



Aluminium Gravity Die Casting Chemical Composition

Aluminium Alloys	Al	Cu	Mg	Si	Fe	Mn	Ni	Zn	Pb	Sn	Ti
BS: 1490, Designation - LM 2	Rem.	0.7 - 2.5	0.30	9.0 - 11.5	1.0	0.5	0.5	2.0	0.3	0.2	0.2
BS: 1490, Designation - LM 4	Rem.	2.0 - 4.0	0.2	4.0 - 6.0	0.8	0.2 - 0.6	0.3	0.5	0.1	0.1	0.2
BS: 1490, Designation - LM 6	Rem.	0.1	0.1	10.0 - 13.0	0.6	0.5	0.1	0.1	0.1	0.05	0.2
BS: 1490, Designation - LM 9	Rem.	0.2	0.2 - 0.6	10.0 - 13.0	0.6	0.3 - 0.7	0.1	0.1	0.1	0.05	0.2
BS: 1490, Designation - LM 13	Rem.	0.7 - 1.5	0.8 - 1.5	10.0 - 13.0	1.0	0.5	1.5	0.5	0.1	0.1	0.2
BS: 1490, Designation - LM 16	Rem.	1.0 - 1.5	0.4 - 0.6	4.5 - 5.5	0.6	0.5	0.25	0.1	0.1	0.05	0.2
BS: 1490, Designation - LM 20	Rem.	0.4	0.2	10.0 - 13.0	1.0	0.5	0.1	0.2	0.1	0.1	0.2
BS: 1490, Designation - LM 21	Rem.	3.0 - 5.0	0.1 - 0.3	5.0 - 7.0	1.0	0.2 - 0.6	0.3	2.0	0.2	0.1	0.2
BS: 1490, Designation - LM 22	Rem.	2.8 - 3.8	0.05	4.0 - 6.0	0.6	0.2 - 0.6	0.15	0.15	0.1	0.05	0.2
BS: 1490, Designation - LM 24	Rem.	3.0 - 4.0	0.3	7.5 - 9.5	1.3	0.5	0.5	3.0	0.3	0.2	0.2
BS: 1490, Designation - LM 25	Rem.	0.2	0.2 - 0.6	6.5 - 7.5	0.5	0.3	0.1	0.1	0.1	0.05	0.2
BS: 1490, Designation - LM 26	Rem.	2.0 - 4.0	0.5 - 1.5	8.5 - 10.5	1.2	0.5	1.0	1.0	0.2	0.1	0.2
BS: 1490, Designation - LM 27	Rem.	1.5 - 2.5	0.35	6.0 - 8.0	0.8	0.2 - 0.6	0.3	1.0	0.2	0.1	0.2
BS: 1490, Designation - LM 28	Rem.	1.3 - 1.8	0.8 - 1.5	17.0 - 20.0	0.7	0.6	0.8 - 1.5	0.2	0.1	0.1	0.2
BS: 1490, Designation - LM 30	Rem.	4.0 - 5.0	0.4 - 0.7	16 - 18	1.1	0.3	0.1	0.2	0.1	0.1	0.2
IS: 617-1994, Designation - 4223	Rem.	2.0 - 4.0	0.15	4.0 - 6.0	0.8	0.2 - 0.6	0.3	0.5	0.1	0.1	0.2
IS: 617-1994, Designation - 4225	Rem.	1.0 - 1.5	0.3 - 6.0	4.5 - 6.0	0.8	0.5	0.3	0.5	0.2	0.1	0.2
IS: 617-1994, Designation - 4300	Rem.	0.1	0.1	4.5 - 6.0	0.6	0.5	0.1	0.1	0.1	0.05	0.2
IS: 617-1994, Designation - 4323	Rem.	3.0 - 5.0	0.1 - 0.3	5.0 - 7.0	1.0	0.2 - 0.6	0.3	2.0	0.2	0.1	0.2
IS: 617-1994, Designation - 4420	Rem.	3.0 - 4.0	0.3	7.5 - 9.5	1.3	0.5	0.5	3.0	0.3	0.2	0.2
IS: 617-1994, Designation - 4423	Rem.	1.5 - 2.5	0.3	6.0 - 8.0	0.8	0.2 - 0.6	0.3	1.0	0.2	0.1	0.2
IS: 617-1994, Designation - 4450	Rem.	0.1	0.20 - 0.45	6.5 - 7.5	0.5	0.3	0.1	0.1	0.1	0.05	0.2
IS: 617-1994, Designation - 4520	Rem.	0.7 - 2.5	0.30	9.0 - 11.5	1.0	0.5	0.5	2.0	0.3	0.2	0.2
IS: 617-1994, Designation - 4525	Rem.	2.0 - 4.0	0.5 - 1.5	8.5 - 10.5	1.2	0.5	1.0	1.0	0.2	0.1	0.2
IS: 617-1994, Designation - 4528	Rem.	1.75 - 2.5	0.15	8.5 - 9.5	0.4 - 0.6	0.8	0.8	0.5	0.1	0.1	0.2
IS: 617-1994, Designation - 4635	Rem.	0.1	0.2 - 0.6	10.0 - 13.0	0.6	0.3 - 0.7	0.1	0.1	0.1	0.05	0.2
IS: 617-1994, Designation - 4652	Rem.	0.7 - 1.5	0.8 - 1.5	10.0 - 12.0	1.0	0.5	0.7 - 1.5	0.5	0.1	0.1	0.2



Aluminium Gravity Die Casting Mechanical Properties

Aluminium Alloys	Condition	Tensile Strength (Min.) N/mm ²	Elongation % on 5.65√S ₀ (Min.)
BS: 1490, Designation - LM 2	M	150	-
BS: 1490, Designation - LM 4	M	160	2
BS: 1490, Designation - LM 6	M	190	7
BS: 1490, Designation - LM 9	M	190	3
BS: 1490, Designation - LM 13	TE	210	-
BS: 1490, Designation - LM 20	M	190	5
BS: 1490, Designation - LM 21	M	170	1
BS: 1490, Designation - LM 24	M	180	1.5
BS: 1490, Designation - LM 25	M	160	3
BS: 1490, Designation - LM 26	TE	210	-
BS: 1490, Designation - LM 27	M	160	2
BS: 1490, Designation - LM 28	TE	170	-
BS: 1490, Designation - LM 30	M	150	-
IS: 617-1994, Designation - 4223	M	160	2
IS: 617-1994, Designation - 4225	T4	230	3
IS: 617-1994, Designation - 4300	M	140	4
IS: 617-1994, Designation - 4323	M	175	1
IS: 617-1994, Designation - 4420	M	180	1.5
IS: 617-1994, Designation - 4423	M	160	2
IS: 617-1994, Designation - 4450	M	160	3
IS: 617-1994, Designation - 4520	M	150	2
IS: 617-1994, Designation - 4525	T5	210	2
IS: 617-1994, Designation - 4528	M	220	1.5
IS: 617-1994, Designation - 4600	M	190	7
IS: 617-1994, Designation - 4628	M	270	1.5
IS: 617-1994, Designation - 4635	M	190	3
IS: 617-1994, Designation - 4652	T5	210	1.5