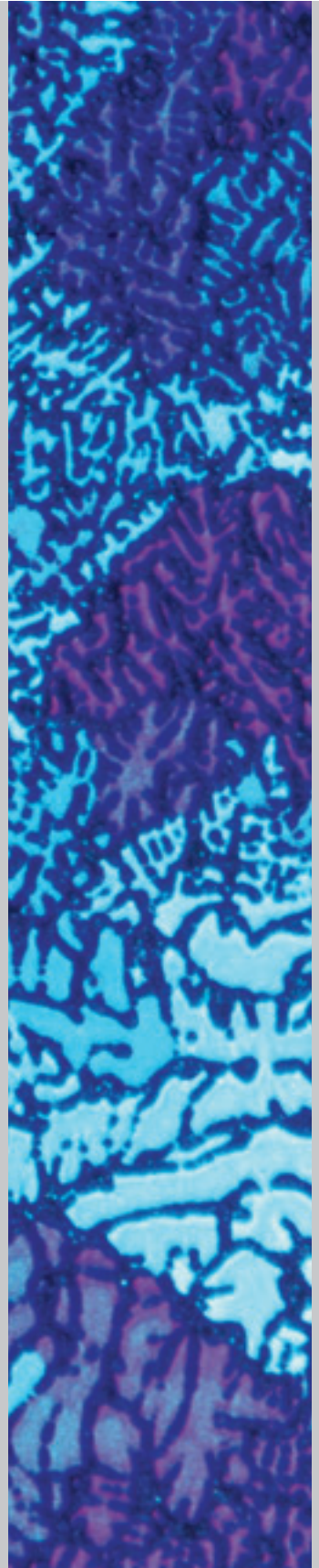
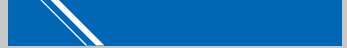


RHEINFELDEN



Primary Aluminium Casting Alloys

Mechanical properties

The mechanical properties indicated in these tables are based on our own tests on our alloys. They usually are higher than the European standards (EN 1706). For sand and permanent mold castings,

the mechanical properties were determined on both separately cast test bars and on samples taken from the castings. For diecastings, only separately cast plates or bars were used. The mecha-

nical property ranges demonstrate the performance of the alloys, as well as the effects of casting method and alloy choice. Maximum values serve only as an indi-

| Alloy designations | | Casting method | Treatment condition | Yield Tensile Strength (YTS) | | Ultimate Tensile Strength (UTS) | | Elongation | | Brinell Hardness | | Fatigue resistance * |
|-------------------------------------|----------------------|----------------|---------------------|------------------------------|--------------------|---------------------------------|-----------------|-----------------|-------|------------------|---------------|----------------------|
| Brand name | Number EN 1706 | | | Chemical composition | $R_{p0,2}$ [MPa]** | | R_m [MPa] | | A [%] | | HB [5/250-30] | σ_{bw} [MPa] |
| Anticorodal-04 | | AlSi0,5Mg | S | F | 60 - 100 (50) | 90 - 130 (80) | 15 - 20 (10) | 35 - 40 (35) | | | | |
| | | | S | T7 | 160 - 180 (150) | 190 - 210 (180) | 3 - 5 (3) | 70 - 75 (70) | | | | |
| | | | K | F | 80 - 120 (70) | 100 - 140 (90) | 18 - 22 (12) | 40 - 45 (40) | | | | |
| | | | K | T7 | 170 - 190 (150) | 200 - 220 (190) | 3 - 6 (3) | 70 - 80 (70) | | | | |
| | | | D | F | 80 - 120 | 100 - 140 | 7 - 12 | 40 - 45 | | | | |
| Anticorodal-50 | | AlSi5Mg | S | F | 100 - 130 (90) | 140 - 180 (130) | 2 - 4 (1) | 60 - 70 (55) | | | 60 - 65 | |
| | | | S | T4 | 150 - 180 (120) | 200 - 270 (150) | 4 - 10 (2) | 75 - 90 (70) | | | 70 - 75 | |
| | | | S | T6 | 220 - 290 (160) | 260 - 320 (180) | 2 - 4 (1) | 95 - 115 (85) | | | 70 - 75 | |
| | | | K | F | 120 - 160 (100) | 160 - 200 (140) | 2 - 5 (1) | 60 - 75 (60) | | | 70 - 75 | |
| | | | K | T4 | 160 - 190 (130) | 210 - 270 (170) | 5 - 10 (3) | 75 - 90 (70) | | | 80 - 85 | |
| | | | K | T6 | 240 - 290 (180) | 260 - 320 (190) | 2 - 7 (1) | 100 - 115 (90) | | | 80 - 85 | |
| Anticorodal-70 Anticorodal-78 dv | 42 100 | AlSi7Mg0,3 | S | F | 80 - 140 (80) | 140 - 220 (140) | 2 - 6 (2) | 45 - 60 (45) | | | | |
| | | | S | T64 | 120 - 170 (120) | 200 - 270 (200) | 4 - 10 (4) | 60 - 80 (55) | | | | |
| | | | S | T6 | 220 - 280 (200) | 240 - 320 (240) | 3 - 6 (2,5) | 80 - 110 (80) | | | 90 - 100 | |
| | | | K | F | 90 - 150 (90) | 180 - 240 (180) | 4 - 9 (2) | 55 - 70 (50) | | | | |
| | | | K | T64 | 180 - 200 (140) | 250 - 270 (220) | 8 - 12 (5) | 80 - 95 (80) | | | | |
| | | | K | T6 | 220 - 280 (200) | 290 - 340 (250) | 5 - 9 (3,5) | 90 - 125 (90) | | | | |
| Anticorodal-71 | | AlSi7Mg0,3 | S | T7 | 160 - 200 (150) | 220 - 250 (210) | 2 - 4 (2) | 70 - 80 (70) | | | | |
| | | | K | T7 | 160 - 200 (150) | 220 - 250 (210) | 4 - 6 (3) | 70 - 80 (70) | | | | |
| Anticorodal-72 | 42 200 | AlSi7Mg0,6 | S | T6 | 220 - 280 (220) | 250 - 320 (250) | 1 - 2 (1) | 90 - 110 (90) | | | 90 - 110 | |
| | | | K | T64 | 210 - 240 (150) | 290 - 320 (230) | 6 - 8 (3) | 90 - 100 (90) | | | | |
| | | | K | T6 | 240 - 280 (220) | 320 - 350 (270) | 4 - 6 (2,5) | 100 - 115 (100) | | | 110 - 115 | |
| Silafont-30 | 43 300 | AlSi9Mg | S | F | 80 - 140 (80) | 160 - 220 (150) | 2 - 6 (2) | 50 - 70 (50) | | | 65 - 75 | |
| | | | S | T6 | 200 - 310 (180) | 250 - 330 (220) | 2 - 5 (2) | 80 - 115 (75) | | | 80 - 100 | |
| | | | K | F | 90 - 150 (90) | 180 - 240 (180) | 2 - 9 (2) | 60 - 80 (60) | | | 80 - 100 | |
| | | | K | T64 | 180 - 210 (140) | 250 - 290 (220) | 6 - 10 (3) | 80 - 90 (80) | | | | |
| | | | K | T6 | 210 - 310 (190) | 290 - 360 (240) | 4 - 7 (2) | 90 - 120 (90) | | | 90 - 110 | |
| Silafont-32 dv | | AlSi9Mg1 | K | T6 | 240 - 310 (230) | 320 - 400 (300) | 2 - 4 (1) | 110 - 120 (105) | | | | |
| Silafont-36 | | AlSi9MgMn | D | F | 120 - 150 | 250 - 290 | 5 - 10 | 75 - 95 | | | 80 - 90** | |
| | | | D | T5 | 155 - 245 | 275 - 340 | 4 - 9 | 90 - 110 | | | | |
| | | | D | T4 | 95 - 140 | 210 - 260 | 15 - 22 | 60 - 75 | | | 80 - 90** | |
| | | | D | T6 | 210 - 280 | 290 - 340 | 7 - 12 | 100 - 110 | | | 80 - 90** | |
| | | | D | T7 | 120 - 170 | 200 - 240 | 15 - 20 | 60 - 75 | | | 80 - 90** | |
| Castasil-37 | | AlSi9Mn | D < 3 mm | F | 120 - 150 | 280 - 300 | 10 - 14 | 60 - 75 | | | 80 - 100 | |
| Silafont-09 | 44 400 | AlSi9 | D | F | 140 - 180 | 240 - 280 | 5 - 10 | 60 - 80 | | | 60 - 70 | |
| Silafont-13 | 44 000 without Mg | AlSi11 | S | F | 80 - 120 (70) | 150 - 210 (150) | 7 - 13 (6) | 50 - 60 (45) | | | 55 - 70 | |
| | | | S | O | 80 - 120 (70) | 150 - 210 (150) | 9 - 15 (8) | 50 - 60 (45) | | | 85 - 100 | |
| | | | K | F | 80 - 150 (80) | 170 - 240 (160) | 7 - 16 (6) | 45 - 60 (45) | | | 70 - 90 | |
| | | | K | O | 110 - 150 (100) | 180 - 240 (160) | 10 - 18 (10) | 55 - 65 (50) | | | 90 - 110 | |
| Silafont-20 | 44 000 with Mg | AlSi11Mg | S | F | 80 - 140 (70) | 170 - 220 (170) | 2 - 4 (1,5) | 50 - 60 (50) | | | 65 - 75 | |
| | | | S | T6 | 120 - 300 (110) | 200 - 320 (200) | 1 - 3 (0,5) | 65 - 120 (55) | | | 90 - 120 | |
| | | | K | F | 80 - 130 (80) | 180 - 230 (180) | 5 - 16 (5) | 55 - 75 (55) | | | 80 - 100 | |
| | | | K | T6 | 125 - 320 (120) | 210 - 350 (210) | 4 - 15 (3) | 70 - 125 (70) | | | 100 - 120 | |
| Silafont-70 | 48 000 | AlSi12CuNiMg | S | F | 120 - 170 (110) | 130 - 180 (120) | 0,5 - 1,5 (0,5) | 80 - 90 (80) | | | 75 - 85 | |
| | | | S | T6 | 200 - 300 (190) | 220 - 300 (200) | 0,3 - 1,0 (0,3) | 130 - 160 (130) | | | 95 - 105 | |
| | | | S | T5 | 140 - 190 (140) | 160 - 190 (160) | 0,2 - 1,0 (0,2) | 80 - 90 (80) | | | | |
| | | | K | F | 190 - 260 (180) | 200 - 270 (190) | 1,0 - 2,5 (0,5) | 90 - 105 (90) | | | 80 - 90 | |
| | | | K | T6 | 320 - 390 (280) | 350 - 400 (300) | 0,5 - 2,0 (0,5) | 135 - 160 (130) | | | 100 - 110 | |
| | | | K | T5 | 185 - 210 (150) | 200 - 230 (180) | 0,5 - 2,0 (0,5) | 90 - 110 (90) | | | | |
| Silafont-90 | | AlSi17Cu4Mg | K | F | 170 - 225 (160) | 180 - 235 (170) | 0,4 - 0,9 (0,3) | 110 - 120 (110) | | | | |
| | | | K | T6 | 270 - 360 (260) | 280 - 370 (270) | 0,4 - 0,8 (0,3) | 140 - 160 (130) | | | 90 - 125 | |
| | | | K | T7 | 260 - 315 (250) | 270 - 320 (260) | 0,2 - 0,5 (0,2) | 130 - 145 (120) | | | | |
| | | | K | T5 | 160 - 225 (160) | 165 - 230 (165) | 0,4 - 0,8 (0,3) | 105 - 115 (110) | | | | |
| | | | D | T5 | 220 - 265 | 230 - 295 | 0,5 - 1,0 | 110 - 120 | | | | |
| Silafont-92 | | AlSi18CuNiMg | K | F | 165 - 200 (155) | 175 - 210 (165) | 0,3 - 0,8 (0,2) | 90 - 110 (85) | | | | |
| | | | K | T5 | 170 - 200 (170) | 180 - 220 (180) | 0,2 - 0,7 (0,2) | 90 - 120 (90) | | | | |

cation of values that can be achieved within a casting or one part of a casting when the most favorable casting method and the best casting techniques are used. Values in parentheses repre-

sent minimum values for castings with wall thicknesses up to 20 mm. Metal impurities – particularly elevated iron content – influence the properties of aluminium casting alloys. The primary

alloys supplied by RHEINFELDEN contain less than 0.15% Fe unless higher values are necessary. The narrow alloying limits of our alloys assure stable casting behavior and other properties.

| Alloy designations | | Casting method | Treatment condition | Yield Tensile Strength (YTS) R_{p0,2} [MPa]** | Ultimate Tensile Strength (UTS) R_m [MPa] | Elongation A₅ [%] | Brinell Hardness HB [5/250-30] | Fatigue resistance* σ_{bw} [MPa] | |
|--------------------|----------------|----------------|---------------------|--|--|---|---|---|----------------------|
| Brand name | Number EN 1706 | | | | | | | | Chemical composition |
| Castadur-50 | | AlZn5Mg | S | T1 | 160 - 200 | 220 - 280 | 5 - 10 | 75 - 85 | |
| Unifont-90 | | AlZn10Si8Mg | S | T1 | 190 - 230 (170) | 220 - 250 (180) | 1 - 2 (1) | 90 - 100 (90) | 80 - 100 |
| | | | K | T1 | 220 - 230 (220) | 280 - 320 (230) | 1 - 6 (1) | 105 - 120 (95) | 90 - 110 |
| Unifont-94 | | AlZn10Si8Mg | D | T1 | 230 - 280 | 300 - 350 | 2 - 4 | 110 - 120 | 70 - 90 |
| Peraluman-30 | 51 100 | AlMg3(a) | S | F | 70 - 100 (60) | 170 - 190 (140) | 4 - 8 (4) | 50 - 60 (45) | 70 - 80 |
| | | | S | T6 | 140 - 160 (110) | 200 - 240 (160) | 6 - 8 (5) | 65 - 75 (60) | 75 - 85 |
| | | | K | F | 70 - 100 (70) | 170 - 210 (150) | 9 - 16 (6) | 50 - 60 (50) | 90 - 100 |
| | | | K | T6 | 140 - 160 (110) | 240 - 260 (180) | 15 - 20 (12) | 70 - 80 (70) | 100 - 110 |
| Peraluman-36 | | AlMg3Si | S | F | 80 - 100 (70) | 140 - 190 (130) | 3 - 8 (3) | 50 - 60 (45) | 60 - 65 |
| | | | S | T6 | 160 - 220 (140) | 220 - 280 (180) | 2 - 8 (2) | 70 - 90 (65) | 75 - 80 |
| | | | K | F | 70 - 100 (70) | 160 - 210 (160) | 6 - 14 (5) | 50 - 65 (50) | 70 - 80 |
| | | | K | T6 | 160 - 220 (150) | 250 - 300 (220) | 5 - 15 (5) | 75 - 90 (75) | 80 - 90 |
| Peraluman-50 | 51 300 | AlMg5 | S | F | 100 - 120 (90) | 190 - 250 (170) | 10 - 15 (8) | 55 - 70 (50) | 60 - 80 |
| | | | K | F | 100 - 140 (100) | 200 - 260 (180) | 10 - 25 (8) | 60 - 75 (55) | 70 - 80 |
| Peraluman-56 | 51 400 | AlMg5Si | S | F | 110 - 130 (100) | 160 - 200 (140) | 3 - 4 (2) | 60 - 80 (55) | 60 - 80 |
| | | | S | T6 | 110 - 160 (110) | 180 - 220 (160) | 3 - 4 (2) | 70 - 80 (65) | 70 - 90 |
| | | | K | F | 110 - 150 (100) | 180 - 240 (150) | 3 - 5 (3) | 65 - 85 (60) | 70 - 80 |
| | | | K | T6 | 110 - 160 (110) | 210 - 260 (200) | 3 - 18 (5) | 75 - 85 (70) | 70 - 90 |
| Peraluman-57 | | AlMg5SiCu | S | T5 | 160 - 180 (140) | 170 - 210 (150) | 0,5 - 2 (0,5) | 70 - 80 (65) | 60 - 70 |
| | | | S | T6 | 190 - 210 (170) | 230 - 250 (200) | 2 - 4 (2) | 85 - 95 (80) | |
| | | | K | T5 | 160 - 190 (140) | 210 - 260 (190) | 2 - 3 (1,5) | 80 - 90 (75) | 70 - 75 |
| | | | K | T6 | 190 - 200 (170) | 280 - 310 (250) | 6 - 10 (4) | 90 - 100 (85) | |
| Magsimal-59 | | AlMg5Si2Mn | D 2 - 4 mm | F | 160 - 220 | 310 - 340 | 12 - 18 | >80 | 90 - 110 |
| | | | D 4 - 6 mm | F | 140 - 170 | 250 - 320 | 9 - 14 | >80 | 90 - 110 |
| | | | D 6 - 12 mm | F | 120 - 145 | 220 - 260 | 8 - 12 | >70 | 90 - 110 |
| Alufont-36 | 45 100 | AlSi5Cu3Mg | K | F | 110 - 130 (100) | 220 - 240 (180) | 2 - 4 (1) | 80 - 85 (80) | |
| | | | K | T4 | 180 - 260 (140) | 270 - 370 (240) | 3 - 7 (2) | 85 - 110 (85) | |
| | | | K | T6 | 310 - 380 (200) | 420 - 450 (280) | 2 - 5 (1) | 130 - 145 (110) | 80 - 110 |
| Alufont-47 | 21 000 | AlCu4TiMg | S | T4 | 220 - 280 (180) | 300 - 400 (240) | 5 - 15 (3) | 90 - 115 (85) | 80 - 100 |
| | | | S | T6 | 240 - 350 (220) | 350 - 420 (280) | 3 - 10 (1) | 95 - 125 (90) | 80 - 100 |
| | | | K | T4 | 220 - 300 (200) | 320 - 420 (280) | 8 - 18 (5) | 95 - 115 (90) | 100 - 110 |
| | | | K | T6 | 260 - 380 (220) | 350 - 440 (300) | 3 - 12 (2) | 100 - 130 (95) | 100 - 110 |
| Alufont-48 | | AlCu4TiMgAg | S | T64 | 200 - 270 (180) | 370 - 430 (320) | 14 - 18 (7) | 105 - 120 (100) | |
| | | | S | T6 | 410 - 450 (320) | 460 - 510 (380) | 3 - 7 (2) | 130 - 150 (125) | 80 - 100 |
| | | | K | T6 | 410 - 460 (340) | 460 - 510 (440) | 5 - 8 (3) | 130 - 150 (130) | 100 - 110 |
| Alufont-52 | 21 100 | AlCu4Ti | S | T64 | 210 - 240 (180) | 300 - 360 (260) | 8 - 15 (4) | 90 - 100 (90) | 80 - 100 |
| | | | S | T6 | 300 - 420 (280) | 400 - 475 (350) | 3 - 4 (2) | 125 - 145 (120) | 80 - 100 |
| | | | K | T64 | 210 - 250 (190) | 360 - 400 (300) | 12 - 20 (10) | 90 - 120 (90) | 100 - 110 |
| | | | K | T6 | 310 - 400 (300) | 420 - 475 (400) | 7 - 16 (4) | 130 - 145 (130) | 100 - 110 |
| Alufont-57 | | AlCu4NiMg | S | T6 | 180 - 200 (160) | 220 - 270 (180) | 0,3 - 0,8 (0,3) | 90 - 110 (80) | 70 - 80 |
| | | | K | T6 | 200 - 220 (180) | 240 - 320 (200) | 0,3 - 1,0 (0,3) | 90 - 125 (80) | 70 - 80 |
| Alufont-60 | | AlCu5NiCoSbZr | S | T7 | 145 - 165 (140) | 180 - 220 (180) | 1 - 1,5 (1) | 85 - 95 (85) | 90 - 100 |
| | | | S | O | 160 - 180 (160) | 180 - 200 (180) | 1 - 1,5 (1) | 80 - 90 (80) | 90 - 100 |
| Rotoren-Al 99,5R | | Al99,5 | K | F | 20 - 40 | 60 - 110 | 35 - 50 | 14 - 25 | 40 - 50 |
| Rotoren-Al 99,7R | | Al99,7 | D | F | 20 - 40 | 80 - 120 | 10 - 25 | 15 - 25 | |
| Aluman-16 | | AlMn1,6 | D | F | 90 - 120 | 160 - 180 | 8 - 15 | 40 - 60 | |

Casting method

Abbreviations for casting methods:

S Sand casting
K Chill or permanent mold casting
D Diecasting

Temper

EN 1706 Description as cast
F annealed
T1 self hardened
T4 naturally aged
T5 stabilized
T6 artificially aged
T64 partially underaged
T7 overaged

Fatigue resistance

* It should be noted that in casting constructions the values of fatigue strength can vary, according to the quality of the structure, the surface condition, etc., in the worst case down to 25% of the indicated values.

** 100 MPa = 100 N/mm² = 14.5 ksi

Chemical composition of casting alloys

The production of high-quality castings requires alloys that are of consistently high purity. The quality assurance system at RHEINFELDEN guarantees that this requirement is met.

The most important alloying elements are indicated as ranges. All other figures are maximum impurity levels. Properties and

stable behavior during the casting process are assured.

These figures are based on European Standard DIN EN 1676. The numerical designations are those of the European standard (EN). Alloys with special compositions can be supplied on demand. Aluminium-silicon alloys can be supplied

with a structure premodified by sodium or with permanent modification by strontium instead of the normally granular structure. These options are indicated by (Na/Sr) in the last column of the table.

| Alloy designation | | | Chemical composition | | | | | | | |
|-------------------|----------------|----------------------|----------------------|------|---------|----------|-----------|----------|-----------|--|
| Brand name | Number EN 1706 | Chemical composition | Si | Fe | Cu | Mn | Mg | Zn | Ti | Others |
| | | | [weight-%] | | | | | | | |
| Anticorodal-04 | | AlSi0,5Mg | 0,3-0,6 | 0,8 | 0,01 | 0,01 | 0,3-0,6 | 0,07 | 0,01 | |
| Anticorodal-50 | | AlSi5Mg | 5,0-6,0 | 0,15 | 0,02 | 0,10 | 0,4-0,8 | 0,10 | 0,05-0,20 | |
| Anticorodal-70 | 42 100 | AlSi7Mg0,3 | 6,5-7,5 | 0,15 | 0,02 | 0,10 | 0,30-0,45 | 0,07 | 0,10-0,18 | (Na/Sr) |
| Anticorodal-71 | | AlSi7Mg0,3 | 6,5-7,5 | 0,15 | 0,01 | 0,01 | 0,30-0,45 | 0,07 | 0,01 | (Na/Sr) |
| Anticorodal-72 | 42 200 | AlSi7Mg0,6 | 6,5-7,5 | 0,15 | 0,02 | 0,05 | 0,50-0,70 | 0,07 | 0,10-0,18 | (Na/Sr) |
| Anticorodal-78 dv | 42 100 | AlSi7Mg0,3 | 6,5-7,5 | 0,15 | 0,02 | 0,05 | 0,30-0,45 | 0,07 | 0,10-0,18 | Sr |
| Silafont-30 | 43 300 | AlSi9Mg | 9,0-10,0 | 0,15 | 0,02 | 0,05 | 0,30-0,45 | 0,07 | 0,15 | (Na/Sr) |
| Silafont-32 dv | | AlSi9Mg1 | 9,0-10,0 | 0,15 | 0,02 | 0,05 | 0,8-1,3 | 0,07 | 0,15 | Sr |
| Silafont-36 | | AlSi9MgMn | 9,5-11,5 | 0,15 | 0,03 | 0,5-0,8 | 0,1-0,5 | 0,10 | 0,15 | Sr |
| Castasil-37 | | AlSi9Mn | 8,5-10,5 | 0,15 | 0,05 | 0,35-0,6 | 0,06 | 0,07 | 0,15 | Mo, Zr, Sr |
| Silafont-09 | 44 400 | AlSi9 | 9,5-10,6 | 0,4 | 0,02 | 0,4 | 0,05 | 0,10 | 0,10 | |
| Silafont-13 | | AlSi11 | 10,0-13,5 | 0,15 | 0,02 | 0,05 | 0,05 | 0,07 | 0,15 | (Na/Sr) |
| Silafont-20 | 44 000 | AlSi11Mg | 10,0-11,8 | 0,15 | 0,02 | 0,05 | 0,1-0,45 | 0,07 | 0,15 | (Na/Sr) |
| Silafont-70 | 48 000 | AlSi12CuNiMg | 11,0-13,5 | 0,15 | 0,8-1,3 | 0,05 | 0,9-1,3 | 0,10 | 0,10 | 0,8-1,3 Ni |
| Silafont-90 | | AlSi17Cu4Mg | 16,0-18,0 | 0,3 | 4,0-5,0 | 0,15 | 0,5-0,6 | 0,10 | 0,20 | |
| Silafont-92 | | AlSi18CuNiMg | 17,0-19,0 | 0,3 | 0,8-1,3 | 0,05 | 0,8-1,3 | 0,10 | 0,10 | 0,8-1,3 Ni |
| Castadur-50 | | AlZn5Mg | 0,15 | 0,2 | 0,05 | 0,1-0,2 | 0,4-0,8 | 4,9-5,8 | 0,15 | 0,02-0,4 Cr |
| Unifont-90 | | AlZn10Si8Mg | 8,5-9,5 | 0,15 | 0,03 | 0,10 | 0,3-0,5 | 9,0-10,0 | 0,15 | (Na/Sr) |
| Unifont-94 | | AlZn10Si8Mg | 8,5-9,5 | 0,4 | 0,03 | 0,4 | 0,3-0,5 | 9,0-10,0 | 0,10 | |
| Peraluman-30 | 51 100 | AlMg3(a) | 0,45 | 0,15 | 0,02 | 0,01-0,4 | 2,7-3,5 | 0,10 | 0,01-0,15 | Be |
| Peraluman-36 | | AlMg3Si | 0,9-1,3 | 0,15 | 0,02 | 0,01-0,4 | 2,7-3,5 | 0,10 | 0,01-0,15 | Be |
| Peraluman-50 | 51 300 | AlMg5 | 0,30 | 0,15 | 0,02 | 0,01-0,4 | 4,8-5,5 | 0,10 | 0,01-0,15 | Be |
| Peraluman-56 | 51 400 | AlMg5Si | 0,9-1,3 | 0,15 | 0,02 | 0,01-0,4 | 4,8-5,5 | 0,10 | 0,01-0,15 | Be |
| Peraluman-57 | | AlMg5SiCu | 0,9-1,5 | 0,15 | 0,4-0,6 | 0,01-0,4 | 4,8-5,5 | 0,10 | 0,01-0,20 | Be |
| Magsimal-59 | | AlMg5Si2Mn | 1,8-2,6 | 0,2 | 0,05 | 0,5-0,8 | 5,0-6,0 | 0,07 | 0,20 | Be |
| Alufont-36 | 45 100 | AlSi5Cu3Mg | 4,7-6,0 | 0,15 | 2,7-3,5 | 0,1 | 0,20-0,50 | 0,10 | 0,01-0,20 | |
| Alufont-47 | 21 000 | AlCu4MgTi | 0,15 | 0,15 | 4,2-5,0 | 0,10 | 0,20-0,35 | 0,07 | 0,15-0,25 | |
| Alufont-48 | | AlCu4MgAgTi | 0,05 | 0,10 | 4,0-5,0 | 0,01-0,5 | 0,15-0,35 | 0,05 | 0,15-0,35 | 0,4-1,0 Ag |
| Alufont-52 | 21 100 | AlCu4Ti | 0,15 | 0,15 | 4,2-5,2 | 0,01-0,5 | 0,03 | 0,07 | 0,15-0,25 | |
| Alufont-57 | | AlCu4NiMg | 0,30 | 0,30 | 3,8-4,2 | 0,10 | 1,3-1,6 | 0,10 | 0,01-0,20 | 1,8-2,2 Ni |
| Alufont-60 | | AlCu5NiCoSbZr | 0,20 | 0,30 | 4,5-5,2 | 0,1-0,3 | 0,10 | 0,10 | 0,15-0,30 | 1,3-1,7 Ni 0,10-0,40 Co each 0,10-0,30 Zr/Sb |
| Rotoren-Al 99,5R | | Al99,5 | 0,30 | 0,40 | 0,02 | 0,02 | 0,02 | 0,07 | 0,02 | Mn+Ti+V+Cr≤0,02% |
| Rotoren-Al 99,7R | | Al99,7 | 0,20 | 0,25 | 0,01 | 0,02 | 0,02 | 0,07 | 0,02 | Mn+Ti+V+Cr≤0,02% |
| Aluman-16 | | AlMn1,6 | 0,15 | 0,90 | 0,03 | 1,4-1,6 | 0,05 | 0,10 | 0,15 | |

Technological and physical properties

The figures in this table refer to the aged condition of alloys as much as that is possible. The **technological properties** are symbolized in the following fashion:

- excellent
- very good
- good
- average
- under certain condition
- not used

Suitability of an alloy for decorative anodizing depends on its silicon content, which, as it increases, produces silvery gray to black layers. Castings of such alloys can be used only for interior architectural application in layers from 5 to 10 µm thick.

The **physical properties** are strongly influenced by variations in alloy compo-

sition. That sensitivity explains the wide ranges that occur in physical values.

The figures for melting and solidification intervals take account of the first signs of melting due to segregations in the cast structure. Those signs can appear, especially in the case of rapid heating, well below the theoretical equilibrium temperature.

| Technological and | | | | | | physical properties | | | | | |
|-------------------|----------------------|-------------|---------------|----------------------------|----------------------------------|--|--|---|---|---|---|
| Water resistance | Sea water resistance | Weldability | Machinability | Brilliance after polishing | Decorative anodizing suitability | Volumetric mass [kg/dm ³] | Modulus of elasticity [kN/mm ²] | Coefficient of linear thermal expansion 20-200 °C [1/K · 10 ⁻⁶] | Thermal conductivity 20-200 °C [W/(K · cm)] | Electrical conductivity [m/(K · mm ²)] | Melting and solidification interval [°C] |
| | | | | | | | | | | | |
| ● | ● | ● | ● | ● | - | 2,67 | 66-73 | 23 | 1,76-2,02 | 29-31,5 | 600-650 |
| ● | ● | ● | ● | ● | ○ | 2,67 | 65-75 | 23 | 1,47-1,76 | 21-26 | 550-625 |
| ● | ● | ● | ● | ● | ○ | 2,66 | 69-75 | 22 | 1,43-1,72 | 21-26 | 550-625 |
| ● | ● | ● | ● | ● | ○ | 2,66 | 69-75 | 22 | 1,43-1,72 | 27-29 | 550-625 |
| ● | ● | ● | ● | ● | ○ | 2,66 | 71-75 | 22 | 1,43-1,72 | 21-26 | 550-625 |
| ● | ● | ● | ● | ● | ○ | 2,66 | 69-75 | 22 | 1,43-1,72 | 21-26 | 550-625 |
| ● | ○ | ● | ● | ● | - | 2,65 | 74-83 | 21 | 1,39-1,68 | 21-26 | 550-600 |
| ● | ○ | ● | ● | ● | - | 2,65 | 77-83 | 21 | 1,39-1,68 | 21-26 | 545-595 |
| ● | ○ | ● | ● | ● | - | 2,64 | 74-83 | 21 | 1,39-1,68 | 21-26 | 550-590 |
| ● | ○ | ● | ● | ● | - | 2,69 | 68-75 | 21 | 1,39-1,68 | 21-26 | 550-595 |
| ● | ○ | ● | ○ | ○ | - | 2,65 | 62-78 | 21 | 1,39-1,68 | 21-26 | 550-595 |
| ● | ○ | ● | ○ | ○ | - | 2,64 | 65-81 | 21 | 1,39-1,70 | 21-27 | 565-585 |
| ● | ○ | ● | ○ | ○ | - | 2,64 | 76-83 | 21 | 1,39-1,66 | 21-26 | 565-585 |
| ○ | - | ○ | ● | ● | - | 2,68 | 77-83 | 21 | 1,17-1,55 | 16-22 | 545-600 |
| ○ | - | ○ | ○ | ● | - | 2,73 | 77-83 | 18 | 1,17-1,34 | 14-17 | 510-650 |
| ○ | - | ○ | ○ | ○ | - | 2,68 | 77-83 | 19 | 1,26-1,42 | 16-18 | 520-675 |
| ● | ○ | ● | ● | ● | ● | 2,78 | 71-74 | 24 | 1,17-1,39 | 18-21 | 555-655 |
| ○ | ○ | ● | ● | ● | - | 2,85 | 74-80 | 21 | 1,17-1,34 | 17-20 | 550-650 |
| ○ | ○ | ○ | ● | ● | - | 2,85 | 74-80 | 21 | 1,17-1,34 | 17-20 | 550-650 |
| ● | ● | ○ | ● | ● | ● | 2,66 | 63-73 | 24 | 1,15-1,60 | 16-23 | 560-650 |
| ● | ● | ○ | ● | ● | ○ | 2,66 | 66-74 | 24 | 1,15-1,60 | 15-23 | 560-650 |
| ● | ● | ○ | ● | ● | ● | 2,63 | 63-73 | 24 | 1,10-1,30 | 15-21 | 545-645 |
| ● | ● | ○ | ● | ● | ○ | 2,63 | 68-75 | 24 | 1,05-1,30 | 14-21 | 545-645 |
| ○ | - | ○ | ● | ● | - | 2,64 | 67-76 | 24 | 1,05-1,25 | 14-20 | 545-645 |
| ● | ● | ● | ● | ● | ○ | 2,63 | 70-80 | 24 | 1,05-1,30 | 14-16 | 580-616 |
| ○ | - | ○ | ● | ● | ○ | 2,73 | 68-74 | 24 | 1,20-1,34 | 17-20 | 510-630 |
| ○ | - | ○ | ● | ● | ● | 2,75 | 65-72 | 23 | 1,15-1,40 | 17-20 | 540-650 |
| ○ | - | ○ | ● | ● | ● | 2,79 | 65-72 | 23 | 1,15-1,40 | 17-20 | 525-645 |
| ○ | - | ○ | ● | ● | ● | 2,75 | 65-73 | 23 | 1,15-1,40 | 17-20 | 540-650 |
| ○ | - | ○ | ● | ● | - | 2,75 | 72-76 | 24 | 1,15-1,51 | 17-21 | 520-630 |
| ○ | - | ○ | ● | ● | - | 2,84 | 72-76 | 22,5 | 1,18-1,55 | 18-21 | 545-650 |
| ● | ● | ● | ○ | ● | ● | 2,67 | 65-70 | 24 | 1,80-2,10 | 34-36 | 655-660 |
| ● | ● | ● | ○ | ● | ● | 2,67 | 65-70 | 24 | 1,80-2,10 | 34,5-36,5 | 655-660 |
| ● | ● | - | ○ | ● | - | 2,73 | 65-72 | 24 | 1,35-1,60 | 20-26 | 645-660 |

Application field

- excellent
- very good
- good
- average
- under certain conditions
- not used

| Brand name | Sand casting | Gravity diecasting | Pressure diecasting | Application field |
|-------------------|--------------|--------------------|---------------------|--|
| Anticorodal-04 | ● | ● | ● | Castings with high electrical conductivity, brazed constructions. |
| Anticorodal-50 | ● | ● | | Engine constructions, food and chemistry industry, element and apparatus constructions, fire equipment, shipbuilding, household equipment, architecture. |
| Anticorodal-70 | ● | ● | | Engine constructions, vehicle and aeroplane constructions, shipbuilding, electrical engineering and engine constructions, constructions for food handling, car wheels. |
| Anticorodal-71 | ● | ● | | Castings with high electrical conductivity. Electrical engineering and engine constructions. |
| Anticorodal-72 | ● | ● | | Engine constructions, vehicle and aeroplane constructions, shipbuilding, electrical engineering and engine constructions, constructions for agriculture, food industry. |
| Anticorodal-78 dv | ● | ● | – | Engine constructions, vehicle and aeroplane constructions, shipbuilding, electrical engineering and engine constructions, constructions for food industry. |
| Silafont-30 | ● | ● | – | General heat-treatable castings, vehicle and engine constructions, textile machinery, electrical constructions, air-conditioning plants. |
| Silafont-32 dv | – | ● | – | Machinery, vehicle and engine constructions, rigid castings. |
| Silafont-36 | – | – | ● | Vehicle constructions, transportation, engine constructions, furniture industry, safety equipment. Substitutional alloy for steel sheet constructions. |
| Castasil-37 | – | – | ● | Vehicle constructions, space frame knodes, castings exposed to elevated temperatures, riveted and welded die castings. Doors and other large panels. |
| Silafont-09 | – | – | ● | Enclosures, optics, lens housings, large apparatus elements, food industry, luminaire, diecastings with bordered connections. |
| Silafont-13 | ● | ● | | Engine constructions, for every kind of complicated, pressure tied, shock- and vibration resistant construction elements, car wheels. |
| Silafont-20 | ● | ● | | Castings in complex shape; high loaded, pressure-tied and vibration resistant general castings, wheels for cars, trucks and bikes. |
| Silafont-70 | ● | ● | | Engine pistons, gear wheels, slide bearings. Constructions with high strength at elevated temperature. |
| Silafont-90 | ● | ● | ● | Castings with highest subjecting to wear, engine housings for car and shipbuilding industry. |
| Silafont-92 | ● | ● | – | Pistons and cylinders for cars and shipbuilding. Castings with high wear resistance and heat distortion. |
| Castadur-50 | ● | ○ | – | General machinery, vibration and impact resistant engineering parts, metal furniture, huge castings. Prototypes for ductile diecastings. |
| Unifont-90 | ● | ● | – | Engine constructions, vehicle constructions, hydraulic unit, household equipment, textile machinery, military equipment, moldmaking. Huge castings without heat treatment. |
| Unifont-94 | – | – | ● | Engine constructions, vehicle constructions, pressure-proof units, household equipment. |
| Peraluman-30 | ● | ● | – | Decorative anodically oxidated parts, builders' hardware, shipbuilding, food industry, metal furniture, optics, shock resistant constructions, art castings. |
| Peraluman-50 | ● | ● | – | |
| Peraluman-36 | ● | ● | – | Corrosion resistant castings for food and chemical industry, element- and apparatus constructions, ship building, fire equipment, architecture, art castings. |
| Peraluman-56 | ● | ● | – | |
| Peraluman-57 | ● | ● | | Engine building and castings for using under higher temperature, air-cooled cylinder heads. |
| Magsimal-59 | – | – | ● | Diecasting constructions with high strength and elongation in cast condition (F). Safety parts and constructions for vehicles, engines and aeroplanes. |
| Alufont-36 | ● | ● | – | Cylinder heads and engine buildings with high-temperature strength. |
| Alufont-47 | ● | ● | – | High loaded general parts with highest fracture toughness, aeroplane and car building, high voltage switchgear, textile machines, military techniques. |
| Alufont-48 | ● | ● | – | High loaded general parts with highest fracture toughness. Aeroplane, car and railway building, high voltage switchgear, textile machines, military techniques. |
| Alufont-52 | ● | ● | – | High loaded general parts, not applying when corrosion resistance is of importance. Machinery, car and textile industry, military techniques. |
| Alufont-57 | ● | ● | – | Pistons for engines, cylinder heads and motor parts with high-temperature strength. |
| Alufont-60 | ● | – | – | Castings with high-temperature strength, especially with high thermal shock resistance. Cylinder heads, military techniques. |
| Rotoren-AI 99,5R | ● | ● | ● | Diecasting of the electrical lines from a squirrel-cage rotor. |
| Rotoren-AI 99,7R | ● | ● | ● | Castings with high heat conduction. Electrical contact and conducting pieces. |
| Aluman-16 | ● | ● | ● | Radiator frame, food industry, electrical engineering, brazed constructions. |

Characteristic Properties

Characteristic properties

| |
|---|
| Medium strength and hardness. Excellent corrosion resistance, very good welding and decorative anodizing, except with pressure die castings. |
| Excellent resistance against weather and sea water, good mechanical strength in as cast condition and very good after artificial ageing. Very good polishing and machining, especially after artificial ageing. Good for welding. |
| Universal alloy with very good mechanical properties. Excellent corrosion resistance, very good for welding and machining. |
| High strength and hardness. Very good casting qualities, very good corrosion resistance, very good for welding and machining. |
| Alloy with very good mechanical properties, excellent corrosion resistance, very good for welding and machining. Higher Magnesium content than Anticorodal-70 and hence higher strength and hardness with less elongation. |
| An alloy with permanent modification, especially for sand casting with very good mechanical strength, excellent corrosion resistance and very good for welding and machining. |
| One of the most important AlSi heat-treatable alloys with very good casting qualities and excellent corrosion resistance. High strength after artificial ageing. Excellent for welding and very good for machining. |
| Good casting qualities in gravity die casting with highest hardness and stability of shape after heat treatment. Excellent for welding and very good for machining. Magnesium content higher than Silafont-30. |
| Pressure die casting alloy with excellent casting qualities, very good elongation in as cast condition, highest elongation after heat treatment. Very good corrosion resistance, good for polishing and very good for machining. |
| High pressure die casting alloy with excellent castability, highest elongation together with high yield strength in the as-cast state compared to other alloys. Very good corrosion resistance, no long term aging at elevated temperatures due to low Mg-content. |
| Pressure die casting alloy suitable for bordering with very good casting qualities. Very good corrosion resistance against weather and water. |
| Universal AlSi alloy near the eutectic with medium mechanical strength, high elongation and impact resistance. Excellent casting characteristics, very good corrosion resistance, excellent for welding. Good brightness after polishing. |
| AlSi alloy near the eutectic, heat-treatable with high strength, excellent corrosion resistance against weather and water. Excellent for welding. Good for machining after heat treatment. Especially good ductility in case of Silafont-20 dv. |
| After full heat treatment, very high values for tensile strength, elastic limit and hardness are obtained. Good mechanical properties at higher temperatures. Good for machining. Lower corrosion resistance. Good rolling and sliding qualities, wear-resistant. |
| Hypereutectic AlSi alloy with high wear resistance and very good mechanical and physical properties. Good casting qualities but reduced corrosion resistance due to higher copper content. |
| Hypereutectic AlSi alloy with high wear resistance. Very good mechanical properties also at higher temperatures. Reduced corrosion resistance due to copper and nickel contents. |
| Self-hardening alloy with a hardening process of 30 days, well castability in sand moulds. Suitable for decorative anodizing and welded composite designs. Shows highly brilliant surface after polishing. |
| Self-hardening alloy with very good mechanical strength and elongation, especially with low pressure die casting, very good for mechanical polishing and for machining. Good for welding. Regains hardness after thermal stress. Castability like Silafont-30. |
| Self-hardening alloy for pressure die-casting for castings under high compression strain but not with static tensile strain. |
| Excellent chemical resistance, particularly against sea water. Excellent for decorative anodizing. Excellent brightness after mechanical polishing. Very good values for elastic limit and for impact resistance. Demanding casting technique. |
| Heat-treatable alloy with medium strength but high elongation. Excellent chemical resistance. Very good brightness after mechanical polishing. Very good for machining. Demanding casting technique. |
| Heat-treatable alloy, heat resistant with little sensibility to thermoshocks, for gravity die and sand casting, good mechanical properties. |
| Pressure die casting alloy with extraordinary mechanical and dynamic properties within thin casted walls. Very good weldability, can be used for riveting. Excellent corrosion resistance, excellent for mechanical polishing and good for machining. |
| Alloy with excellent casting qualities, heat-treatable with good strength and hardness at high temperatures. Reduced corrosion resistance. |
| High strength alloy for natural and artificial ageing. Very good toughness after natural ageing. Very good for machining. Excellent brightness after mechanical polishing. Tendency to stress corrosion. |
| Aluminium foundry alloy with highest values for tensile strength, elastic limit and hardness combined with excellent elongation. Values can be varied in a wide range by adjusting artificial ageing. Excellent for machining, very good for polishing, good for welding. |
| High strength alloy for partial and artificial ageing. Excellent for machining, very good for polishing, good for welding. Reduced corrosion resistance. Mechanical values can be varied in a wide range by adjusting artificial ageing. |
| Heat-treatable alloy with good strength and hardness at high temperatures. Very good for machining, reduced corrosion resistance. |
| Heat-treatable alloy with good strength at high temperatures. Good resistance against creeping up to 200 °C. Reduced corrosion resistance due to copper and nickel contents. |
| Good working qualities due to well balanced composition. Only little tendency to thermal cracks. Excellent chemical stability and especially good electrical conductivity and high thermal conductivity, low elastic limit and hardness. |
| Alloy for brazing with limited casting qualities for gravity die casting. |

Tables to facilitate alloy selection

The tables below will show selection of the alloy for a given construction easier on the basis of yield strength, tensile elongation, and corrosion resistance.

The values presented show the suitability of the alloys and can, with proper casting conditions, be obtained in castings or in a part of them.

Sand casting, casting condition

| Elongation A [%] | YTS R _{p0,2} [MPa] | | | |
|------------------|--|--------------------------------|----------------|---------------|
| | 60 - 120 | 90 - 160 | 160 - 200 | 200 - 230 |
| 0,5 - 3 | | Silafont-70 Silafont-20 | | Unifont-90 T1 |
| 3 - 6 | Anticorodal-70/78 dv Silafont-30 Peraluman-30/36 Peraluman-50 | Anticorodal-50 Peraluman-56 | | |
| 6 - 13 | Silafont-13 | | Castadur-50 T1 | |

Sand casting, temperature treated

| Elongation A [%] | YTS R _{p0,2} [MPa] | | |
|------------------|--|--|---|
| | 90 - 160 | 160 - 300 | 300 - 450 |
| 0,3 - 3 | Peraluman-56 T6 | Anticorodal-50 T6 Anticorodal-72 T6 Silafont-20 T6 Silafont-70 T6 | |
| 2 - 5 | | Anticorodal-70/78 dv T6 Silafont-30 T6 Peraluman-36 T6 | Alufont-47 T6 Alufont-48 T6 Alufont-52 T6 |
| 4 - 18 | Anticorodal-70/78 dv T64 Silafont-13 O Peraluman-30 T6 | Anticorodal-50 T4 Alufont-47 T4 Alufont-48 T64 Alufont-52 T64 | |

Mold casting, casting condition

| Elongation A [%] | YTS R _{p0,2} [MPa] | | |
|------------------|-----------------------------|---|----------------------------|
| | 70 - 100 | 90 - 180 | 180 - 260 |
| 0,5 - 2 | | | Silafont-70 Silafont-90 |
| 2 - 6 | Peraluman-36 | Anticorodal-50 Anticorodal-70 Silafont-30 Peraluman-56 Alufont-36 | Unifont-90 T1 |
| 6 - 20 | Peraluman-30 | Silafont-13 Silafont-20 Peraluman-50 | |

Tables to facilitate alloy selection

Temper

| | |
|-----|---------------------|
| O | annealed |
| T1 | self-hardened |
| T4 | naturally aged |
| T6 | artificially aged |
| T64 | partially underaged |
| T7 | overaged |

Mold casting, temperature treated

| Elongation A [%] | YTS R _{p0,2} [MPa] | | |
|------------------|--|--|---|
| | 120 - 200 | 200 - 300 | 300 - 450 |
| 0,5 - 4 | | Anticorodal-50 T6 | Silafont-70 T6 Silafont-90 T6 Alufont-36 T6 |
| 4 - 8 | Anticorodal-50 T4 Peraluman-36 T6 Peraluman-56 T6 | Anticorodal-70/78 dv T6 Anticorodal-72 T64 Silafont-30 T6 Silafont-20 T6 Alufont-36 T4 | Alufont-47 T6 Alufont-48 T6 Alufont-52 T6 |
| 8 - 12 | Anticorodal-70/78 dv T64 Silafont-13 O Peraluman-30 T6 | Alufont-47 T4 Alufont-52 T64 | |

Diecasting

| Elongation A [%] | YTS R _{p0,2} [MPa] | | |
|------------------|---|---|----------------|
| | 80 - 120 | 120 - 220 | 220 - 280 |
| 0,4 - 1 | | | Silafont-90 |
| 1 - 5 | | | Unifont-94 T1 |
| 5 - 20 | Anticorodal-04 Silafont-36 T4 Aluman-16 | Silafont-09 Silafont-36 T7 Magsimal-59 Castasil-37 | Silafont-36 T6 |

Corrosion resistance

| Corrosion resistance | casting properties | | | |
|------------------------|---|---|--|---|
| | average | good | very good | excellent |
| with surface treatment | Alufont-47 u. 48 Alufont-52, 57 u. 60 Silafont-90 u. 92 Peraluman-57 | Silafont-70 Alufont-36 | | |
| for air | | Castadur-50 | Silafont-30 Castadur-50 Unifont-90 Unifont-94 | Silafont-13 Silafont-20 Silafont-09 Silafont-36 Castasil-37 |
| for sea water | Anticorodal-04 Peraluman-30 u. 36 Peraluman-50 u. 56 | Anticorodal-50 Anticorodal-70/78dv Anticorodal-71 Anticorodal-72 | Magsimal-59 | |

Thermal treatment

Castings cooled in permanent molds take the shortest annealing time. Those cooled in sand take the longest.

For AlCu alloys, the annealing time figures apply to castings with wall thickness to 8 mm. Castings with thicker walls should be annealed at temperatures 10 °C lower for 12–18 hours.

Temper

| | |
|-----|---------------------|
| O | annealed |
| T1 | self-hardened |
| T4 | naturally aged |
| T6 | artificially aged |
| T64 | partially underaged |
| T7 | overaged |

| Brand name | Chemical designation of alloys | Condition temperature | Annealing temperature | Annealing time | Temperature of water | Artificial aging temperature | Aging time |
|-------------------|--------------------------------|-----------------------|-----------------------|----------------|----------------------|------------------------------|------------|
| | | | [°C] | [h] | [°C] | [°C] | [h] |
| Anticorodal-04 | AlSi0,5Mg | T7 | 520-530 | 6-8 | 20 | 220-240 | 4-6 |
| Anticorodal-50 | AlSi5Mg | T6 | 520-535 | 4-8 | 20 | 155-160 | 7-9 |
| | | T4 | 520-535 | 4-8 | 20 | 15-30 | 120 |
| Anticorodal-70 | AlSi7Mg0,3 | T6 | 520-545 | 4-10 | 20 | 155-165 | 6-8 |
| | | T64 | 520-545 | 4-10 | 20 | 150-160 | 2-3 |
| Anticorodal-78 dv | AlSi7Mg0,3 | T6 | 520-545 | 4-20 | 20 | 145-160 | 2-15 |
| Anticorodal-71 | AlSi7Mg0,3 | T6 | 520-545 | 4-8 | 20 | 155-165 | 6-8 |
| | | T7 | 520-545 | 4-8 | 20 | 200-230 | 6-8 |
| Anticorodal-72 | AlSi7Mg0,6 | T6 | 520-545 | 4-10 | 20 | 155-165 | 6-8 |
| | | T64 | 520-545 | 4-10 | 20 | 150-160 | 2-3 |
| Silafont-30 | AlSi9Mg | T6 | 520-535 | 6-10 | 20 | 160-170 | 6-8 |
| | | T5 | - | - | Air | 210-230 | 6-8 |
| Silafont-32 dv | AlSi9Mg1 | T6 | 520-535 | 6-10 | 20 | 160-170 | 6-8 |
| Silafont-36 | AlSi9MgMn | T6 | 480-490 | 2-5 | 20 | 155-170 | 2-3 |
| | | T7 | 480-490 | 2-5 | 20 | 190-230 | 2-3 |
| | | T5 | - | - | 20 | 155-170 | 2-5 |
| Silafont-13 | AlSi11 | O | 520-530 | 6-8 | 20 | | |
| Silafont-20 | AlSi11Mg | T6 | 520-535 | 6-10 | 20 | 130-170 | 6-8 |
| | | T5 | - | - | Air | 210-230 | 5-8 |
| Silafont-70 | AlSi12CuNiMg | T6 | 520-530 | 5-10 | 20-80 | 165-185 | 5-8 |
| | | T5 | - | - | Air | 210-220 | 10-12 |
| Peraluman-36 | AlMg3Si | T6 | 545-555 | 4-8 | 20 | 160-170 | 8-10 |
| Peraluman-56 | AlMg5Si | T6 | 540-550 | 4-8 | 20 | 160-170 | 8-10 |
| Alufont-36 | AlSi5Cu3Mg | T6 | 495-510 | 4-8 | 20 | 170-180 | 7-9 |
| Alufont-47 | AlCu4MgTi | T4 | 520-530 | 8-16 | 20-80 | 15-30 | 120 |
| Alufont-48 | AlCu4MgAgTi | T6 | 525-530 | 8-16 | 20-80 | 170-180 | 6-7 |
| Alufont-52 | AlCu4Ti | T6 | 525-535 | 8-16 | 20-50 | 160-175 | 6-7 |
| | | T64 | 525-535 | 8-10 | 20-50 | 135-145 | 6-7 |

All indications in the document are based on our best knowledge after adequate testing. As all indications referring to technical applications, they are without guarantee, outside any contractual obligation, (also with respect to the rights of third parties) for which we do not accept any liability. They do not constitute a guarantee of qualities and a user is not exonerated from his own testing of the products supplied by us with respect to their qualification for the intended use. Reprinting and copying, also of extracts, are subject to our express agreement.



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