

victory, e-victory US		Clamping unit	
		160	180
Clamp force	US tons / kN	160 / 1400	180 / 1600
Opening force	US tons	10.8	10.8
Opening stroke max.	inches	23.62	23.62
Mold height min.	inches	11.81	11.81
Daylight max.	inches	35.43	35.43
Mold fixing platens standard h x v	inches	29.53 x 29.53	29.53 x 29.53
Larger mold fixing platen / wide platen h x v	inches	29.53 x 33.46	29.53 x 33.46
Standard discharge chute width	inches	21.65	21.65
Wide-Platen discharge chute width	inches	25.59	25.59
Ejector stroke	inches	5.91	5.91
Ejector force forward / return	US tons	6.8 / 3.0	6.8 / 3.0
mold weight, max on moving platen/center of gravity ¹	lbs / inches	2646 / 9.84	2646 / 9.84
Dry operation time	sec@inches	1.73 @ 7.87	1.73 @ 7.87

1. Without additional guide block

victory 160, 180 US		Injection unit				
		330	500	650	750	1050
Weight Standard / Wide-Platen	to US tons	8.7 / 9.2 9.6 / 10.1	8.7 / 9.2 9.6 / 10.1	8.9 / 9.4 9.8 / 10.4	9.2 / 9.7 10.1 / 10.7	9.2 / 9.7 10.1 / 10.7
Oil reservoir capacity ¹	l gal	460 121.5	460 121.5	460 121.5	460 121.5	460 121.5
Drive power HV1 / HV2	kW hp	22 / 22 29.9 / 29.9	22 / 22 29.9 / 29.9	22 / 22 29.9 / 29.9	30 / 30 40.8 / 40.8	30 / 30 40.8 / 40.8
Drive power SHV1 / SHV2 / SHV3	kW hp	25 / 31 / 40 34.0 / 42.1 / 54.4	25 / 31 / 40 34.0 / 42.1 / 54.4	25 / 31 / 40 34.0 / 42.1 / 54.4	28 / 34 / 48.5 38.1 / 46.2 / 65.9	28 / 34 / 48.5 38.1 / 46.2 / 65.9
Injection unit heating capacity (max.capacity / max.zones)	kW / n	6.44 / 4	8.54 / 5	9.35 / 5	10.75 / 5	11.45 / 5
Total power HV1 / HV2	kW	31 / 31	33 / 33	34 / 34	43 / 43	44 / 44
Total power SHV1 / SHV2	kW	33 / 39	35 / 41	36 / 42	40 / 46	41 / 47
Connected current HV1 / HV2 ²	A	55 / 55	64 / 64	61 / 61	83 / 83	80 / 80
Connected current SHV1 / SHV2 ²	A	49 / 58	57 / 66	54 / 63	65 / 73	62 / 70
Cooling water consumption HVx / SHVx ³	m ³ /h gal/h	0.8 / 0.4 211 / 105	0.8 / 0.4 211 / 105	0.8 / 0.4 211 / 105	1 / 0.5 264 / 132	1 / 0.5 264 / 132

1. In case of oil supply when commissioning carried out at ENGEL +15%
2. With voltage 3 x 380V - 400V + N + PE, 50/60Hz
3. With an ambient temperature of maximum 35° C / 95° F

e-victory 160, 180 US		Injection unit			
		310	440	740	940
Weight Standard / Wide-Platen	to US tons	9.4 / 9.9 10.4 / 10.9	9.4 / 9.9 10.4 / 10.9	9.9 / 10.4 10.9 / 11.5	9.9 / 10.4 10.9 / 11.5
Oil reservoir capacity ¹	l gal	530 140.0	530 140.0	530 140.0	530 140.0
Drive power SHV1 / SHV2	kW hp	22.10 / 28.34 30.05 / 38.53	23.05 / 29.24 31.34 / 39.76	24.53 / 30.68 33.35 / 41.71	29.54 / 35.68 40.16 / 48.51
Injection unit heating capacity (max.capacity / max.zones)	kW / n	6.44 / 4	8.54 / 5	10.75 / 5	11.45 / 5
Total power SHV1 / SHV2 ²	kW	30 / 36	33 / 39	37 / 42	42 / 48
Connected current SHV1 / SHV2 ^{2 3}	A	45 / 54	55 / 64	60 / 69	64 / 73
Cooling water consumption SHVx ⁴	m ³ /h gal/h	-	-	-	-

1. In case of oil supply when commissioning carried out at ENGEL +15%
2. When using compensation equipment for correcting the power factor of machines, plants or plant components, reactive current compensation with impedance capacitors is necessary.
3. With voltage 3 x 380V - 400V + N + PE, 50/60Hz
4. With an ambient temperature of maximum 35° C / 95° F

victory		Injection unit 750 - EHV								
		HV1 / HV2			HV3			HV3-HSI		
Screw diameter	mm in	45 1.77	50 1.97	55 2.17	45 1.77	50 1.97	55 2.17	45 1.77	50 1.97	55 2.17
Screw stroke	mm in	200 7.87	200 7.87	200 7.87	200 7.87	200 7.87	200 7.87	200 7.87	200 7.87	200 7.87
Injection capacity	cm ³ in ³	318 19.40	392 23.92	475 28.98	318 19.40	392 23.92	475 28.98	318 19.40	392 23.92	475 28.98
Screw speed	min ⁻¹ rpm	230	230	230	320	320	320	320	320	320
Peripheral screw speed max.	m/s ft/s	0.54 1.77	0.60 1.97	0.66 2.17	0.75 2.46	0.84 2.76	0.92 3.02	0.75 2.46	0.84 2.76	0.92 3.02
Screw torque max.	Nm lbf-ft	1290 951.46	1290 951.46	1290 951.46	1290 951.46	1290 951.46	1290 951.46	1290 951.46	1290 951.46	1290 951.46
L/D ratio (3-zone screw)	L/D	20	20	20	20	20	20	20	20	20
Recovery rate (3-zone screw) ¹	g/s oz/s	24.0 0.85	32.1 1.13	41.3 1.46	34.9 1.23	45.4 1.60	57.5 2.03	34.9 1.23	45.4 1.60	57.5 2.03
L/D ratio (barrier screw)	L/D	24	24	24	24	24	24	24	24	24
Recovery rate (barrier screw) ²	g/s oz/s	30.0 1.06	39.2 1.38	50.0 1.76	41.7 1.47	54.4 1.92	69.2 2.44	41.7 1.47	54.4 1.92	69.2 2.44
Injection speed	mm/s in/s	144 5.67	144 5.67	144 5.67	198 7.80	198 7.80	198 7.80	-	-	-
Injection speed (inj. pressure increased)	mm/s in/s	107 4.21	107 4.21	107 4.21	148 5.83	148 5.83	148 5.83	600 23.62	600 23.62	600 23.62
Injection rate ³	cm ³ /s in ³ /s	230 14.04	283 17.27	343 20.93	316 19.28	390 23.82	472 28.80	-	-	-
Injection rate (inj. pressure increased) ³	cm ³ /s in ³ /s	171 10.44	211 12.88	255 15.56	236 14.40	291 17.76	353 21.54	957 58.40	1181 72.07	1429 87.20
Spec. injection pressure	bar psi	1760 25520	1430 20735	1180 17110	1760 25520	1430 20735	1180 17110	1760 25520	1430 20735	1180 17110
Injection pressure (max.)	bar psi	2360 34220	1910 27695	1580 22910	2360 34220	1910 27695	1580 22910	2360 34220	1910 27695	1580 22910
Nozzle stroke	mm in	350 13.78	350 13.78	350 13.78	350 13.78	350 13.78	350 13.78	350 13.78	350 13.78	350 13.78
Nozzle penetration	mm in	30 1.18	30 1.18	30 1.18	30 1.18	30 1.18	30 1.18	30 1.18	30 1.18	30 1.18
Nozzle contact pressure	kN US tons	67 7.50	67 7.50	67 7.50	67 7.50	67 7.50	67 7.50	67 7.50	67 7.50	67 7.50
Heating wattage	kW	13.3	15.3	16.3	13.3	15.3	16.3	13.3	15.3	16.3
Number of heating zones incl. nozzle		5	5	5	5	5	5	5	5	5

1. Values for polystyrene (according to ENGEL factory standard ETR 10100)
2. Values for HDPE (according to ENGEL factory standard ETR 10100)
3. Dependent on pump drive power

victory		Injection unit 750 - ecodrive								
		SHV1 / SHV1-HSI			SHV2 / SHV5			SHV3 / SHV3-HSI		
Screw diameter	mm in	45 1.77	50 1.97	55 2.17	45 1.77	50 1.97	55 2.17	45 1.77	50 1.97	55 2.17
Screw stroke	mm in	200 7.87	200 7.87	200 7.87	200 7.87	200 7.87	200 7.87	200 7.87	200 7.87	200 7.87
Injection capacity	cm ³ in ³	318 19.40	392 23.92	475 28.98	318 19.40	392 23.92	475 28.98	318 19.40	392 23.92	475 28.98
Screw speed	min-1 rpm	230	230	230	230	230	230	320	320	320
Peripheral screw speed max.	m/s ft/s	0.54 1.77	0.60 1.97	0.66 2.17	0.54 1.77	0.60 1.97	0.66 2.17	0.75 2.46	0.84 2.76	0.92 3.02
Screw torque max.	Nm lbf-ft	1290 951.46	1290 951.46	1290 951.46	1290 951.46	1290 951.46	1290 951.46	1290 951.46	1290 951.46	1290 951.46
L/D ratio (3-zone screw)	L/D	20	20	20	20	20	20	20	20	20
Recovery rate (3-zone screw) ¹	g/s oz/s	24.0 0.85	32.1 1.13	41.3 1.46	24.0 0.85	32.1 1.13	41.3 1.46	34.9 1.23	45.4 1.60	57.5 2.03
L/D ratio (barrier screw)	L/D	24	24	24	24	24	24	24	24	24
Recovery rate (barrier screw) ²	g/s oz/s	30.0 1.06	39.2 1.38	50.0 1.76	30.0 1.06	39.2 1.38	50.0 1.76	41.7 1.47	54.4 1.92	69.2 2.44
Injection speed	mm/s in/s	144 / - 5.67 / -	144 / - 5.67 / -	144 / - 5.67 / -	144 5.67	144 5.67	144 5.67	198 / - 7.80 / -	198 / - 7.80 / -	198 / - 7.80 / -
Injection speed (inj. pressure increased)	mm/s in/s	107 / 600 4.2 / 23.6	107 / 600 4.2 / 23.6	107 / 600 4.2 / 23.6	107 4.2	107 4.2	107 4.2	148 / 600 5.8 / 23.6	148 / 600 5.8 / 23.6	148 / 600 5.8 / 23.6
Injection rate ³	cm ³ /s in ³ /s	230 / - 14.04 / -	283 / - 17.27 / -	343 / - 20.93 / -	230 14.04	283 17.27	343 20.93	316 / - 19.28 / -	390 / - 23.80 / -	472 / - 28.80 / -
Injection rate (inj. pressure increased) ³	cm ³ /s in ³ /s	171 / 957 10.4 / 58.4	211 / 1181 12.9 / 72.1	255 / 1429 15.6 / 87.2	171 10.4	211 12.9	255 15.6	236 / 957 14.4 / 58.4	291 / 1181 17.8 / 72.1	353 / 1429 21.5 / 87.2
Spec. injection pressure	bar psi	1760 25520	1430 20735	1180 17110	1760 25520	1430 20735	1180 17110	1760 25520	1430 20735	1180 17110
Injection pressure (max.)	bar psi	2360 34220	1910 27695	1580 22910	2360 34220	1910 27695	1580 22910	2360 34220	1910 27695	1580 22910
Nozzle stroke	mm in	350 13.78	350 13.78	350 13.78	350 13.78	350 13.78	350 13.78	350 13.78	350 13.78	350 13.78
Nozzle penetration	mm in	30 1.18	30 1.18	30 1.18	30 1.18	30 1.18	30 1.18	30 1.18	30 1.18	30 1.18
Nozzle contact pressure	kN US tons	67 7.50	67 7.50	67 7.50	67 7.50	67 7.50	67 7.50	67 7.50	67 7.50	67 7.50
Heating wattage	kW	13.3	15.3	16.3	13.3	15.3	16.3	13.3	15.3	16.3
Number of heating zones incl. nozzle		5	5	5	5	5	5	5	5	5

1. Values for polystyrene (according to ENGEL factory standard ETR 10100)
2. Values for HDPE (according to ENGEL factory standard ETR 10100)
3. Dependent on pump drive power