

DG-EP SERIES

SMALL & MEDIUM SIZE

SERVO MOTOR DRIVE

INJECTION MOLDING MACHINE SPECIFICATION

DG25EP – DG450EP

* Possible combinations of clamp units / injection units

Clamp units	Injection units														
	30	70	120	170	240	360	460	620	800	1000	1500	1700	2000	2400	2700
25	●☆														
50		●☆	●												
90		●	●	●☆	●										
120		●	●	●	●☆	●									
160		●	●	●	●	●☆	●								
200			●	●	●	●	●☆	●	●						
240			●	●	●	●	●	●☆	●						
280						●	●	●	●☆	●	●				
320								●	●	●☆	●	●	●		
350								●	●	●	●	●☆	●		
400									●	●	●	●	●☆	●	
450										●	●	●	●	●☆	●

☆ Standard injection combination for clamp unit



DER GANG MACHINERY CO., LTD.

9907C29

* High Performance Standard Specification for DG-EP Series.

NO.	Item	Standard	Optional
Clamping unit			
1	Greasless toggle bushings	○	
2	Automatic greasing	○	
3	High performance mold platen support	○	
4	Hydraulic safety device for mold closing	○	
5	Electrical safety device for mold closing	○	
6	Mechanical safety device for mold closing	○	
7	Hydraulic driven mold thickness adjusting system	○	
8	Automatic clamping force adjustment device	○	
9	4 stages of pressure & speed control on open mold	○	
10	4 stages of pressure & speed control on close mold	○	
11	Low pressure mold protecting device	○	
12	Ejection : Standard · Vibrating & Half eject	○	
13	Ejector plate return confirmation circuit	○	
14	Ejection mode change		●
15	No.1 hydraulic core puller circuit	○	
16	No.2 hydraulic core puller circuit		●
17	No.3 hydraulic core puller circuit		●
18	Cores and mold sets protection	○	
19	No.1 air jet	○	
20	No.2 air jet		●
21	Hydraulic motor for unscrewing		●
22	Photocell type product chute confirmation		●
23	Automatic safety door opening and closing device		●
24	Drilling of product take-out robot mounting holes		●
25	Circuit for product take-out robot (EUROMAP 12)		●
26	Dual function (ejector during mold opening)		●
27	Dual function (screw rotation during mold opening)		●
28	Daylight extension		●
29	T-grooved plate		●
Hydraulic unit & related equipment			
1	Servo motor for energy saving device	○	
2	Oil temperature display	○	
3	Oil filter		●
4	Oil low level alarm		●
5	Oil temperature upper and lower limits alarm	○	
6	Oil preheating circuit		●
7	"Y" strainer of cooling water		●
8	Mold cooling water with flow indicator		●
9	Mold cooling water with flow controller	○	
Monitor			
1	Cylinder temperature upper and lower alarm	○	
2	Production quantity control	○	
3	Packaging quantity control	○	
4	Abnormal alarm buzzer	○	
5	Abnormal flashlight	○	
6	Upper and lower limit for molding conditions	○	
7	Cycle monitor display	○	
8	Machine process monitor	○	
9	History of alarm (200sets)	○	
10	History of molding conditions value (200sets)	○	

NO.	Item	Standard	Optional
Injection unit			
1	Screw cylinder (one set of H · A · B or C)	○	
2	Back flow preventing ring	○	
3	Open nozzle	○	
4	Open long nozzle		●
5	Bi-metal cylinder for abrasion		●
6	Bi-metal screw for abrasion		●
7	Screw for rigid PVC		●
8	Shut-off nozzle (Hydraulic)		●
9	Cold start-up prevention	○	
10	Swivel for injection unit	○	
11	Barrel temperature pause changeover function	○	
12	24 hours warm keeping and temperature control	○	
13	PID control on temperature control	○	
14	Automatic purging circuit	○	
15	Retraction select for injection unit	○	
16	Screw suck-back device	○	
17	Automatic residual material (cushion) adjustment	○	
18	1-6 steps injection speed (adjust.)	○	
19	1-6 steps injection pressure (adjust.)	○	
20	1-5 steps holding speed (adjust.)	○	
21	1-5 steps holding pressure (adjust.)	○	
22	1-5 steps holding time (adjust.)	○	
23	1-5 steps screw speed (adjust.)	○	
24	1-5 steps screw back pressure (adjust.)	○	
25	Transfer to holding pressure by sensing injection position	○	
26	Transfer to holding pressure by sensing injection time	○	
27	Transfer to holding pressure by pressure sensor		●
28	Screw revolution display		●
29	Purge cover (with interlock)		●
30	Accumulator circuit for injection		●
31	Servo circuit for injection		●
32	Gas injection circuit		●
33	Flow molding circuit	○	
34	Injection pressure and speed curve display immediately	○	
Controller			
1	Color LCD for C-7000 controller (Above DG240EP)	○	
2	Color LCD for C-7000 controller (Under DG200EP)	●	
3	Color LCD for PILOT controller (Under DG200EP)		○
4	200 sets memory of molding conditions	○	
5	USB for memory of molding conditions	○	
6	Configuration unit description	○	
7	Diagnose input and output status	○	
8	Execute input / output detecting	○	
9	Input and output points correction setting	○	
10	Multiple layer password setting	○	
11	5 language switching function (Chinese, English, Spain, Portugal, Turkey)	○	
12	Other language select		●

* Summary of clamp units / Injection units

DG25EP - DG450EP / 30 - 2700

INJECTION UNITS		CLAMP UNITS																					
		DG 450EP																					
		DG 400EP																					
		DG 350EP																					
		DG 320EP																					
		DG 280EP																					
		DG 240EP																					
		DG 200EP																					
		DG 160EP/...																					
		DG 120EP																					
		DG 90EP																					
		DG 50EP																					
		DG 25EP/...																					
		Screw diameter	mm	18	20	22	24	26	28	30	34	38	42	48	52	55	60	65	70	75	80	85	90
30	Injection pressure	bar	2593	2100	1735																		
	Theoretical shot volume	cm ³	20	25	30																		
70	Injection pressure	bar				2722	2319	2000	1742														
	Theoretical shot volume	cm ³				45	53	61	70														
100	Injection pressure	bar					3976	3428	2986	2325													
	Theoretical shot volume	cm ³					61	70	81	104													
120	Injection pressure	bar					2702	2330	2030	1580													
	Theoretical shot volume	cm ³					66	77	88	113													
170	Injection pressure	bar							2333	1816	1454												
	Theoretical shot volume	cm ³							106	136	170												
240	Injection pressure	bar								2325	1861	1523											
	Theoretical shot volume	cm ³								154	192	235											
360	Injection pressure	bar									2421	1982	1517										
	Theoretical shot volume	cm ³									226	277	362										
460	Injection pressure	bar										2332	1786	1522									
	Theoretical shot volume	cm ³										304	398	467									
620	Injection pressure	bar											2138	1822	1629								
	Theoretical shot volume	cm ³											470	552	617								
800	Injection pressure	bar												2143	1915	1610							
	Theoretical shot volume	cm ³												594	665	792							
1000	Injection pressure	bar													2221	1866	1590						
	Theoretical shot volume	cm ³													760	904	1061						
1500	Injection pressure	bar														2310	1968	1697					
	Theoretical shot volume	cm ³														1130	1327	1539					
1700	Injection pressure	bar															2226	1920	1672				
	Theoretical shot volume	cm ³															1327	1539	1767				
2000	Injection pressure	bar																1920	1672	1470			
	Theoretical shot volume	cm ³																1539	1767	2010			
2400	Injection pressure	bar																	2116	1860	1648		
	Theoretical shot volume	cm ³																	1899	2161	2440		
2700	Injection pressure	bar																		1898	1681	1500	
	Theoretical shot volume	cm ³																		2186	2468	2767	

DG25EP / 30

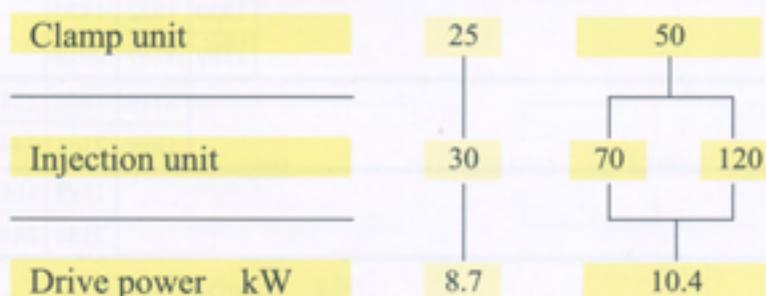
DG50EP / 70 / 120

MODEL		DG25EP/30		
Clamp unit		25		
Clamp force	kN	250		
Opening stroke	mm	220		
Mold height(min-max)	mm	100-250		
Maximum daylight	mm	470		
Distance between tie-bars	mm	270 × 270		
Platen dimensions	mm	410 × 410		
Ejector points		1		
Ejector stroke	mm	60		
Ejector force	kN	13.4		
Oil tank volume	l	100		
Injection unit		☆ 30		
Screw symbol		H	A	B
Screw diameter	mm	18	20	22
Injection pressure	bar	2593	2100	1735
Theoretical shot volume	cm ³	20	25	30
Shot weight(PS)	g	18	22	27
Screw L/D ratio		22.2	20	18.2
Injection rate	cm ³ /s	49	61	74
Plasticizing capacity(PS)	kg/hr	14	17	22
Screw revolution	rpm	385		
Temperature control zones		1+3		
General				
Drive power	kW	8.7		
Barrel heating	kW	3.55		
Machine weight	kg	1900		
Machine dimensions	m	3.1 × 1.1 × 1.75		

DG50EP/70				DG50EP/120			
50							
500							
260							
100-300							
560							
310 × 310							
460 × 460							
5							
60							
27.4							
130							
☆ 70				120			
H	A	B	C	H	A	B	C
24	26	28	30	26	28	30	34
2722	2319	2000	1742	2702	2330	2030	1580
45	53	61	70	66	77	88	113
40	47	54	63	60	69	79	102
22.2	20.5	19	17.7	23	21.4	20	17.6
48	57	66	76	48	56	65	83
21	26	31	41	26	31	41	56
286				286			
1+4				1+4			
10.4				10.4			
5.53				5.68			
2900				2900			
4 × 1 × 1.51				4 × 1 × 1.51			

☆ Standard injection combination for clamp unit

Selection scheme for injection unit



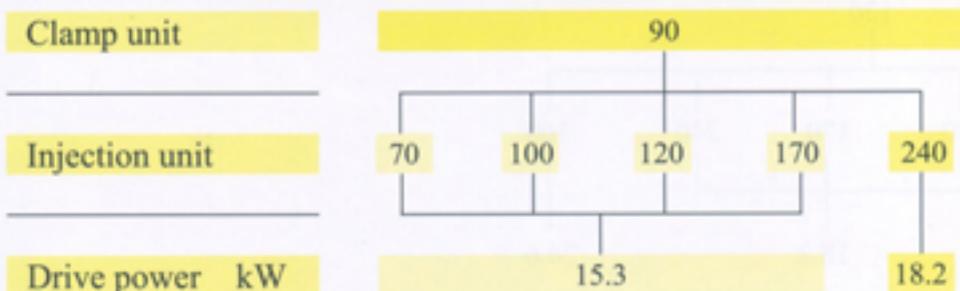
DG90EP

/ 70 / 170
/ 100 / 240
/ 120

MODEL		DG90EP/70				DG90EP/100				DG90EP/120				DG90EP/170			DG90EP/240		
Clamp unit		90																	
Clamp force	kN	900																	
Opening stroke	mm	330																	
Mold height(min-max)	mm	100-350																	
Maximum daylight	mm	680																	
Distance between tie-bars	mm	360 × 360																	
Platen dimensions	mm	560 × 560																	
Ejector points		5																	
Ejector stroke	mm	80																	
Ejector force	kN	39.5																	
Oil tank volume	l	200																	
Injection unit		70				100				120				☆ 170			240		
Screw symbol		H	A	B	C	H	A	B	C	H	A	B	C	H	A	B	H	A	B
Screw diameter	mm	24	26	28	30	26	28	30	34	26	28	30	34	30	34	38	34	38	42
Injection pressure	bar	2722	2319	2000	1742	3976	3428	2986	2325	2702	2330	2030	1580	2333	1816	1454	2325	1861	1523
Theoretical shot volume	cm ³	45	53	61	70	61	70	81	104	66	77	88	113	106	136	170	154	192	235
Shot weight(PS)	g	40	47	54	63	55	63	73	93	60	69	79	102	95	122	153	138	172	211
Screw L/D ratio		22.2	20.5	19	17.7	23	21.4	20	17.6	23	21.4	20	17.6	23	20.3	18.2	22.4	20	18.1
Injection rate	cm ³ /s	64	75	87	100	46	54	62	80	64	74	85	109	75	96	120	96	120	146
Plasticizing capacity(PS)	kg/hr	27	35	41	54	34	39	52	71	35	41	54	74	41	58	78	62	84	110
Screw revolution	rpm	375				360				375				300			320		
Temperature control zones		1+4				1+4				1+4				1+4			1+4		
General																			
Drive power	kW	15.3				15.3				15.3				15.3			18.2		
Barrel heating	kW	5.53				5.68				5.68				6.88			6.88		
Machine weight	kg	4000				4000				4000				4100			4100		
Machine dimensions	m	4.47 × 1.1 × 1.66				4.47 × 1.1 × 1.66				4.47 × 1.1 × 1.66				4.47 × 1.1 × 1.66			4.47 × 1.1 × 1.66		

☆ Standard injection combination for clampy unit

Selection scheme for injection unit



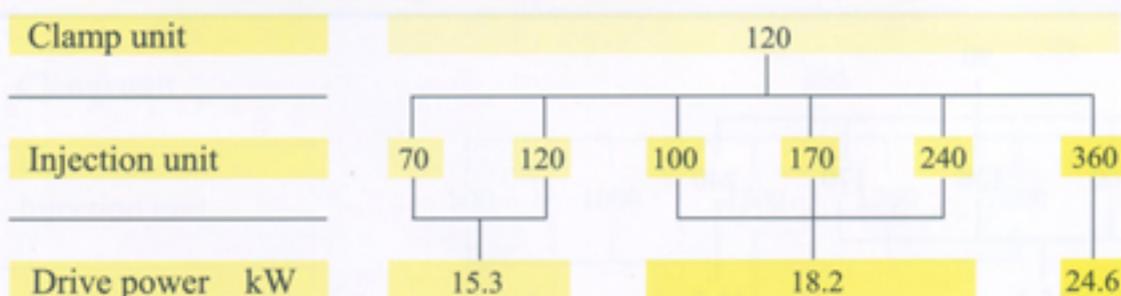
DG120EP

/ 70
/ 100
/ 120

MODEL		DG120EP/70				DG120EP/100				DG120EP/120			
Clamp unit		120											
Clamp force	kN	1200											
Opening stroke	mm	410											
Mold height(min-max)	mm	150-450											
Maximum daylight	mm	860											
Distance between tie-bars	mm	410 × 410											
Platen dimensions	mm	640 × 640											
Ejector points		5											
Ejector stroke	mm	130											
Ejector force	kN	39.5											
Oil tank volume	l	250											
Injection unit		70				100				120			
Screw symbol		H	A	B	C	H	A	B	C	H	A	B	C
Screw diameter	mm	24	26	28	30	26	28	30	34	26	28	30	34
Injection pressure	bar	2722	2319	2000	1742	3976	3428	2986	2325	2702	2330	2030	1580
Theoretical shot volume	cm ³	45	53	61	70	61	70	81	104	66	77	88	113
Shot weight(PS)	g	40	47	54	63	55	63	73	93	60	69	79	102
Screw L/D ratio		22.2	20.5	19	17.7	23	21.4	20	17.6	23	21.4	20	17.6
Injection rate	cm ³ /s	64	75	87	100	56	65	75	96	64	74	85	109
Plasticizing capacity(PS)	kg/hr	27	35	41	54	32	37	48	67	35	41	54	74
Screw revolution	rpm	375				336				375			
Temperature control zones		1+4				1+4				1+4			
General													
Drive power	kW	15.3				18.2				15.3			
Barrel heating	kW	5.53				5.68				5.68			
Machine weight	kg	5000				5000				5000			
Machine dimensions	m	4.6 × 1.19 × 1.77				4.6 × 1.19 × 1.77				4.6 × 1.19 × 1.77			

☆ Standard injection combination for clamp unit

Selection scheme for injection unit



DG120EP

/ 170
/ 240
/ 360

MODEL		DG120EP/170			DG120EP/240			DG120EP/360		
Clamp unit		120								
Clamp force	kN	1200								
Opening stroke	mm	410								
Mold height(min-max)	mm	150-450								
Maximum daylight	mm	860								
Distance between tie-bars	mm	410 × 410								
Platen dimensions	mm	640 × 640								
Ejector points		5								
Ejector stroke	mm	130								
Ejector force	kN	39.5								
Oil tank volume	l	250								
Injection unit		170			☆ 240			360		
Screw symbol		H	A	B	H	A	B	H	A	B
Screw diameter	mm	30	34	38	34	38	42	38	42	48
Injection pressure	bar	2333	1816	1454	2325	1861	1523	2421	1982	1517
Theoretical shot volume	cm ³	106	136	170	154	192	235	226	277	362
Shot weight(PS)	g	95	122	153	138	172	211	203	249	325
Screw L/D ratio		23	20.3	18.2	22.4	20	18.1	22.9	20.7	18.1
Injection rate	cm ³ /s	96	123	154	96	120	146	115	141	184
Plasticizing capacity(PS)	kg/hr	44	62	84	62	84	110	78	103	154
Screw revolution	rpm	320			320			300		
Temperature control zones		1+4			1+4			1+4		
General										
Drive power	kW	18.2			18.2			24.6		
Barrel heating	kW	6.88			6.88			8.14		
Machine weight	kg	5100			5100			5300		
Machine dimensions	m	4.8 × 1.19 × 1.77			4.8 × 1.19 × 1.77			5 × 1.19 × 1.77		

☆ Standard injection combination for clampy unit

DG160EP

/ 70
/ 100
/ 120

MODEL		DG160EP/70				DG160EP/100				DG160EP/120			
Clamp unit		160											
Clamp force	kN	1600											
Opening stroke	mm	420											
Mold height(min-max)	mm	150-500											
Maximum daylight	mm	920											
Distance between tie-bars	mm	460 × 450											
Platen dimensions	mm	690 × 690											
Ejector points		5											
Ejector stroke	mm	130											
Ejector force	kN	39.5											
Oil tank volume	l	350											
Injection unit		70				100				120			
Screw symbol		H	A	B	C	H	A	B	C	H	A	B	C
Screw diameter	mm	24	26	28	30	26	28	30	34	26	28	30	34
Injection pressure	bar	2722	2319	2000	1742	3976	3428	2986	2325	2702	2330	2030	1580
Theoretical shot volume	cm ³	45	53	61	70	61	70	81	104	66	77	88	113
Shot weight(PS)	g	40	47	54	63	55	63	73	93	60	69	79	102
Screw L/D ratio		22.2	20.5	19	17.7	23	21.4	20	17.6	23	21.4	20	17.6
Injection rate	cm ³ /s	81	96	111	128	56	65	75	96	81	94	108	140
Plasticizing capacity(PS)	kg/hr	24	32	37	48	32	37	48	67	32	37	48	67
Screw revolution	rpm	336				336				336			
Temperature control zones		1+4				1+4				1+4			
General													
Drive power	kW	18.2				18.2				18.2			
Barrel heating	kW	5.53				5.68				5.68			
Machine weight	kg	5700											
Machine dimensions	m	4.87 × 1.22 × 1.86											

☆ Standard injection combination for clamp unit

Selection scheme for injection unit

Clamp unit

160

Injection unit

70 100 120 170 240 360 460

Drive power kW

18.2

24.6

DG160EP

/ 170 / 460
/ 240
/ 360

MODEL		DG160EP/170	DG160EP/240	DG160EP/360	DG160EP/460								
Clamp unit		160											
Clamp force	kN	1600											
Opening stroke	mm	420											
Mold height(min-max)	mm	150-500											
Maximum daylight	mm	920											
Distance between tie-bars	mm	460 × 450											
Platen dimensions	mm	690 × 690											
Ejector points		5											
Ejector stroke	mm	130											
Ejector force	kN	39.5											
Oil tank volume	l	350											
Injection unit		170			240			☆ 360			460		
Screw symbol		H	A	B	H	A	B	H	A	B	H	A	B
Screw diameter	mm	30	34	38	34	38	42	38	42	48	42	48	52
Injection pressure	bar	2333	1816	1454	2325	1861	1523	2421	1982	1517	2332	1786	1522
Theoretical shot volume	cm ³	106	136	170	154	192	235	226	277	362	304	398	467
Shot weight(PS)	g	95	122	153	138	172	211	203	249	325	273	358	420
Screw L/D ratio		23	20.3	18.2	22.4	20	18.1	22.9	20.7	18.1	22.8	20	18.5
Injection rate	cm ³ /s	96	123	154	96	120	146	115	141	184	140	182	214
Plasticizing capacity(PS)	kg/hr	44	62	84	62	84	110	78	103	154	96	143	168
Screw revolution	rpm	320			320			300			280		
Temperature control zones		1+4			1+4			1+4			1+4		
General													
Drive power	kW	18.2			18.2			24.6			24.6		
Barrel heating	kW	6.88			6.88			8.14			8.98		
Machine weight	kg	5800			5800			5900			6100		
Machine dimensions	m	4.87 × 1.22 × 1.86			4.87 × 1.22 × 1.86			5.07 × 1.22 × 1.86			5.07 × 1.22 × 1.86		

☆ Standard injection combination for clamp unit

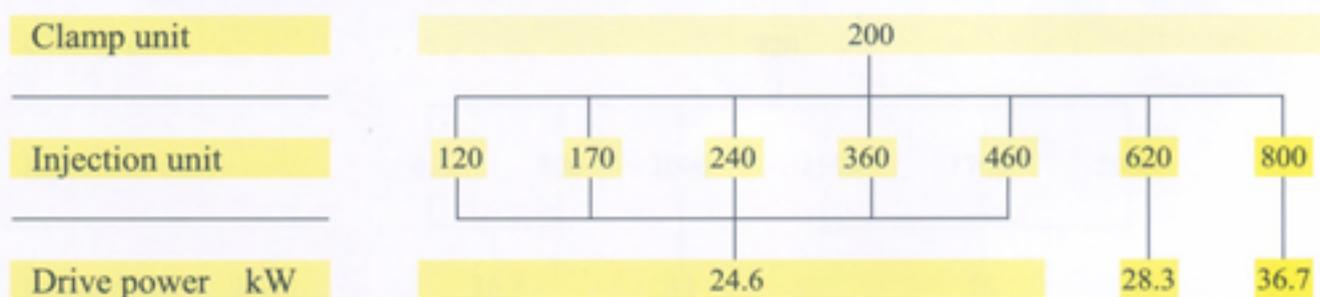
DG200EP

/ 120
/ 170
/ 240

MODEL		DG200EP/120				DG200EP/170			DG200EP/240		
Clamp unit		200									
Clamp force	kN	2000									
Opening stroke	mm	480									
Mold height(min-max)	mm	150-570									
Maximum daylight	mm	1050									
Distance between tie-bars	mm	510 × 480									
Platen dimensions	mm	760 × 740									
Ejector points		9									
Ejector stroke	mm	160									
Ejector force	kN	53.8									
Oil tank volume	l	400									
Injection unit		120				170			240		
Screw symbol		H	A	B	C	H	A	H	H	H	B
Screw diameter	mm	26	28	30	34	30	34	38	34	38	42
Injection pressure	bar	2702	2330	2030	1580	2333	1816	1454	2325	1861	1523
Theoretical shot volume	cm ³	66	77	88	113	106	136	170	154	192	235
Shot weight(PS)	g	60	69	79	102	95	122	153	138	172	211
Screw L/D ratio		23	21.4	20	17.6	23	20.3	18.2	22.4	20	18.1
Injection rate	cm ³ /s	102	118	135	174	120	154	192	120	150	182
Plasticizing capacity(PS)	kg/hr	34	40	51	72	55	77	105	77	105	137
Screw revolution	rpm	360				400			400		
Temperature control zones		1+4				1+4			1+4		
General											
Drive power	kW	24.6				24.6			24.6		
Barrel heating	kW	5.68				6.88			6.88		
Machine weight	kg	7500				7600			7600		
Machine dimensions	m	5.26 × 1.31 × 1.89				5.26 × 1.31 × 1.89			5.26 × 1.31 × 1.89		

☆ Standard injection combination for clamp unit

Selection scheme for injection unit



DG200EP

/ 360 / 800
/ 460
/ 620

MODEL	DG200EP/360	DG200EP/460	DG200EP/620	DG200EP/800									
Clamp unit		200											
Clamp force	kN	2000											
Opening stroke	mm	480											
Mold height(min-max)	mm	150-570											
Maximum daylight	mm	1050											
Distance between tie-bars	mm	510 × 480											
Platen dimensions	mm	740 × 740											
Ejector points		9											
Ejector stroke	mm	160											
Ejector force	kN	53.8											
Oil tank volume	l	400											
Injection unit		360			☆ 460			620			800		
Screw symbol		H	A	B	H	A	B	H	A	B	H	A	B
Screw diameter	mm	38	42	48	42	48	52	48	52	55	52	55	60
Injection pressure	bar	2421	1982	1517	2332	1786	1522	2138	1822	1629	2143	1915	1610
Theoretical shot volume	cm ³	226	277	362	304	398	467	470	552	617	594	665	792
Shot weight(PS)	g	203	249	325	273	358	420	423	496	555	534	598	712
Screw L/D ratio		22.9	20.7	18.1	22.8	20	18.5	21.7	20	19	21	20	18.3
Injection rate	cm ³ /s	115	141	184	140	182	214	168	197	220	191	214	254
Plasticizing capacity(PS)	kg/hr	78	103	154	96	143	168	113	132	157	132	157	198
Screw revolution	rpm	300			280			220			220		
Temperature control zones		1+4			1+4			1+4			1+4		
General													
Drive power	kW	24.6			24.6			28.3			36.7		
Barrel heating	kW	8.14			8.98			11.38			12.58		
Machine weight	kg	7800			7800			8000			8000		
Machine dimensions	m	5.46 × 1.31 × 1.89			5.46 × 1.31 × 1.89			5.86 × 1.31 × 1.89			5.86 × 1.31 × 1.89		

☆ Standard injection combination for clamp unit

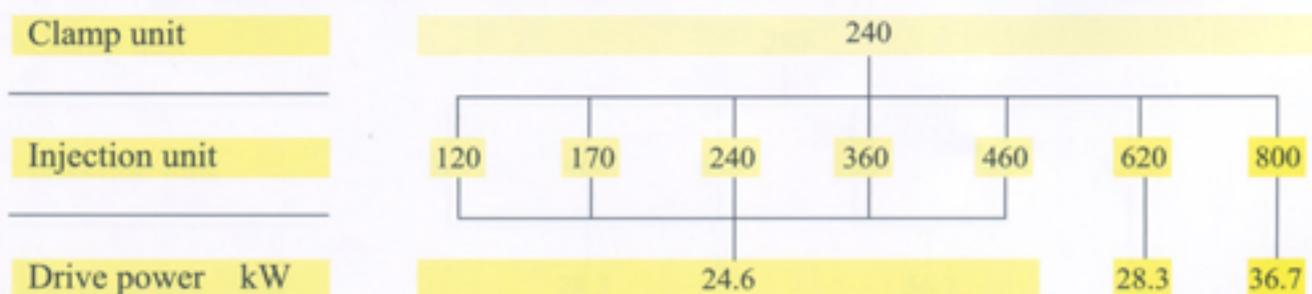
DG240EP

/ 120
/ 170
/ 240

MODEL		DG240EP/120	DG240EP/170	DG240EP/240							
Clamp unit		240									
Clamp force	kN	2400									
Opening stroke	mm	530									
Mold height(min-max)	mm	200-630									
Maximum daylight	mm	1160									
Distance between tie-bars	mm	530 × 530									
Platen dimensions	mm	800 × 800									
Ejector points		9									
Ejector stroke	mm	160									
Ejector force	kN	53.8									
Oil tank volume	l	450									
Injection unit		120				170			240		
Screw symbol		H	A	B	C	H	A	B	H	A	B
Screw diameter	mm	26	28	30	34	30	34	38	34	38	42
Injection pressure	bar	2702	2330	2030	1580	2333	1816	1454	2325	1861	1523
Theoretical shot volume	cm ³	66	77	88	113	106	136	170	154	192	235
Shot weight(PS)	g	60	69	79	102	95	122	153	138	172	211
Screw L/D ratio		23	21.4	20	17.6	23	20.3	18.2	22.4	20	18.1
Injection rate	cm ³ /s	119	138	158	203	140	180	224	140	174	213
Plasticizing capacity(PS)	kg/hr	33	38	48	68	63	89	121	89	121	158
Screw revolution	rpm	350				460			460		
Temperature control zones		1+4				1+4			1+4		
General											
Drive power	kW	24.6				24.6			24.6		
Barrel heating	kW	5.68				6.88			6.88		
Machine weight	kg	8000				8300			8300		
Machine dimensions	m	5.19 × 1.35 × 1.87				5.19 × 1.35 × 1.87			5.19 × 1.35 × 1.87		

☆ Standard injection combination for clamp unit

Selection scheme for injection unit



DG240EP

/ 360 / 800
/ 460
/ 620

MODEL		DG240EP/360	DG240EP/460	DG240EP/620	DG240EP/800								
Clamp unit		240											
Clamp force	kN	2400											
Opening stroke	mm	530											
Mold height(min-max)	mm	200-630											
Maximum daylight	mm	1160											
Distance between tie-bars	mm	530 × 530											
Platen dimensions	mm	800 × 800											
Ejector points		9											
Ejector stroke	mm	160											
Ejector force	kN	53.8											
Oil tank volume	l	450											
Injection unit		360			460			☆ 620			800		
Screw symbol		H	A	B	H	A	B	H	A	B	H	A	B
Screw diameter	mm	38	42	48	42	48	52	48	52	55	52	55	60
Injection pressure	bar	2421	1982	1517	2332	1786	1522	2138	1822	1629	2143	1915	1610
Theoretical shot volume	cm ³	226	277	362	304	398	467	470	552	617	594	665	792
Shot weight(PS)	g	203	249	325	273	358	420	423	496	555	534	598	712
Screw L/D ratio		22.9	20.7	18.1	22.8	20	18.5	21.7	20	19	21	20	18.3
Injection rate	cm ³ /s	135	164	215	162	211	248	168	197	220	191	214	254
Plasticizing capacity(PS)	kg/hr	92	120	180	96	143	168	113	132	157	132	157	198
Screw revolution	rpm	350			280			220			220		
Temperature control zones		1+4			1+4			1+4			1+4		
General													
Drive power	kW	24.6			24.6			28.3			36.7		
Barrel heating	kW	8.14			8.98			11.38			12.58		
Machine weight	kg	8500			8500			8800			8800		
Machine dimensions	m	5.59 × 1.35 × 1.87			5.59 × 1.35 × 1.87			5.99 × 1.35 × 1.87			5.99 × 1.35 × 1.87		

☆ Standard injection combination for clamp unit

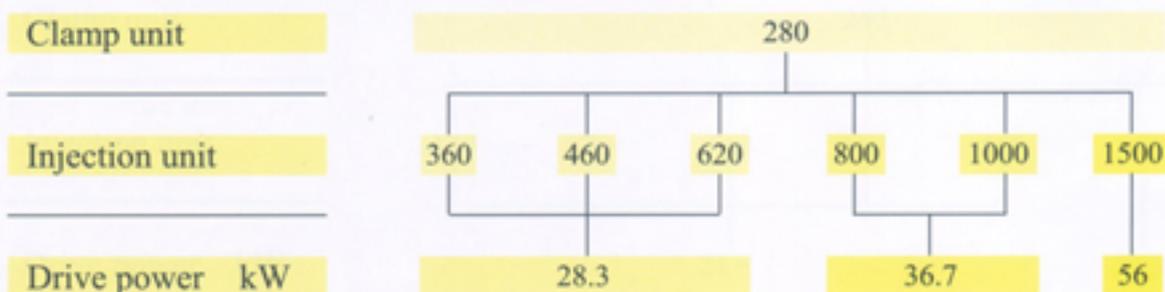
DG280EP

/ 360
/ 460
/ 620

MODEL		DG280EP/360			DG280EP/460			DG280EP/620		
Clamp unit		280								
Clamp force	kN	2800								
Opening stroke	mm	570								
Mold height(min-max)	mm	200-680								
Maximum daylight	mm	1250								
Distance between tie-bars	mm	560 × 560								
Platen dimensions	mm	830 × 830								
Ejector points		9								
Ejector stroke	mm	160								
Ejector force	kN	53.8								
Oil tank volume	l	500								
Injection unit		360			460			620		
Screw symbol		H	A	B	H	A	B	H	A	B
Screw diameter	mm	38	42	48	42	48	52	48	52	55
Injection pressure	bar	2421	1982	1517	2332	1786	1522	2138	1822	1629
Theoretical shot volume	cm ³	226	277	362	304	398	467	470	552	617
Shot weight(PS)	g	203	249	325	273	358	420	423	496	555
Screw L/D ratio		22.9	20.7	18.1	22.8	20	18.5	21.7	20	19
Injection rate	cm ³ /s	147	180	234	177	232	272	168	197	220
Plasticizing capacity(PS)	kg/hr	100	130	195	103	154	180	113	132	157
Screw revolution	rpm	380			300			220		
Temperature control zones		1+4			1+4			1+4		
General										
Drive power	kW	28.3			28.3			28.3		
Barrel heating	kW	8.14			8.98			11.38		
Machine weight	kg	9100			9100			9400		
Machine dimensions	m	5.97 × 1.40 × 1.94			5.97 × 1.40 × 1.94			6.37 × 1.40 × 1.94		

☆ Standard injection combination for clamp unit

Selection scheme for injection unit



DG280EP

/ 800
/ 1000
/ 1500

MODEL		DG280EP/800	DG280EP/1000	DG280EP/1500						
Clamp unit		280								
Clamp force	kN	2800								
Opening stroke	mm	570								
Mold height(min-max)	mm	200-680								
Maximum daylight	mm	1250								
Distance between tie-bars	mm	560 × 560								
Platen dimensions	mm	830 × 830								
Ejector points		9								
Ejector stroke	mm	160								
Ejector force	kN	53.8								
Oil tank volume	l	500								
Injection unit		☆ 800			1000			1500		
Screw symbol		H	A	B	H	A	B	H	A	B
Screw diameter	mm	52	55	60	55	60	65	60	65	70
Injection pressure	bar	2143	1915	1610	2221	1866	1590	2310	1968	1697
Theoretical shot volume	cm ³	594	665	792	760	904	1061	1130	1327	1539
Shot weight(PS)	g	534	598	712	684	813	954	1017	1194	1385
Screw L/D ratio		21	20	18.3	22.5	20.7	19.1	21.6	20	18.6
Injection rate	cm ³ /s	191	214	254	201	240	281	264	310	360
Plasticizing capacity(PS)	kg/hr	132	157	198	136	171	212	189	235	286
Screw revolution	rpm	220			190			210		
Temperature control zones		1+4			1+5			1+5		
General										
Drive power	kW	36.7			36.7			56		
Barrel heating	kW	12.58			17			20.27		
Machine weight	kg	9400			9800			11000		
Machine dimensions	m	6.37 × 1.40 × 1.94			6.57 × 1.40 × 1.94			7.07 × 1.40 × 1.94		

☆ Standard injection combination for clamp unit

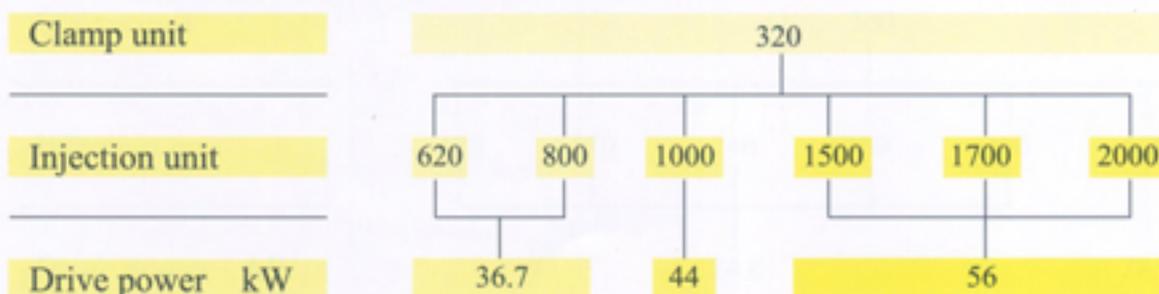
DG320EP

/ 620
/ 800
/ 1000

MODEL		DG320EP/620			DG320EP/800			DG320EP/1000		
Clamp unit		320								
Clamp force	kN	3200								
Opening stroke	mm	620								
Mold height(min-max)	mm	250 - 750								
Maximum daylight	mm	1370								
Distance between tie-bars	mm	620 × 620								
Platen dimensions	mm	930 × 930								
Ejector points		13								
Ejector stroke	mm	200								
Ejector force	kN	110								
Oil tank volume	l	550								
Injection unit		620			800			☆ 1000		
Screw symbol		H	A	B	H	A	B	H	A	B
Screw diameter	mm	48	52	55	52	55	60	55	60	65
Injection pressure	bar	2138	1822	1629	2143	1915	1610	2221	1866	1590
Theoretical shot volume	cm ³	470	552	617	594	665	792	760	904	1061
Shot weight(PS)	g	423	496	555	534	598	712	684	813	954
Screw L/D ratio		21.7	20	19	21	20	18.3	22.5	20.7	19.1
Injection rate	cm ³ /s	191	225	251	191	214	254	220	262	308
Plasticizing capacity(PS)	kg/hr	128	150	178	132	157	198	150	189	234
Screw revolution	rpm	250			220			210		
Temperature control zones		1+4			1+4			1+5		
General										
Drive power	kW	36.7			36.7			44		
Barrel heating	kW	11.38			12.58			17		
Machine weight	kg	11600			11600			12000		
Machine dimensions	m	6.6 × 1.63 × 2			6.6 × 1.63 × 2			6.80 × 1.63 × 2		

☆ Standard injection combination for clamp unit

Selection scheme for injection unit



DG320EP

/ 1500
/ 1700
/ 2000

MODEL		DG320EP/1500			DG320EP/1700			DG320EP/2000		
Clamp unit		320								
Clamp force	kN	3200								
Opening stroke	mm	620								
Mold height(min-max)	mm	250 - 750								
Maximum daylight	mm	1370								
Distance between tie-bars	mm	620 × 620								
Platen dimensions	mm	930 × 930								
Ejector points		13								
Ejector stroke	mm	200								
Ejector force	kN	110								
Oil tank volume	l	550								
Injection unit		1500			1700			2000		
Screw symbol		H	A	B	H	A	B	H	A	B
Screw diameter	mm	60	65	70	65	70	75	70	75	80
Injection pressure	bar	2310	1968	1697	2226	1920	1672	1920	1672	1470
Theoretical shot volume	cm ³	1130	1327	1539	1327	1539	1767	1539	1767	2010
Shot weight(PS)	g	1017	1194	1385	1194	1385	1590	1385	1590	1809
Screw L/D ratio		21.6	20	18.6	21.5	20	18.6	22	20.5	19.3
Injection rate	cm ³ /s	264	310	360	274	318	365	318	365	415
Plasticizing capacity(PS)	kg/hr	189	235	286	196	238	274	197	227	270
Screw revolution	rpm	210			175			145		
Temperature control zones		1+5			1+5			1+5		
General										
Drive power	kW	56			56			56		
Barrel heating	kW	20.27			20.27			26.51		
Machine weight	kg	12600			12600			13200		
Machine dimensions	m	7.30 × 1.63 × 2			7.30 × 1.63 × 2			7.50 × 1.63 × 2		

☆ Standard injection combination for clamp unit

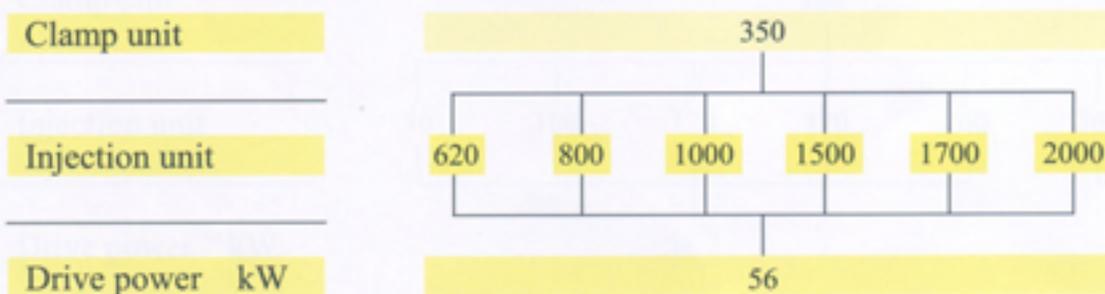
DG350EP

/ 620
/ 800
/ 1000

MODEL		DG350EP/620			DG350EP/800			DG350EP/1000		
Clamp unit		350								
Clamp force	kN	3500								
Opening stroke	mm	650								
Mold height(min-max)	mm	300-800								
Maximum daylight	mm	1450								
Distance between tie-bars	mm	660 × 660								
Platen dimensions	mm	960 × 960								
Ejector points		13								
Ejector stroke	mm	240								
Ejector force	kN	110								
Oil tank volume	l	650								
Injection unit		620			800			1000		
Screw symbol		H	A	B	H	A	B	H	A	B
Screw diameter	mm	48	52	55	52	55	60	55	60	65
Injection pressure	bar	2138	1822	1629	2143	1915	1610	2341	1967	1676
Theoretical shot volume	cm ³	470	552	617	594	665	792	760	904	1061
Shot weight(PS)	g	423	496	555	534	598	712	684	813	954
Screw L/D ratio		21.7	20	19	21	20	18.3	22.5	20.7	19.1
Injection rate	cm ³ /s	249	293	327	284	318	378	273	325	381
Plasticizing capacity(PS)	kg/hr	193	226	268	193	229	288	186	234	290
Screw revolution	rpm	375			320			260		
Temperature control zones		1+4			1+4			1+5		
General										
Drive power	kW	56			56			56		
Barrel heating	kW	11.38			12.58			17		
Machine weight	kg	13800			13800			14300		
Machine dimensions	m	7.07 × 1.8 × 2.04			7.07 × 1.8 × 2.04			7.07 × 1.8 × 2.04		

☆ Standard injection combination for clamp unit

Selection scheme for injection unit



DG350EP

/ 1500

/ 1700

/ 2000

MODEL		DG350EP/1500			DG350EP/1700			DG350EP/2000		
Clamp unit		350								
Clamp force	kN	3500								
Opening stroke	mm	650								
Mold height(min-max)	mm	300-800								
Maximum daylight	mm	1450								
Distance between tie-bars	mm	660 × 660								
Platen dimensions	mm	960 × 960								
Ejector points		13								
Ejector stroke	mm	240								
Ejector force	kN	110								
Oil tank volume	l	650								
Injection unit		1500			☆ 1700			2000		
Screw symbol		H	A	B	H	A	B	H	A	B
Screw diameter	mm	60	65	70	65	70	75	70	75	80
Injection pressure	bar	2310	1968	1697	2226	1920	1672	1920	1672	1470
Theoretical shot volume	cm ³	1130	1327	1539	1327	1539	1767	1539	1767	2010
Shot weight(PS)	g	1017	1194	1385	1194	1385	1590	1385	1590	1809
Screw L/D ratio		21.6	20	18.6	21.5	20	18.6	22	20.5	19.3
Injection rate	cm ³ /s	264	310	360	274	318	365	318	365	415
Plasticizing capacity(PS)	kg/hr	189	235	286	196	238	274	197	227	270
Screw revolution	rpm	210			175			145		
Temperature control zones		1+5			1+5			1+5		
General										
Drive power	kW	56			56			56		
Barrel heating	kW	20.27			20.27			26.51		
Machine weight	kg	15000			15000			15600		
Machine dimensions	m	7.77 × 1.8 × 2.04			7.77 × 1.8 × 2.04			7.98 × 1.8 × 2.04		

☆ Standard injection combination for clamp unit

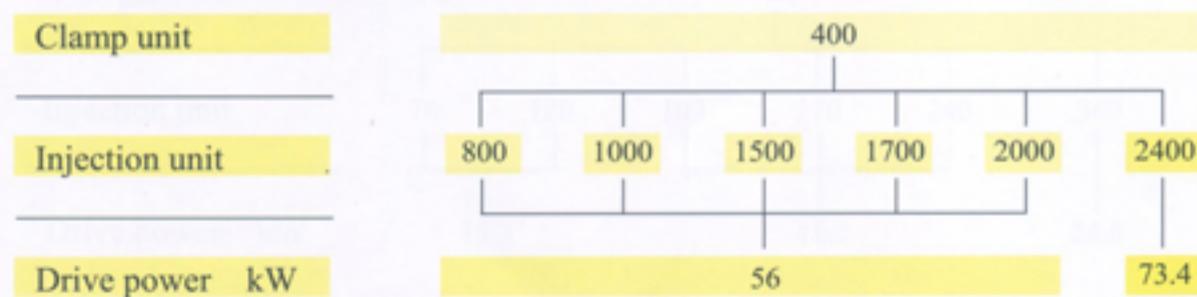
DG400EP

/ 800
/ 1000
/ 1500

MODEL		DG400EP/800			DG400EP/1000			DG400EP/1500		
Clamp unit		400								
Clamp force	kN	4000								
Opening stroke	mm	720								
Mold height(min-max)	mm	300-800								
Maximum daylight	mm	1520								
Distance between tie-bars	mm	710 × 710								
Platen dimensions	mm	1060 × 1060								
Ejector points		13								
Ejector stroke	mm	240								
Ejector force	kN	110								
Oil tank volume	l	650								
Injection unit		800			1000			1500		
Screw symbol		H	A	B	H	A	B	H	A	B
Screw diameter	mm	52	55	60	55	60	65	60	65	70
Injection pressure	bar	2143	1915	1610	2341	1967	1676	2310	1968	1697
Theoretical shot volume	cm ³	594	665	792	760	904	1061	1130	1327	1539
Shot weight(PS)	g	534	598	712	684	813	954	1017	1194	1385
Screw L/D ratio		21	20	18.3	22.5	20.7	19.1	21.6	20	18.6
Injection rate	cm ³ /s	284	318	378	273	325	381	264	310	360
Plasticizing capacity(PS)	kg/hr	193	229	288	186	234	290	189	235	286
Screw revolution	rpm	320			260			210		
Temperature control zones		1+4			1+5			1+5		
General										
Drive power	kW	56			56			56		
Barrel heating	kW	12.58			17			20.27		
Machine weight	kg	16000			16600			17000		
Machine dimensions	m	7.07 × 1.8 × 2.04			7.33 × 1.92 × 2			7.83 × 1.92 × 2		

☆ Standard injection combination for clamp unit

Selection scheme for injection unit



DG400EP

/ 1700

/ 2000

/ 2400

MODEL		DG400EP/1700			DG400EP/2000			DG400EP/2400		
Clamp unit		400								
Clamp force	kN	4000								
Opening stroke	mm	720								
Mold height(min-max)	mm	300-800								
Maximum daylight	mm	1520								
Distance between tie-bars	mm	710 × 710								
Platen dimensions	mm	1060 × 1060								
Ejector points		13								
Ejector stroke	mm	240								
Ejector force	kN	110								
Oil tank volume	l	650								
Injection unit		1700			☆ 2000			2400		
Screw symbol		H	A	B	H	A	B	A	B	C
Screw diameter	mm	65	70	75	70	75	80	75	80	85
Injection pressure	bar	2226	1920	1672	1920	1672	1470	2116	1860	1648
Theoretical shot volume	cm ³	1327	1539	1767	1539	1767	2010	1899	2161	2440
Shot weight(PS)	g	1194	1385	1590	1385	1590	1809	1709	1944	2196
Screw L/D ratio		21.5	20	18.6	22	20.5	19.3	21.3	20	18.8
Injection rate	cm ³ /s	274	318	365	318	365	415	428	487	550
Plasticizing capacity(PS)	kg/hr	196	238	274	197	227	270	218	298	337
Screw revolution	rpm	175			145			160		
Temperature control zones		1+5			1+5			1+5		
General										
Drive power	kW	56			56			73.4		
Barrel heating	kW	20.27			26.51			26.51		
Machine weight	kg	17000			17600			18200		
Machine dimensions	m	7.83 × 1.92 × 2			8.13 × 1.92 × 2			8.13 × 1.92 × 2		

☆ Standard injection combination for clamp unit

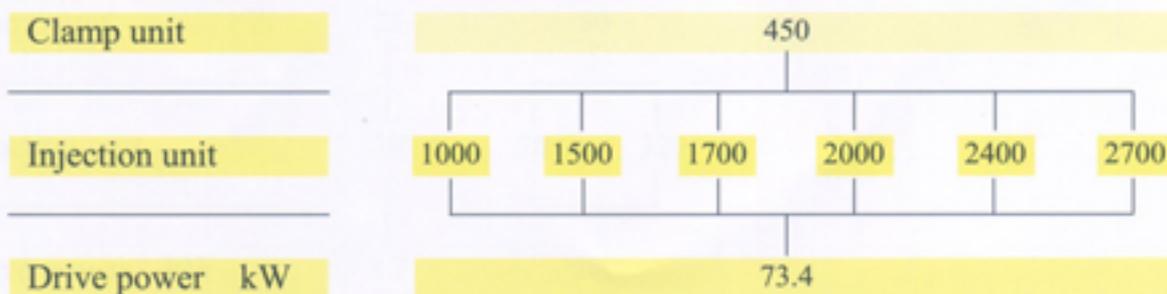
DG450EP

/ 1000
/ 1500
/ 1700

MODEL		DG450EP/1000			DG450EP/1500			DG450EP/1700		
Clamp unit		450								
Clamp force	kN	4500								
Opening stroke	mm	770								
Mold height(min-max)	mm	300-850								
Maximum daylight	mm	1620								
Distance between tie-bars	mm	760 × 760								
Platen dimensions	mm	1130 × 1130								
Ejector points		17								
Ejector stroke	mm	240								
Ejector force	kN	172								
Oil tank volume	l	700								
Injection unit		1000			1500			1700		
Screw symbol		H	A	B	H	A	B	H	A	B
Screw diameter	mm	55	60	65	60	65	70	65	70	75
Injection pressure	bar	2341	1967	1676	2310	1968	1697	2226	1920	1672
Theoretical shot volume	cm ³	760	904	1061	1130	1327	1539	1327	1539	1767
Shot weight(PS)	g	684	813	954	1017	1194	1385	1194	1385	1590
Screw L/D ratio		22.5	20.7	19.1	21.6	20	18.6	21.5	20	18.6
Injection rate	cm ³ /s	332	395	464	321	378	438	331	384	441
Plasticizing capacity(PS)	kg/hr	229	288	358	231	286	349	235	286	329
Screw revolution	rpm	320			256			210		
Temperature control zones		1+5			1+5			1+5		
General										
Drive power	kW	73.4			73.4			73.4		
Barrel heating	kW	17			20.27			20.27		
Machine weight	kg	18500			19000			19000		
Machine dimensions	m	8 × 2.12 × 2.02			8.5 × 2.12 × 2.02			8.5 × 2.12 × 2.02		

☆ Standard injection combination for clamp unit

Selection scheme for injection unit



DG450EP

/ 2000
/ 2400
/ 2700

MODEL		DG450EP/2000			DG450EP/2400			DG450EP/2700		
Clamp unit		450								
Clamp force	kN	4500								
Opening stroke	mm	770								
Mold height(min-max)	mm	300-850								
Maximum daylight	mm	1620								
Distance between tie-bars	mm	760 × 760								
Platen dimensions	mm	1130 × 1130								
Ejector points		17								
Ejector stroke	mm	240								
Ejector force	kN	172								
Oil tank volume	l	700								
Injection unit		2000			☆ 2400			2700		
Screw symbol		A	B	C	A	B	C	A	B	C
Screw diameter	mm	70	75	80	75	80	85	80	85	90
Injection pressure	bar	1920	1672	1470	2116	1860	1648	1898	1681	1500
Theoretical shot volume	cm ³	1539	1767	2010	1899	2161	2440	2186	2468	2767
Shot weight(PS)	g	1385	1590	1809	1709	1944	2196	1967	2221	2490
Screw L/D ratio		22	20.5	19.3	21.3	20	18.8	21.4	20.1	19
Injection rate	cm ³ /s	384	441	502	428	487	550	440	497	558
Plasticizing capacity(PS)	kg/hr	238	274	326	218	298	337	298	337	397
Screw revolution	rpm	175			160			160		
Temperature control zones		1+5			1+5			1+5		
General										
Drive power	kW	73.4			73.4			73.4		
Barrel heating	kW	26.51			26.51			28.91		
Machine weight	kg	19500			19500			20000		
Machine dimensions	m	8.7 × 2.12 × 2.02			8.7 × 2.12 × 2.02			8.8 × 2.12 × 2.02		

☆ Standard injection combination for clampy unit

