No 45 B     | FC300 | 0.6030   | GG 30       | Grade 300   | —  | Ft 30 D  | G30    | FG30   | 0130   | HT300 |
| No 50 B     | FC350 | 0.6035   | GG 35       | Grade 350   | —  | Ft 35 D  | G35    | FG35   | 0135   | HT350 |
| No 55 B     | —     | 0.6040   | GG 40       | Grade 400   | —  | Ft 40 D  | —      | —      | 0140   | HT400 |
| A436 Type 2 | —     | 0.6660   | GGL NiCr202 | L-NiCuCr202 | —  | L-NC 202 | —      | —      | 0523   | —     |

## ■ FUNDICION HIERRO NODULAR

| USA       | Japón  | Alemania |             | Inglaterra |    | Francia    | Italia    | España    | Suecia   | China    |
|-----------|--------|----------|-------------|------------|----|------------|-----------|-----------|----------|----------|
| AISI/SAE  | JIS    | W-nr.    | DIN         | BS         | EN | AFNOR      | UNI       | UNE       | SS       | GB       |
| 60-40-18  | FCD400 | 0.7040   | GGG 40      | SNG 420/12 | —  | FCS 400-12 | GS 370-17 | FGE 38-17 | 07 17-02 | QT400-18 |
| —         | —      | —        | GGG 40.3    | SNG 370/17 | —  | FGS 370-17 | —         | —         | 07 17-12 | —        |
| —         | —      | 0.7033   | GGG 35.3    | —          | —  | —          | —         | —         | 07 17-15 | —        |
| 80-55-06  | FCD500 | 0.7050   | GGG 50      | SNG 500/7  | —  | FGS 500-7  | GS 500    | FGE 50-7  | 07 27-02 | QT500-7  |
| A43D2     | —      | 0.7660   | GGG NiCr202 | Grade S6   | —  | S-NC202    | —         | —         | 07 76    | —        |
| —         | —      | —        | GGG NiMn137 | L-NiMn 137 | —  | L-MN 137   | —         | —         | 07 72    | —        |
| —         | FCD600 | —        | GGG 60      | SNG 600/3  | —  | FGS 600-3  | —         | —         | 07 32-03 | QT600-3  |
| 100-70-03 | FCD700 | 0.7070   | GGG 70      | SNG 700/2  | —  | FGS 700-2  | GS 700-2  | FGS 70-2  | 07 37-01 | QT700-18 |

## ■ FUNDICION MALEABLE

| USA         | Japón   | Alemania |           | Inglaterra |    | Francia  | Italia | España | Suecia | China |
|-------------|---------|----------|-----------|------------|----|----------|--------|--------|--------|-------|
| AISI/SAE    | JIS     | W-nr.    | DIN       | BS         | EN | AFNOR    | UNI    | UNE    | SS     | GB    |
| —           | FCMB310 | —        | —         | 8 290/6    | —  | MN 32-8  | —      | —      | 08 14  | —     |
| 32510       | FCMW330 | —        | GTS-35    | B 340/12   | —  | MN 35-10 | —      | —      | 08 15  | —     |
| 40010       | FCMW370 | 0.8145   | GTS-45    | P 440/7    | —  | Mn 450   | GMN45  | —      | 08 52  | —     |
| 50005       | FCMP490 | 0.8155   | GTS-55    | P 510/4    | —  | MP 50-5  | GMN55  | —      | 08 54  | —     |
| 70003       | FCMP540 | —        | GTS-65    | P 570/3    | —  | MP 60-3  | —      | —      | 08 58  | —     |
| A220-70003  | FCMP590 | 0.8165   | GTS-65-02 | P 570/3    | —  | Mn 650-3 | GMN 65 | —      | 08 56  | —     |
| A 220-80002 | FCMP690 | —        | GTS-70-02 | P 690/2    | —  | Mn 700-2 | GMN 70 | —      | 08 62  | —     |