

Mechanical properties of separately cast test bars

| <i>Alloy</i> | <i>CSN EN 1706</i> | <i>State</i> | <i>poured in sand</i> | | | | <i>poured in ingot-mould</i> | | | |
|---------------------|--------------------|--------------|-------------------------------|----------------------------------|--------------------------------|------------|-------------------------------|----------------------------------|--------------------------------|------------|
| | | | <i>R_m</i> (MPa) | <i>R_{p0,2}</i> (MPa) | <i>A_{50mm}</i> (%) | <i>HBS</i> | <i>R_m</i> (MPa) | <i>R_{p0,2}</i> (MPa) | <i>A_{50mm}</i> (%) | <i>HBS</i> |
| AlCu4MgTi | EN AC-21000 | T4 | 300 | 200 | 5 | 90 | 320 | 200 | 8 | 95 |
| AlSi7Mg0,3 | EN AC-42100 | T6 | 230 | 190 | 2 | 75 | 290 | 210 | 4 | 90 |
| | | T64 | | | | | 250 | 180 | 8 | 80 |
| AlSi10Mg (a) | EN AC-43000 | F | 150 | 80 | 2 | 50 | 180 | 90 | 2,5 | 55 |
| | | T6 | 220 | 180 | 1 | 75 | 260 | 220 | 1 | 90 |
| | | T64 | | | | | 240 | 200 | 2 | 80 |
| AlSi12 (b) | EN AC-44100 | F | 150 | 70 | 4 | 50 | 170 | 80 | 5 | 55 |
| AlSi8Cu3 | EN AC-46200 | F | 150 | 90 | 1 | 60 | 170 | 100 | 1 | 75 |
| AlSi9Cu1Mg | EN AC-46400 | F | 135 | 90 | 1 | 60 | 170 | 100 | 1 | 75 |
| | | T6 | | | | | 275 | 235 | 1,5 | 105 |
| AlSi12 (Cu) | EN AC-47000 | F | 150 | 80 | 1 | 50 | 170 | 90 | 2 | 55 |

State:

- F in molten state
- T4 after solution annealing and natural ageing
- T6 after solution annealing and full artificial ageing
- T64 after solution annealing and artificial ageing under the conditions of ageing incompleton