

## Mechanical properties of gravity die casting alloys

Alloy group	Alloy description			Tensile strength	Yield strength	Facture strain	Brinell hardness	
	Numerical	Chemical symbols	Material condition	Rm Mpa min.	Rp0,2 Mpa min.	A50 mm % min.	HBS min.	
AlSi7Mg	EN AC-42100	AlSi7Mg0,3	T6	290	210	4	90	
			T64	250	180	8	80	
	EN AC-42200	AlSi7Mg0,6	T6	320	240	3	100	
			T64	290	210	6	90	
AlSi10Mg	239	EN AC-43000	AlSi10Mg(a)	F	180	90	2,5	55
				T6	260	220	1	90
				T64	240	200	2	80
	EN AC-43300	AlSi9Mg	T6	290	210	4	90	
			T64	250	180	6	80	
AlSi9Cu	226	EN AC-46200	AlSi8Cu3	F	170	100	1	75
	226D	EN AC-46000	AlSi7Cu2	F	170	100	1	75
AlSi(Cu)	231	EN AC-47000	AlSi12(Cu)	F	170	90	2	55

1N/mm<sup>2</sup>= 1Mpa

### For separately cast sample rods

Separately cast sample rods have an important function in that they serve to check the quality of the melt. Owing to changes in the structure which result from variations in cross section and perfection, the values of the cast pieces may deviate from the minimum values in the casting may lie above those in the data sheet, or below them, but not below 70% of the value determined.

As far as elongation is concerned, the values of the casting may lie above those in the data sheets or, in certain places, up to 50 % below these values.