

Technische Daten / Technical data

ieß- und Spritzaggregate sind variabel kombinierbar.
 Imping and injection units can be combined variably.

Engel Robot



duo

Größen von 8000 kN bis 20000 kN
 Sizes from 8000 kN to 20000 kN

Größenbezeichnung ¹ / Internat. size designation ¹		8000-5400	9000-6000	10000-8700	11000-13000	13000-13000	15000-17500	17000-17500	20000-23200	
Bezeichnungen / Machine designations		DUO 4550/800	DUO 5550/900	DUO 7050/1000	DUO 11050/1100	DUO 11050/1300	DUO 16050/1500	DUO 16050/1700	DUO 23050/2000	
Injection unit		4550	5550	7050	11050	11050	16050	16050	23050	
Durchmesser	Screw diameter	mm	80/90/105	80/90/105	90/105/120	105/120/135	105/120/135	120/135/150	120/135/150	135/150/160
	Screw stroke	mm	390	430	480	570	570	620	620	720
Leistung	Max. injection capacity	cm ³	1960/2480/3380	2160/2740/3720	3050/4160/5430	4940/6450/8160	4940/6450/8160	7010/8870/10960	7010/8870/10960	10310/12720/14480
Umdrehungszahl	Screw speed	min ⁻¹	140	148	130	120	120	100	100	85
	L/D ratio (3-zone screw)		22	22	22	22	22	22	22	22
Längenangabe (3-Zonen)	Recovery rate (3-zone screw) ^{2, 3, 4}	g/sec	59/81/121	62/85/128	75/112/157	104/145/195	104/145/195	121/163/213	121/163/213	139/181/200
	L/D ratio (barrier screw) [*]		22	22	22	22	22	22	22	22
Längenangabe Barriere [*]	Recovery rate (barrier screw) ^{* 4, 5}	g/sec	80/108/159	85/114/168	100/147/206	136/191/256	136/191/256	159/214/279	159/214/279	182/237/279
	Injection rate (regenerative) ⁶	cm ³ /sec	420/530/720	450/560/760	585/800/1040	760/990/1255	760/990/1255	985/1245/1540	985/1245/1540	1445/1785/2030
Druck	Injection pressure (regenerative)	bar	2300/1910/1400	2300/1910/1400	2250/1650/1260	1930/1480/1170	1930/1480/1170	2080/1640/1330	2080/1640/1330	1740/1410/1240
	Injection pressure (max)	bar	2300/2180/1600	2300/2180/1600	2300/2090/1600	2300/2020/1600	2300/2020/1600	2300/1980/1600	2300/1980/1600	2250/1820/1600
Düsenanpresskraft	Nozzle stroke • Nozzle cont. pressure	mm • kN	700 • 150	700 • 150	700 • 150	700 • 150	950 • 150	950 • 210	950 • 210	1100 • 210
	Heating wattage ⁷	kW	53/62/73	53/62/73	65/74/89	74/89/97	74/89/97	98/109/118	98/109/118	109/118/133
Zonen inkl. Düse ⁷	Heating zones incl. nozzle ⁷		6/7/7	6/7/7	7	7	7	6/7/7	6/7/7	7
	Clamping unit		DUO 800	DUO 900	DUO 1000	DUO 1100	DUO 1300	DUO 1500	DUO 1700	DUO 2000
Anspannkraft	Clamping force	kN	8000	9000	10000	11000	13000	15000	17000	20000
	Opening stroke	mm	1600	1600	1800	1800	2350	2350	2550	3000
Anspannhöhe min-max.	mold height min-max	mm	500-1100	500-1100	600-1200	600-1200	700-1400	700-1400	800-1600	800-1800
	Total daylight max.	mm	2100	2100	2400	2400	3050	3050	3350	3800
Platten Standard hor. x vert.	Platen size standard hor. x vert.	mm	1550 x 1520	1550 x 1520	1850 x 1810	1850 x 1810	2200 x 1990	2200 x 1990	2420 x 2170	2700 x 2430
	Vergrößerte Platten (Wide platen) h x v	mm								
Abstand hor. x vert.	Dist. between tie bars hor. x vert.	mm	1170 x 1000	1170 x 1000	1400 x 1150	1400 x 1150	1530 x 1275	1530 x 1275	1850 x 1415	2000 x 1600
	Drop out chute width	mm								
Gewicht max. ⁸	Mold weight max. ⁸	kg	13000	13000	21000	21000	30000	30000	45000	62000
	Anzahl Kühlkreisläufe	# x l/min	8 x 10	8 x 10	10 x 30	10 x 30	10 x 30	10 x 30	10 x 30	10 x 30
Auswerferkraft	Ejector stroke • Ejector force	mm • kN	300 • 180	300 • 180	300 • 215	300 • 215	300 • 230	300 • 230	300 • 230	400 • 385
	Dry cycle (Euromap 6) • Hub	sec • mm	3,3 • 800	3,3 • 800	3,9 • 1000	3,9 • 1000	4,4 • 1100	4,4 • 1100	4,9 • 1300	5,5 • 1400
Drive										
Leistung	Rated drive power	kW	75	90	110	130	130	165	165	225
	Oil reservoir capacity	l	1000	1000	1800	1800	1800	3000	3000	3000

Abmessungen / Weight and Dimensions		8000-5400	9000-6000	10000-8700	11000-13000	13000-13000	15000-17500	17000-17500	20000-23200	
Net clamp./injec. unit (without oil fill.)		to	28/10	28/10	39/17	39/18	54/18	54/28	68/28	96/29
Length x width x height		m	9,2 x 3,2 x 2,4	9,2 x 3,2 x 2,4	10,6 x 3,5 x 2,7	10,6 x 3,5 x 2,7	12,0 x 3,7 x 2,9	13,2 x 3,7 x 2,9	13,3 x 4,0 x 3,1	14,4 x 4,3 x 3,5
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Clamp force [kN] – Injection capacity [cm ³] x Injection pressure max [bar]/1000	ERC 93	ERC 93	ERC 93	ERC 93	ERC 93	ERC 93	ERC 93	ERC 93	ERC 93, 123
	viper 40, 60	viper 40, 60	viper 40, 60	viper 40, 60	viper 40, 60	viper 40, 60	viper 40, 60	viper 60	

Data for GPPS up to injection unit 2550 acc. ETR 10100									
Data for HDPE from injection unit 3550 onward acc. ETR 10100									
Data for PP for Tecomelt machines acc. ETR 10100									

Data for HDPE acc. ETR 10100									
Theoretical values									
for 3-zone screw length									

⁸ of which max. 2/3 on the moving platen, determination of the distance of the center of gravity with respect to the moving platen see page 34
^{*} Option