



# **INSO GROUP SPAIN, S.L.**

## **MATERIALES FORJA / FORGING ALLOYS**

**ACERO / STEEL**

**HIERRO / IRON**

**INOXIDABLE / STAINLESS STEEL**

**ALEACIONES ESPECIALES / SPECIAL ALLOYS**

**TITANIO / TITANIUM**

**ALUMINIO / ALUMINIUM**

**COBRE / COPPER**

**CUPRONÍQUEL / COPPER-NICKEL**

**BRONCE / BRONZE**

---

INSO GROUP SPAIN, S.L.

POETA ANTONIO CHOCOMELI 1-2 - 46015 VALENCIA (ESPAÑA)

www.insogroup.es - info@grupoinso.es - Oficina: +34 960 704 062 / Móvil: +34 652 655 871

---

## Aceros de construcción:

### General structural steel:

1.0037 - ST37-2 G  
1.0038 - RST.37-2  
1.0050 - ST50-2  
1.0060 - ST60-2 G  
1.0116 - ST37-3 G  
1.0301 - C10  
1.0401 - C15  
1.0402 - C22  
1.0425 - P265GH  
1.0432 - C21  
1.0460 - C22G2  
1.0481 - P295GH  
1.0482 - 19Mn5  
1.0486 - StE285  
1.0487 - WStE285  
1.0488 - TStE285  
1.0501 - C35  
1.0503 - C45  
1.0505 - StE 315  
1.0506 - WStE 315  
1.0508 - TStE 315  
1.0562 - StE 355  
1.0565 - WStE 355  
1.0566 - TStE 355  
1.0570 - ST52-3  
1.0601 - C60  
1.1133 - 20Mn5  
1.1141 - CK15  
1.1151 - CK22  
1.1181 - CK35  
1.1191 - CK45  
1.1193 - CF45  
1.1213 - CF53  
1.1221 - CK60

## Aceros de cementación:

### Case hardening steel:

1.5752 - 15NiCr13  
1.5919 - 15CrNi6  
1.5920 - 18CrNi8  
1.6587 - 18CrNiMo7-6  
1.7131 - 16MnCr5  
1.7147 - 20MnCr5

## Aceros de rodamientos:

### Bearing steel:

1.3505 - 100Cr6  
1.3536 - 100CrMo7-3  
1.3539 - 100CrMnMo8

## Aceros herramienta:

### Tool steel:

1.2067 - 102Cr6  
1.2080 - X210Cr12  
1.2162 - 21MnCr5  
1.2312 - 40CrMnMoS8-6  
1.2316 - X36CrMo17  
1.2343 - X38CrMoV5-1  
1.2344 - X40CrMoV5-1  
1.2363 - X100CrMoV5-1  
1.2367 - X38CrMoV5-3  
1.2379 - X155CrMoV12-1  
1.2436 - X210CrW12  
1.2510 - 100MnCrW4  
1.2550 - 60WCrV7  
1.2601 - X165CrMoV12  
1.2714 - 56NiCrMoV7  
1.2764 - X19NiCrMo4  
1.2767 - X45NiCrMo 4  
1.2826 - 60MnSiCr4  
1.2842 - 90MnCrV8

## Aceros de resistencia:

### Heat resisting steel:

1.5120 - 38MnSi4  
1.5141 - 53MnSi4  
1.5415 - 16Mo3  
1.5423 - 16Mo5  
1.5637 - 12Ni14  
1.5680 - X12Ni5  
1.5864 - 35NiCr18  
1.6210 - 15MnNi63  
1.6310 - 20MnMoNi5-5  
1.6311 - 20MnMoNi4-5  
1.6368 - 15NiCuMoNb5  
1.6562 - 40NiCrMo8-4  
1.6580 - 30CrNiMo8  
1.6582 - 34CrNiMo6  
1.6746 - 32NiCrMo14-5  
1.6780 - 15NiCrMo10-6  
1.6948 - 27NiCrMoV11-6  
1.6957 - 26NiCrMoV14-5  
1.6958 - 26NiCrMo14-6  
1.6981 - 21CrMoNiV4-7  
1.7033 - 34Cr4  
1.7034 - 37Cr4  
1.7035 - 41Cr4  
1.7103 - 67SiCr5  
1.7218 - 25CrMo4  
1.7219 - 26CrMo4  
1.7220 - 34CrMo4  
1.7225 - 42CrMo4  
1.7228 - 50CrMo4  
1.7258 - 24CrMo5  
1.7323 - 20MoCrS4  
1.7325 - 25MoCr4  
1.7335 - 13CrMo4-5  
1.7362 - 12CrMo19-5  
1.7380 - 10CrMo9-10  
1.7383 - 11CrMo9-10  
1.7386 - X11CrMo9-1  
1.7707 - 30CrMoV9  
1.7709 - 21CrMoV5-7

1.7715 - 14MoV6-3  
1.7733 - 24CrMoV5-5  
1.7734  
1.8159 - 50CrV4  
1.8161 - 58CrV4  
1.8507 - 34CrAlMo5  
1.8509 - 41CrAlMo7-10  
1.8515 - 31CrMo12  
1.8519 - 31CrMoV9  
1.8550 - 34CrAlNi7  
1.8882 - S355G3  
1.8902 - S420N2  
1.8905 - P460N2  
1.8907 - StE500  
1.8912 - S420NL2  
1.8915 - P460NL12  
1.8917 - TStE500  
1.8928 - S690QL  
1.8931 - S690Q  
1.8932 - WStE420  
1.8935 - P460NH2  
1.8937 - WStE500

## Aceros ESR:

### ESR steel:

1.4361 ESU  
1.4429 ESU  
1.4435 ESU  
1.4542 ESU  
1.4545 ESU  
1.4548 ESU  
1.4923 ESU  
1.4944 ESU  
1.4980 ESU  
1.6580 ESU  
1.6582 ESU  
1.6587 ESU  
1.6746 ESU  
1.6780 ESU  
1.6948 ESU

## Materiales ABB:

### ABB materials:

ST 10 TS  
ST 11 T  
ST 12  
ST 12 T  
ST 12 TS  
ST 16/13 MoVNbl  
ST 325  
ST 325 TS  
ST 330 TS  
ST 460 TS  
ST 525 TS  
ST 530 TS  
ST 575  
ST 577  
ST 85  
ST 9 TS  
St S 18/8  
ST T 17/13 W

### Aceros inoxidables:

#### Stainless steel:

1.3912 - Ni 36  
 1.3952 - X2CrNiMoN 1814  
 1.3964 - X2CrNiMnMoNNb21-16-5-3  
 1.3974 - X2CrNiMnMoNNb23-17-6-3  
 1.4000 - X6Cr13  
 1.4006 - X12Cr13  
 1.4021 - X20Cr13  
 1.4024 - X15Cr13  
 1.4034 - X46Cr13  
 1.4057 - X17CrNi16-2  
 1.4104 - X14CrMoS17  
 1.4112 - X90CrMoV18  
 1.4119 - X 15 CrMo 13  
 1.4120 - X20CrMo13  
 1.4122 - X39CrMo17-1  
 1.4301 - X5CrNi18-10  
 1.4305 - X10CrNiS18-9  
 1.4306 - X2CrNi19-11  
 1.4307 - X2CrNi18-9  
 1.4313 - X4CrNi13-4  
 1.4320 - X2CrNiMo13-4  
 1.4361 - X1CrNiSi18-15-4  
 1.4401 - X5CrNiMo17-12-2  
 1.4404 - X2CrNiMo17-13-2  
 1.4406 - X2CrNiMoN17-11-2  
 1.4410 - X2CrNiMoN25-7-4  
 1.4418 - X4CrNiMo16-5-1  
 1.4418mod - X4CrNiMo16-5-1  
 1.4429 - X2CrNiMoN17-13-3  
 1.4435 - X2CrNiMo18-14-3  
 1.4438 - X2CrNiMo18-15-4  
 1.4439 - X2CrNiMoN17-13-5  
 1.4462 - X2CrNiMoN22-5-3  
 1.4462A1-A3 - X2CrNiMoN22-5-3  
 1.4501 - X2CrNiMoCuWn25-7-4  
 1.4529 - X1NiCrMoCuN25-20-7  
 1.4533 - X6CrNiTi18-10S  
 1.4539 - X1NiCrMoCu25-20-5  
 1.4541 - X6CrNiTi18-10  
 1.4542 - X5CrNiCuNb16-4  
 1.4547 - X1CrNiMoCuN20-18-7  
 1.4548 - X5CrNiCuNB17-4-4  
 1.4550 - X 6 CrNiNb 18-10  
 1.4553 - X6CrNiNb18-10S  
 1.4571 - X6CrNiMoTi17-12-2  
 1.4577 - X3CrNiMoTi25-25  
 1.4580 - X6CrNiMoNb17-12-2  
 1.4582 - X4CrNiMoNb25-7  
 1.4718 - X45CrSi9-3  
 1.4828 - X15CrNiSi20-12  
 1.4841 - X 15 CrNiSi 25 20  
 1.4901 - X 10 CrWMoVNb 9-2 F92  
 1.4902 - X14CrMoVNBn10-1  
 1.4903 - X10CrMoVNB9-1/ F91  
 1.4906 - X 12 CrMoWVNbN 1011  
 1.4910 - X3CrNiMoN17-13  
 1.4913 - X19CrMoVNBn11-1

1.4922 - X20CrMoV12-1  
 1.4923 - X22CrMoV12-1  
 1.4926 - X21CrMoV12-1  
 1.4938 - X12CrNiMoV12-3  
 1.4939 - X 12 CrNiMo 12  
 1.4941 - X6CrNiTiB18-10  
 1.4944 - X5NiCrTi26-15  
 1.4961 - X8CrNiNb16-13  
 1.4980 - X6NiCrTiMoVB25-15-2  
 1.4981 - X8CrNiMoNb16-16  
 1.4986 - X7CrNiMoBNb16-16  
 1.4988 - X8CrNiMoVNB16-13

### Norma Americana:

#### American grades:

A182 Gr. F11  
 A182 Gr. F304  
 A182 Gr. F304H  
 A182 Gr. F304L  
 A182 Gr. F316  
 A182 Gr. F316LN  
 A182 Gr. F316LN6  
 A182 Gr. F316LNG  
 A182 Gr. F316N  
 A182 Gr. F316Ti  
 A182 Gr. F317L  
 A182 Gr. F321  
 A182 Gr. F321H  
 A182 Gr. F347  
 A182 Gr. F347H  
 A182 Gr. F430  
 A182 Gr. F44  
 A182 Gr. F46  
 A182 Gr. F5  
 A182 Gr. F51  
 A182 Gr. F53  
 A182 Gr. F55  
 A182 Gr. F5a  
 A182 Gr. F6NM  
 A182 Gr. F60  
 A182 Gr. F6a  
 A182 Gr. F9  
 A204 Gr. A  
 A240 Type 316  
 A276 Type 420  
 A322 Gr. 4140  
 A336 F91  
 A350 Gr. LF1  
 A350 Gr. LF2  
 A350 Gr. LF3  
 A694 Gr. F42  
 A694 Gr. F46  
 A694 Gr. F52  
 A694 Gr. F56  
 A694 Gr. F60  
 A694 Gr. F65  
 A694 Gr. F70  
 A723 Cl.1  
 A739 Gr. B22  
 A743 Gr. CA6MN  
 A765 Gr. II  
 AISI 309  
 AISI 317  
 AISI 347

AISI 410  
 AISI 420  
 SA181 Cl. 60  
 SA181 Cl. 70  
 SA266 Cl. 1  
 SA266 Cl. 2  
 SA266 Cl. 4  
 SAE 4140  
 SAE 4340  
 SAF 2507

### Aleaciones Titanio:

#### Titanium alloys:

3.7035 - Titanio Gr. 2  
 3.7164 - TiAl 6 V 4  
 3.7165 - TiAl 6 V 4  
 3.7235 - Titanio Gr. 7  
 Grade 1  
 Grade 2  
 Grade 3  
 Grade 4  
 Grade 5  
 Grade 7  
 Grade 9  
 Grade 23

### Calidades ZF:

#### ZF qualities:

ZF 1  
 ZF 1A  
 ZF 6  
 ZF 63  
 ZF 68  
 ZF 7B

### Aleaciones base cobre:

#### Copper base alloys:

2.0070  
 2.0440  
 2.0550  
 2.0966  
 2.1197  
 2.1504

### Aluminio:

#### Aluminium:

3.1255 - AlCuSiMn  
 3.1325 - AlCuMg1  
 3.1355 - AlCu4Mg1  
 3.1924 - AlCuMgNi  
 3.2315 - AlMgSi1  
 3.3547 - AlMg4.5Mn  
 3.4345 - AlZuMgCu0.5  
 3.4365 - AlZuMgCu1.5

**Aleaciones base níquel:**

**Nickel base alloys:**

1.4563 - X1NiCrMoCuN31-27-4  
1.4876 - X10NiCrAlTi32-21  
1.4958 - X5NiCrAlTi31-20  
2.4360 - NiCu 30 Fe  
2.4375 - NiCu 30 Al  
2.4602 - NiCr 21 Mo 14 W  
2.4610 - NiMo 16 Cr 16 Ti  
2.4663 - NiCr23Co12Mo  
2.4668 - NiCr19Fe19Nb5Mo3  
2.4816 - NiCr15Fe  
2.4819 - NiMo16Cr15W  
2.4856 - NiCr22Mo9Nb  
2.4858 - NiCr21Mo  
2.4952 - NiCr20TiAl  
Alloy 28  
Alloy 59  
Alloy 718  
Alloy 800  
Hastelloy® B2  
Hastelloy® B3  
Hastelloy® C 22  
Hastelloy® C 4  
Hastelloy® C276  
Hastelloy® G  
Hastelloy® C-2000  
Hastelloy® X  
Nilo® 36  
Invar®  
Nilo® 42  
Invar®  
Nitronic 50  
Nitronic 60  
Nimonic® 75  
Nilomag® 77  
Nimonic® 80A  
Nimonic® 90  
Nickel 200 / 201  
Nimonic® 263  
Incoloy® 330  
Monel® 400  
Monel® K 500  
Inconel® 600  
Inconel® 601  
Inconel® 625  
Inconel® 625 LCF  
Inconel® 686  
Inconel® 718  
Inconel® X-750  
Inconel® 825  
Incoloy® 800  
Incolloy® 800 HT  
Incoloy® 825  
Incoloy® 901  
Incoloy® 925  
Incoloy® A-286  
Incoloy® DS Nilo® K  
Kovar®  
Waspalloy®