



## ALUMINIUM CASTING ALLOY LM25M (STANDARD CASTING)

(BS 1490:1988 LM25)

LM25 is a common general purpose alloy of aluminium which is used where good mechanical properties are needed. It has a good resistance to corrosion and has high strength. It responds well to heat treatment and is available in four different conditions. Its uses are increased by its availability in as-cast and partially heat-treated condition as well.

LM25 has numerous applications including electrical, food, chemical and marine. It is extensively used in the automotive sector where cylinder blocks, wheels, heads and other parts are regularly cast in this aluminium alloy. LM25 offers good machinability.

Typical Mechanical Properties:	Sand Cast	Gravity Die Cast
Ultimate Tensile Strength	130 - 150 MPa	160 - 200 MPa
Elongation (minimum)	2 %	3 %
Typical Hardness	55 - 65 BHN	55 - 65 BHN
Compressive Strength	80 -100 MPa	80 - 100 MPa
Specific Gravity	2.68	2.68

### Chemical Composition - Al-Si17Mg0.5

Element		%
Silicon	Si	6.50 - 7.50
Magnesium	Mg	0.20 - 0.60
Iron	Fe	0.50 maximum
Manganese	Mn	0.30 maximum
Titanium	Ti	0.20 maximum
Copper	Cu	0.20 maximum
Nickel	Ni	0.10 maximum
Zinc	Zn	0.10 maximum
Lead	Pb	0.10 maximum
Tin	Sn	0.05 maximum
Aluminium	Al	Balance
Total Impurities		0.50 maximum

Comparative Specifications	
ISO Al-Si7Mg	EN AC 42 000
France: A-S7G	Germany: G-AlSi7Mg
Italy: UNI 3599	ASTM A356
SAE 323	Japan: AC 4C

**To discuss your requirements, call a member of NovaCast's team on +44 (0) 1225 707466, or email [sales@novacast.co.uk](mailto:sales@novacast.co.uk)**

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy options rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of trading.

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