

ALLROUNDER CUBE 1800

Distance between tie bars: 570 x 570 mm

Clamping force: 1800 kN

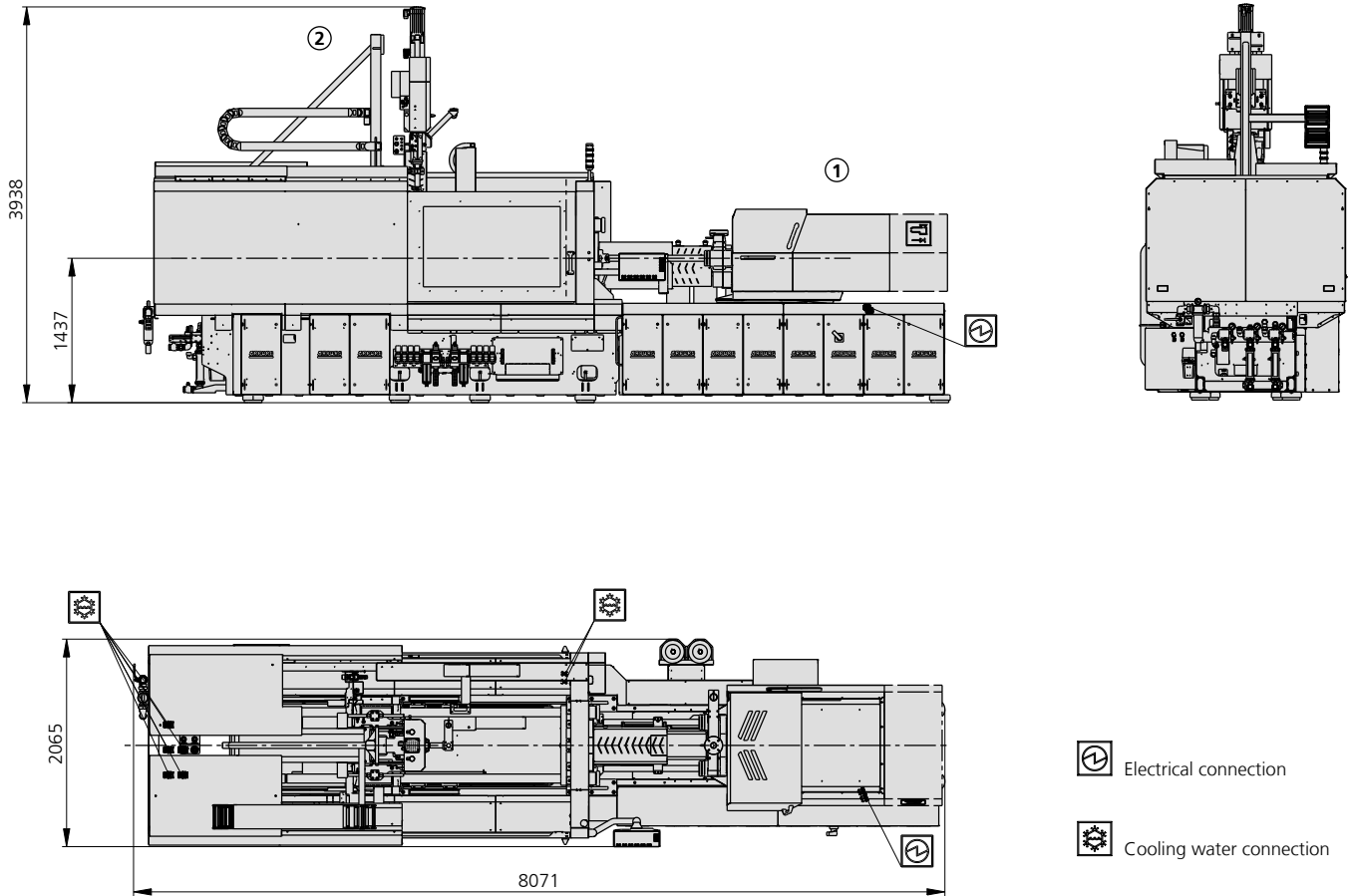
Injection unit: 400, 800, 1300 – horizontal

70, 100, 170, 290, 400, 800 – moving

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MACHINE DIMENSIONS | CUBE 1800

Machine dimensions based on example of the ALLROUNDER CUBE 1800 - 1300/290 machine size



Available injection units

Position	Size								
	70	100	170	290	400	800	1300	2100	3200
① horizontal									
② moving	vertical								
	horizontal								

The installation dimensions may vary due to additional special options and peripherals.

TECHNICAL DATA | CUBE 1800

Clamping unit		1800 CUBE		
with clamping force	max. kN	1800		
Opening force stroke	max. kN mm	--- 450		
Mould height, fixed variable	min. mm	--- 1150-1550		
Platen daylight fixed variable	max. mm	--- 1600-2000		
Distance between tie bars (w x h)	mm	570 x 570		
Mould mounting platens (w x h)	max. mm	795 x 795		
Ejector force stroke	max. kN mm	60 200		
Dry cycle time EUROMAP ²	min. s - mm	1,4 - 399		

Injection unit ¹		70			100			170		
with screw diameter	mm	18	22	25	20	25	30	25	30	35
Effective screw length	L/D	24,5	20	17,5	25	20	16,7	24	20	17
Screw stroke	max. mm	90			100			120		
Calculated stroke volume	max. cm ³	23	34	44	31	49	71	59	85	115
Shot weight	max. g PS	21	31	40	29	45	65	54	77	105
Material throughput	max. kg/h PS	4,1	5,5	6,5	5,5	8	9,5	10	13,5	16
	max. kg/h PA6.6	2,1	2,8	3,3	2,8	4	4,9	5	7	8
Injection pressure	max. bar	2500	2000	1550	2500	2000	1390	2500	2000	1470
Holding pressure	max. bar	2500	2000	1550	2500	2000	1390	2500	2000	1470
Injection flow ²	max. cm ³ /s	140	209	270	173	270	389	221	318	433
Screw circumferential speed ²	max. m/min	49	60	68	48	60	72	50	60	70
Screw torque	max. Nm	90	110	120	120	150	180	210	250	290
Nozzle contact force retraction stroke	max. kN mm	50 150			50 180			50 210		
Heating capacity zones	kW	4,1 4			4,9 5			9,4 5		

Drive and connection										
with horizontal/moving injection unit										
Net weight of machine	kg				16500					
Sound press. level Insecurity ⁴	dB(A)				67 3					
Oil filling	l				310					
Dimensions	l	mm			-					
	b	mm			-					
	h	mm			-					
Cooling water connection	max. °C				30					
	min. Δp bar				1,5 DN 25					

Upon request: other machine types and mould installation heights, screws, drive powers, etc.

All specifications relate to the basic machine version. Deviations are possible depending on variants, process settings and material type. Depending on the drive, certain combinations, e.g. max. injection pressure and max. injection flow may be mutually exclusive.

- 1) Size of injection unit = max. stroke volume (cm³) x max. injection pressure (kbar)
- 2) Specifications depend on the drive variant / drive configuration.
- 3) Specifications relate to 400 V/50 Hz.
- 4) Detailed info in the operating instr.
- [] Specifications apply to alternative equipment.

Available injection units

Position		Size						
		70	100	170	290	400	800	1300
horizontal								
moving	vertikal							
	horizontal							

TECHNICAL DATA | CUBE 1800

Clamping unit		1800 CUBE	
with clamping force	max. kN	1800	
Opening force stroke	max. kN mm	--- 450	
Mould height, fixed variable	min. mm	--- 1150-1550	
Platen daylight fixed variable	max. mm	--- 1600-2000	
Distance between tie bars (w x h)	mm	570 x 570	
Mould mounting platens (w x h)	max. mm	795 x 795	
Ejector force stroke	max. kN mm	60 200	
Dry cycle time EUROMAP ²	min. s - mm	1,4 - 399	

Injection unit ¹		290			400			800		
with screw diameter	mm	30	35	40	35	40	45	45	50	55
Effective screw length	L/D	23,3	20	17,5	23	20	18	22	20	18
Screw stroke	max. mm	150			160			200		
Calculated stroke volume	max. cm ³	106	144	188	154	201	254	318	392	474
Shot weight	max. g PS	97	132	172	141	184	232	291	359	434
Material throughput	max. kg/h PS	17	20,5	24,5	25	29	35	46	53	59
	max. kg/h PA6.6	8,5	10,5	12,5	12,5	15	17,5	23	27	30
Injection pressure	max. bar	2500	2000	1530	2500	2000	1580	2470	2000	1650
Holding pressure	max. bar	2500	2000	1530	2500	2000	1580	2470	2000	1650
Injection flow ²	max. cm ³ /s	318	433	565	492	642	814	530	656	792
Screw circumferential speed ²	max. m/min	51	60	69	47	54	61	54	60	66
Screw torque	max. Nm	320	380	430	480	550	610	900	1000	1100
Nozzle contact force retraction stroke	max. kN mm	60 240			60 300			70 300		
Heating capacity zones	kW	6,4 5			9,4 5			19,9 8		

Drive and connection								
with horizontal/moving injection unit								
Net weight of machine	kg			17500				
Sound press. level Insecurity ⁴	dB(A)			67 3				
Oil filling	l			310				
Dimensions	l	mm			-			
	b	mm			-			
	h	mm			-			
Cooling water connection	max. °C			30				
	min. Δp bar			1,5 DN 25				

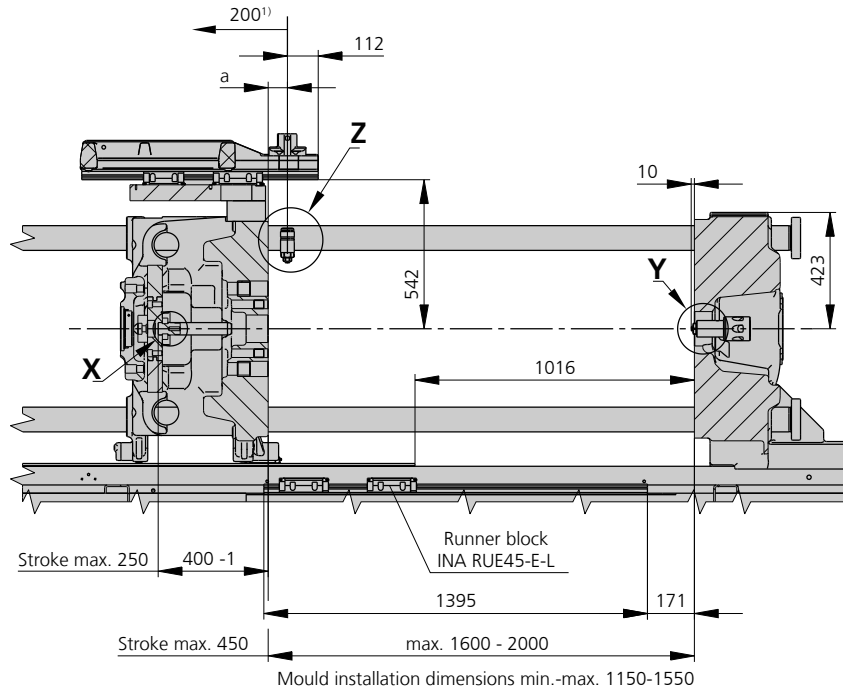
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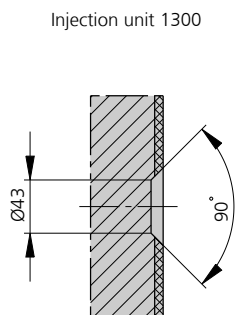
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MOULD INSTALLATION DIMENSIONS | CUBE 1800

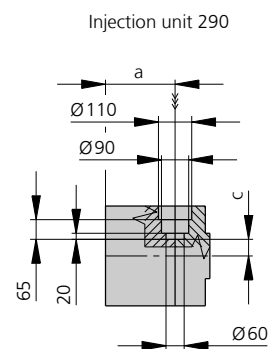
mould installation dimensions based on example of the ALLROUNDER CUBE 1800 - 1300/290 machine size



Bore in mould (if required) | Y

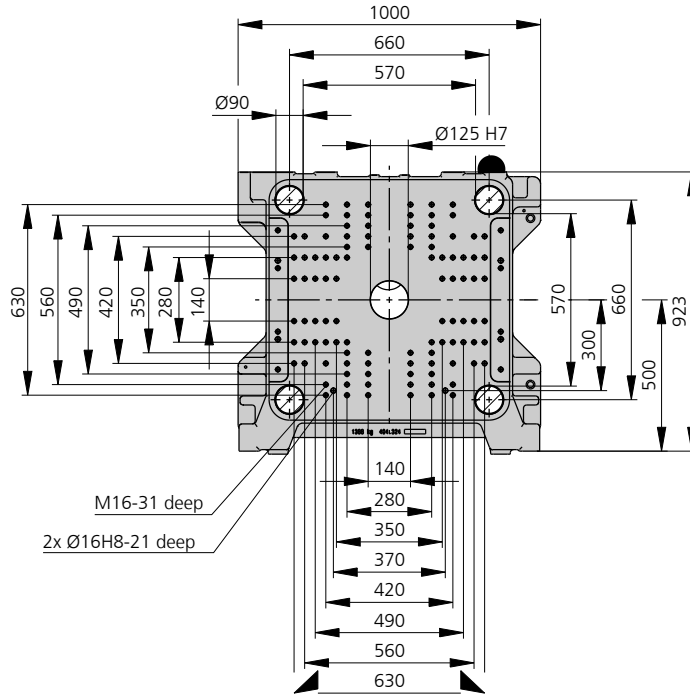


Bore in mould (if required) | Z

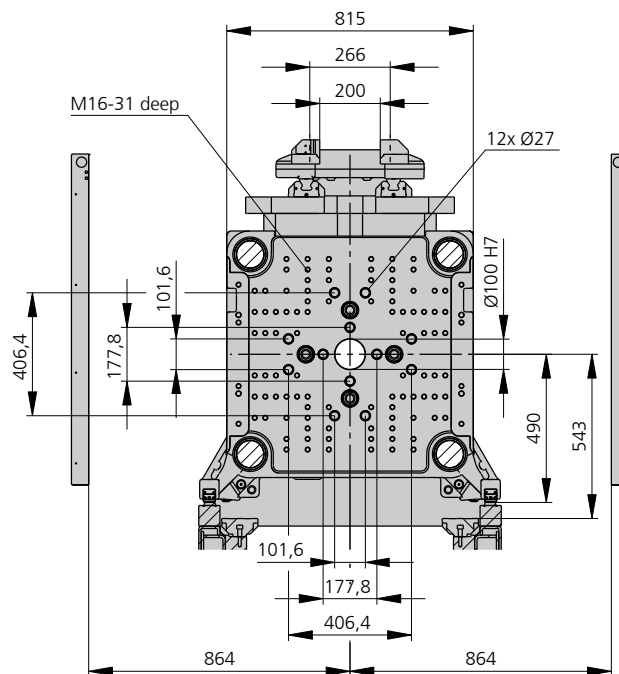


MOULD INSTALLATION DIMENSIONS | CUBE 1800

Fixed mould mounting platen | A



Moving mould mounting platen | B



SHOT WEIGHTS | CUBE 1800

Theoretical shot weights for the most important injection moulding materials

Injection units according to EUROMAP		70		
Screw diameter	mm	18	22	25
Polystyrene	max. g PS	21	31	40
Styrene heteropolymerizates	max. g SB	20	31	39
	max. g SAN, ABS ¹⁾	20	30	39
Cellulose acetate	max. g CA ¹⁾	24	35	45
Celluloseacetobutyrate	max. g CAB ¹⁾	22	33	42
Polymethyl methacrylate	max. g PMMA	22	32	42
Polyphenylene ether, mod.	max. g PPE	19	29	37
Polycarbonate	max. g PC	22	33	42
Polysulphone	max. g PSU	23	34	44
Polyamides	max. g PA 6.6 PA 6 ¹⁾	21	31	40
	max. g PA 6.10 PA 11 ¹⁾	19	29	37
Polyoximethylene (Polyacetal)	max. g POM	26	39	50
Polyethylene terephthalate	max. g PET	25	37	48
Polyethylene	max. g PE-LD	16	24	30
	max. g PE-HD	16	24	31
Polypropylene	max. g PP	17	25	32
Fluoropolymerides	max. g FEP, PFA, PCTFE ¹⁾	33	50	65
	max. g ETFE	29	44	57
Polyvinyl chloride	max. g PVC-U	25	38	49
	max. g PVC-P ¹⁾	23	35	45

Injection units according to EUROMAP		400		
Screw diameter	mm	35	40	45
Polystyrene	max. g PS	141	184	232
Styrene heteropolymerizates	max. g SB	137	179	227
	max. g SAN, ABS ¹⁾	135	176	223
Cellulose acetate	max. g CA ¹⁾	158	207	262
Celluloseacetobutyrate	max. g CAB ¹⁾	147	192	243
Polymethyl methacrylate	max. g PMMA	145	190	240
Polyphenylene ether, mod.	max. g PPE	131	171	216
Polycarbonate	max. g PC	148	193	244
Polysulphone	max. g PSU	153	199	252
Polyamides	max. g PA 6.6 PA 6 ¹⁾	140	183	231
	max. g PA 6.10 PA 11 ¹⁾	131	171	216
Polyoximethylene (Polyacetal)	max. g POM	174	227	287
Polyethylene terephthalate	max. g PET	167	219	277
Polyethylene	max. g PE-LD	106	139	176
	max. g PE-HD	110	143	181
Polypropylene	max. g PP	112	146	185
Fluoropolymerides	max. g FEP, PFA, PCTFE ¹⁾	225	294	372
	max. g ETFE	196	256	324
Polyvinyl chloride	max. g PVC-U	170	222	281
	max. g PVC-P ¹⁾	157	205	260

1) average value

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