ALUMEC 79® (7022)

ASTM: 7022

Other designations

Germany : ALUMEC 79®
ASTM : 7022
Euronorm : AW-7022 [Al Zn 5 Mg 3 Cu]

Applications areas

Mechanical parts with high strength, heating plates, machine tables. Bottom plates of stamping or cutting transfer tools. Plastic moulds depending on injected material: standard production or pilot production. All types of production: blowing, injection, thermo-compression, injection-blowing, deep vacuum stamping, etc.

Steel properties

Thermal conductivity 4 times higher than steel, very good machinability with excellent surface finish, very good stability with high mechanical strength. Resists all currently used plastics, therefore does not necessarily need surface treatment. Can be anodised: please contact us.

Chemical composition

in %

Si	Fe	Cu	Mn	Mg	Cr	Zn	Autre / other
≤ 0,25	≤ 0,5	0,5-1,0	0,1-0,4	2,6-3,6	0,1-0,3	4,3-5,2	0,35

Mechanical properties

Stretched hot rolled plates
T 651 temper

Thickness mm	HardnessHB	U.T.S. MPa	Y.S. 0.2% MPa	Elongation%
10-25	167	545	485	10
25-50	163	535	470	10
50-75	159	520	455	9,5
75-100	152	500	430	9
100-125	149	480	400	8,5
125-167	143	465	375	8

Physical Properties

Thermal conductivity	Coeff. of thermal expansion	Young modulus	Rigidity modulus
(25 °C)	(20-100 °C)		
W/(m.K)	$K^{(-1)}$	MPa	MPa
122	23.10^{-6}	71 500	26900

Ultimate shear stress	Specific Heat
	(0-100 °C)
MPa	J/(kg . K)
310	890

Available stock

Hot rolled sheets and plates
T 651

Format ,mm	Thickness ,mm																								
	10	12	15	20	26	30	33	36	41	46	51	56	60	64	72	82	92	102	112	122	132	142	153	163
1250 x 2500																						●	●	●
1500 x 3000	●	●	●		●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●			
2000 x 4000				●																				