

# COMPARISON OF CASTING METHODS



	SAND CASTING	SHELL MOULD CASTING	GRAVITY DIE CASTING	LOW PREASSURE DIE CASTING	HIGH PRESSURE DIE CASTING at LENAAL (our capacities)
Casting weight (kg)	0,1 ... 500	0,1.....15	0,01 ..... 50	1 ..... 70	0,01 .....10
Annual volume (pcs)	1 - 5.000	50 - 10.000	100 - 50.000	100 - 10.000	20.000 - 2.000.000
Tooling cost	relatively low	relatively low / moderate	moderate	moderate	high
Cost of changes	low	relatively low / moderate	moderate	moderate	high
Minimum wall thickness (mm)	4 - 6	2 - 4	3 - 4	3 - 4	ALU 1,5 - 3 ZN 0,8 - 1,5
Dimension accuracy	Fairly good	Good	Good	Good	Very good
Possible surface roughness (Ra)	> 6.3 - 12.3	> 6.3	> 3.2 (2.5)	> 3.2	> 1.6 (0.8)
Casting alloys	AlSi7Cu2 AlSi7Mg AlSi9Cu2 AlSi10Mg	AlMg3 AlSi7Mg AlSi10Mg AlSi12	AlSi7Mg AlSi10Mg AlSi12	AlSi7Mg AlSi10Mg AlSi12	AlSi9Cu3(Fe) AlSi9MgMn AlSi10Mg(Fe) AlSi11Cu2(Fe) AlSi12(Fe) AlSi12Cu1(Fe) ZnAl4Cu1
Lead time for tools and samples (weeks)	3 - 6	2 - 4	5 - 12	8 - 15	10 - 20