



Aluminium Casting Solutions | Your Global Partner



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Alteams' history stretches back over half a century, with roots in industrial foundry operations in Finland and Sweden in the 1940s. Alteams is today a privately owned Finnish company.

Building on this solid foundation in Nordic industry, Alteams has expanded into a truly global enterprise with sales of over €100 million in 2017, global support services and six production facilities around the world, located in Finland, China, India and Poland. Alteams employs over 1,800 top professionals, and has regional customer support units in Sweden, Estonia, Japan, and the USA.

Alteams offers more than just aluminium casting. It has its own dedicated tool design and manufacturing facilities, and is able to utilize five different casting methods. This gives Alteams a broad capacity range, from single prototype units to mass production, and from 100 grams up to one tons.

Technological development has given Alteams a range of competences that goes beyond regular foundry operations, from initial R&D and prototyping, all the way to mass production.

Because Alteams has its own R&D operations and a lot of experience of producing innovations in aluminium casting and added-value processes, Alteams is an excellent partner and ideal choice for you at every stage of your product development and manufacturing.

Alteams combines its own competencies with its network of skilled partners allowing Alteams to work together with customers to solve their casting design, aluminium alloy, heat transfer, and shielding and sealing challenges.







High quality and continuous improvement

The quality objectives at Alteams are to produce high-quality products, on time and at the cost-effective and competitive price level. This will lead to best customer satisfaction and ongoing improvements in process efficiency.

Alteams Quality Management System will meet the IATF16949 requirements in Poland and China by 2019. Alteams Finland Oy Laihia and Ashley Alteams India Ltd are already certified according to ISO/TS 16949.

Operational Excellence is a part of the continuous improvement program. The target is to reduce non-value-added activities in daily operations and reduce quality costs. Best practices are shared systematically between the factories. The core of the effectiveness is to be a little bit better every day!



delivery with full value chain.

Aluminium alloys used at Alteams and approximate equivalences against common standards

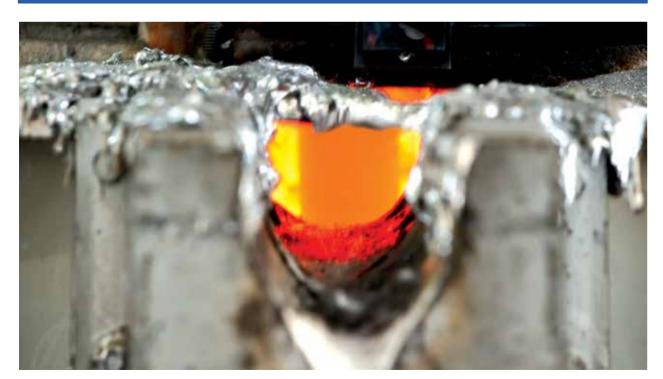
Note. Standards are not equal with each others. Specified alloy composition to be clarifed case by case.

S = Sand Casting, K = Permanent Die Casting (Gravity Casting, Low Pressure Casting), D = High Pressure Die Casting * old national standard

Alloy types	asting method	European	International	Finnish	Swedish	German	English	American	Italian	French	Japanese	Chinese
	ပဳ	EN	ISO	SFS*	SS*	DIN, WNr*	BS*	AA ASTM	UNI*	NF*	JIS	GB

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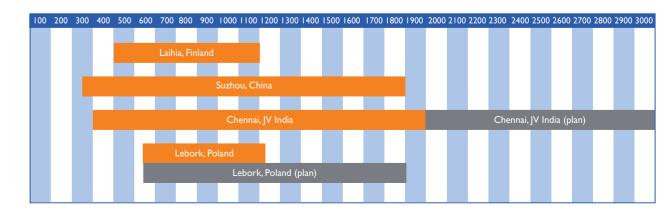
AISi12 D EN AC-44300 AISi2(Fe) SFS 2566 SS 14 4263 3.3582 LM 20 A413.0 5079 A-S12 ADC1 ZL102 AISi10Mg S / K EN AC-43100 AISi10Mg SFS 2567 SS 14 4253 3.2381 LM 9 3049 A-S10G AC4A ZL104 AISi10Mg D EN AC-43400 AISi10(Fe) SFS 2567 3.2382 A361.0 5074 A-S9 ADC3 ZL104 AISi7Mg S / K EN AC-42100 AISi7Mg0,3 SFS 2574 SS 14 4245 3.2371 LM 25 A356.0 3599 A-S7G AC4CH ZL101 AISi7Mg D AISi9Cu3 S EN AC-46200 AISi8Cu3 SFS 2568 SS 14 4251 3.2163.01 LM 24 A380.0 AC4B ZL111 AISi9Cu3 D EN AC-46000 AISi9Cu3(Fe) SFS 2568 SS 14 4250 3.2163.05 LM 24 A380.0 5075 A-S9U3A ADC10 AISi11Cu2 D EN AC-46600 AISi7Cu2 LM 27	Aluminum	II AII	773									
AlSi10Mg D EN AC-43400 AlSi10(Fe) SFS 2567 3.2382 A361.0 5074 A-S9 ADC3 ZL104 AlSi7Mg S / K EN AC-42100 AlSi7Mg0,3 SFS 2574 SS 14 4245 3.2371 LM 25 A356.0 3599 A-S7G AC4CH ZL101 AlSi7Mg D	AlSi12	S/K		AlSi12		 						ZLI02 ZLI02
AlSi9Cu3 D EN AC-46000 AlSi9Cu3(Fe) SFS 2568 SS 14 4250 3.2163.05 LM 24 A380.0 5075 A-S9U3A ADC10 AlSi11Cu2 D EN AC-46100 AlSi11Cu2(Fe) LM 2 A383.0 5076 A-S9U3 ADC12 AlSi7Cu2 S EN AC-46600 AlSi7Cu2 LM 27	AlSi10Mg AlSi7Mg	D S/K	EN AC-43400 EN AC-42100	AlSi10(Fe)	SFS 2567	 3.2382			5074	A-S9	ADC3	ZL104 ZL104 ZL101
	AlSi9Cu3 AlSi11Cu2 AlSi7Cu2	D D	EN AC-46000 EN AC-46100	AlSi9Cu3(Fe) AlSi11Cu2(Fe)			LM 24 LM 2	A380.0			ADC10	ZLIII ZLII0



Comparison of Alteams casting methods

	Sand casting	Shell mould casting	Gravity casting	Low pressure die casting	Pressure die casting
Weight of the casting, kg	0.1800	0.115	0.0150	I70	0.01 30
Annual volume	I5000	5010 000	10050 000	10010 000	5000 I 000 000
Pattern/tooling cost	Relatively low	Relat. low/ moderate	Moderate	Moderate	Relatively high
Cost of changes	Low	Relat. low/ moderate	Moderate	Moderate	Relatively high
Flexibility of design	Very high	High	High	Relatively high	Relatively high
Minimun wall thickness, mm	46	24	34	34	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	AlSi10Mg AlSi7Mg AlSi9Cu2 AlSi7Cu2	AlSi10Mg AlSi7Mg AlSi12 AlMg3	AlSi12 AlSi10Mg AlSi7Mg	AISi12Mg AISi10Mg	AlSi9Cu3Fe AlSi12 AlSi10Mg AlSi11Cu2(Fe)
Delivery time for samples, weeks	36	24	512	815	820
Special features	Also heat-treated	Also with sand cores and heat-treated	Also with sand cores and heat-treated	Also heat-treated	Also heat-treatable (in special conditions)
Alteams factory	Loppi Ruovesi	Loppi	Laihia Loppi	Laihia Loppi	Laihia Poland Suzhou Chennai

Range of Alteams high pressure die casting machines (tons)



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