



Spark EH Series

Redefining Performance and Value for the Plastics Industry



Electric Injection Molding Machines

EH100 to EH300EX

(112 to 405 US Tons)

SPARK EH Specifications

		SPARK EH100			SPARK EH120			SPARK EH150			SPARK EH150 EX				SPARK EH180			SPARK EH230			SPARK EH300			SPARK EH300 EX		
INJECTION UNIT		A	B	C	A	B	C	A	B	C	A	B	C	D	A	B	C	A	B	C	A	B	C	A	B	C
Screw Diameter	inches	0.98	1.10	1.26	1.10	1.26	1.42	1.10	1.26	1.42	1.26	1.42	1.61	1.81	1.42	1.61	1.81	1.42	1.61	1.81	1.81	2.05	2.36	2.36	2.64	2.95
	mm	25	28	32	28	32	36	28	32	36	32	36	41	46	36	41	46	36	41	46	46	52	60	60	67	75
Screw L/D Ratio	L/D	20			20			20			20				20			20			20					
Swept Volume	inches ³	2.99	4.21	5.49	4.21	5.49	6.96	4.21	5.49	6.96	7.81	11.17	16.54	23.31	11.17	16.54	23.31	11.17	16.54	23.31	23.31	33.69	49.12	51.75	70.97	97.03
Shot Size (PS)	ounces	1.6	2.2	2.9	2.2	2.9	3.6	2.2	2.9	3.6	4.1	5.9	8.7	12.3	5.9	8.7	12.3	5.9	8.7	12.3	12.4	17.9	26	27.6	37.8	51.6
	grams	45	63	82	63	82	103	63	82	103	117	167	246	348	167	246	348	167	246	348	351	507	740	780	1070	1462
Injection Pressure (max)	PSI	37710	31908	25382	31908	25382	20015	31908	25382	20015	43511	34084	26542	21030	36259	34084	25672	36259	34084	25527	44382	34809	26107	33939	27267	21756
Injection Rate	in ³ /s	5.98	7.51	9.82	7.51	9.82	12.45	7.51	9.82	12.45	9.76	12.39	16.11	20.26	12.39	16.11	20.26	12.39	16.11	20.26	20.26	25.94	34.48	34.48	43.02	53.88
Screw Stroke	inches	3.94	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	6.30	7.09	8.07	9.06	7.09	8.07	9.06	7.09	8.07	9.06	9.06	10.24	11.22	11.81	12.99	14.17
	mm	100	112	112	112	112	112	112	112	112	160	180	205	230	180	205	230	180	205	230	230	260	285	300	330	360
Screw Rotation Speed (max)	RPM	350			350			350			350				350			350			300			235		
Nozzle Forward Force (max)	US-Tons	4.61			4.61			6.86			6.86				6.86			6.86			10.12			10.12		
Nozzle Stroke	inches	11.42			11.42			12.80			12.80				14.96			15.75			17.32			17.32		
	mm	290			290			325			325				380			400			440			440		
CLAMPING UNIT																										
Clamping Force	metric tons	102			122			153			153				184			235			306			306		
	US-tons	112			135			169			169				202			259			337			337		
Opening Stroke	inches	14.2			14.2			16.5			16.5				18.9			21.7			23.6			23.6		
	mm	360			360			420			420				480			550			600			600		
Space Between Tie Bars	inches	18.11x16.14			18.11x16.14			20.08x18.11			20.08x18.11				22.05x22.05			24.02x24.02			28.74x28.74			28.74x28.74		
	mm	460x410			460x410			510x460			510x460				560x560			610x610			730x730			730x730		
Platen Size (hwxw)	inches	23.22x25.20			23.22x25.21			26.77x28.74			26.77x28.74				31.69x31.50			34.86x35.04			42.13x42.52			42.13x42.52		
	mm	590x640			590x640			680x730			680x730				805x800			885.5x890			1070x1080			1070x1080		
Mold Thickness (min-max)	inches	5.91-20.08			5.91-20.08			7.09-20.47			7.09-20.47				7.87-23.62			9.84-26.77			11.81-29.53			11.81-29.53		
	mm	150-510			150-510			180-520			180-520				200-600			250-680			300-750			300-750		
Maximum Daylight	inches	34.25			34.25			37.01			37.01				48.43			53.15			53.15			53.15		
	mm	870			870			940			940				1080			1230			1350			1350		
Ejector Force	US-tons	3.82			3.82			3.82			3.82				7.53			7.53			7.53			7.53		
Ejector Stroke	inches	3.94			3.94			4.72			4.72				4.72			5.91			6.30			6.30		
	mm	100			100			120			120				120			150			160			160		
Mold Register Hole	inches	4			4			4			4				4			6			6			6		
	mm	100			100			100			100				100			160			160			160		
POWER PACK																										
System Pressure	PSI	2538			2538			2538			2538				2538			2538			2538			2538		
Motor Power	KW	18			20			20			27				37			37			50			69		
	HP	24			27			27			36				50			50			67			93		
Electrical Heating Power	KW	6.3	7.2	8.2	7.2	8.2	8.9	7.2	8.2	8.9	10.7	12.6	14.5	16.9	12.4	14.3	16.7	12.4	14.3	16.2	16.2	22.8	29.4	29.4	36	42.6
Temperature Control Zones		3+1			3+1			3+1			3+1				3+1			3+1			3+1			3+1		
MISCELLANEOUS																										
Machine Dimensions(LxWxH)	inches	180x54x76			184x54x76			233x60x76			233x60x76				257x62x82			267x66x86			303x78x93			303x78x93		
	meters	4.56x1.38x1.92			4.68x1.38x1.92			5.92x1.52x1.93			5.92x1.52x1.93				6.53x1.56x2.07			6.79x1.68x2.19			7.70x1.97x2.37			7.70x1.97x2.37		
Oil Tank Capacity	gallon	15.85			15.85			23.78			23.78				32.23			32.23			35.66			35.66		
Machine Weight (approximate)	lbs	8598			9039			12346			13889				16535			22046			31967			33731		

Standard Features:

- Energy Saving Precision Servo Motors & Pumps
- 2 Core Pull Circuits
- High Torque Screw Drive
- Multiple Ejector Control
- Electrical, Mechanical and Hydraulic Safeties
- SPI Standards
- Programmable Input & Outputs
- Spare Parts Kit— Heaters Bands, Leveling Pads, Filters and Mold Clamps
- 2-Year Limited Factory Warranty—Parts & Labor
- 3-Year Limited Warranty on Frames & Castings
- Powerful Controller
- 2 Air Blow Circuits
- Eject & Recovery in Parallel with Clamp motion
- Precise Barrel and Nozzle Temperature Control
- Water Flow Meters
- SPI-ANI 146 (E67) Robot Interface
- CE Declaration

Available Options:

- Special Screw and Barrel Designs—High Mixing, Rigid PVC, PET, PMMA, Reinforced Nylon and more
- Additional Core Pull and Air Blast Circuits including special programming
- Integrated Valve Gate Controls (blocks of 4)
- Integrated Hot Runner Controls (blocks of 8)
- Shut off nozzles
- High Heat Packages

Precision Control

- 15" High resolution touch screen panel
- High speed CPU
- Ethernet and power link capable
- Increased precision using self adapting software
- More flexibility for programming operational sequences
- Integrated with latest safety regulations



Offices :

Headquarters

CH-America
151 Ella Grasso Avenue
Torrington, CT 06790

Midwest Sales & Service

CH-America
42471 Garfield Road
Clinton Township, MI 48038

For Sales and Service in the USA and Canada