

Table 4 — Chemical composition (cast analysis) of ferritic corrosion resistant steels

| Steel designation | | % by mass ^a | | | | | | | | | | |
|-------------------|----------|------------------------|------|------|-------|--------------------|--------------|--------------|--------------|-------|---|--|
| Name | Number | C | Si | Mn | P | S | Cr | Ni | Mo | N | Ti | Others |
| Standard grades | | | | | | | | | | | | |
| X2CrNi12 | 1.4003 | 0,030 | 1,00 | 2,00 | 0,040 | 0,030 ^b | 10,5 to 12,5 | 0,30 to 1,00 | - | 0,030 | - | - |
| X6Cr13 | 1.4000 | 0,08 | 1,00 | 1,00 | 0,040 | 0,030 ^b | 12,0 to 14,0 | - | - | - | - | - |
| X6Cr17 | 1.4016 | 0,08 | 1,00 | 1,00 | 0,040 | 0,030 ^b | 16,0 to 18,0 | - | - | - | - | - |
| X6CrMoS17 | 1.4105 | 0,08 | 1,50 | 1,50 | 0,040 | 0,15 to 0,35 | 16,0 to 18,0 | - | 0,20 to 0,60 | - | - | - |
| X6CrMo17-1 | 1.4113 | 0,08 | 1,00 | 1,00 | 0,040 | 0,030 ^b | 16,0 to 18,0 | - | 0,90 to 1,40 | - | - | - |
| X2CrMoSiS18-2-1 | 1.4106 | 0,030 | 2,00 | 1,00 | 0,040 | 0,25 to 0,35 | 17,0 to 19,0 | - | 1,00 to 2,50 | - | - | - |
| Special grades | | | | | | | | | | | | |
| X3CrS12 | 1.4045 | 0,06 | 2,00 | 1,50 | 0,040 | 0,15 to 0,35 | 11,0 to 13,0 | - | 1,00 | - | - | - |
| X2CrTi17 | 1.4520 | 0,025 | 0,50 | 0,50 | 0,040 | 0,015 ^b | 16,0 to 18,0 | - | - | 0,015 | $[4 \times (C+N) + 0,15]$ to 0,80 ^c | - |
| X3CrNb17 | 1.4511 | 0,05 | 1,00 | 1,00 | 0,040 | 0,030 ^b | 16,0 to 18,0 | - | - | - | - | Nb: 12 × C to 1,00 |
| X2CrTiNb18 | 1.4509 | 0,030 | 1,00 | 1,00 | 0,040 | 0,015 ^b | 17,5 to 18,5 | - | - | - | 0,10 to 0,60 | Nb: $[(3 \times C) + 0,30]$ to 1,00 |
| X2CrTi21 * | 1.4611 * | 0,030 | 1,00 | 1,00 | 0,050 | 0,050 ^b | 19,0 to 22,0 | 0,50 | 0,50 | - | $[4 \times (C+N) + 0,20]$ to 1,00 ^c | Al: 0,050 Cu: 0,50 |
| X2CrNbCu21 | 1.4621 | 0,030 | 1,00 | 1,00 | 0,040 | 0,015 | 20,0 to 21,5 | - | - | 0,030 | - | Cu: 0,10 to 1,00 Nb: $[7 \times (C + N) + 0,10]$ to 1,00 |
| X2CrTi24 * | 1.4613 * | 0,030 | 1,00 | 1,00 | 0,050 | 0,050 | 22,0 to 25,0 | 0,50 | 0,50 | - | $[4 \times (C+N) + 0,20]$ to 1,00 ^c | Al:0,050 Cu: 0,50 |
| X6CrMoNb17-1 | 1.4526 | 0,08 | 1,00 | 1,00 | 0,040 | 0,015 | 16,0 to 18,0 | - | 0,80 to 1,40 | 0,040 | - | Nb: $[7 \times (C + N) + 0,10]$ to 1,00 |