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CHEN HSONG

Add.: Unit 2001, 20th Floor, Citicorp Centre, 18 Whitfield Road, Hong Kong

Tel.: +852 2665-3888 | 2665-3222

Email: mr@chenhsong.com

Web.: www.chenhsong.com

CH 20260409-CV

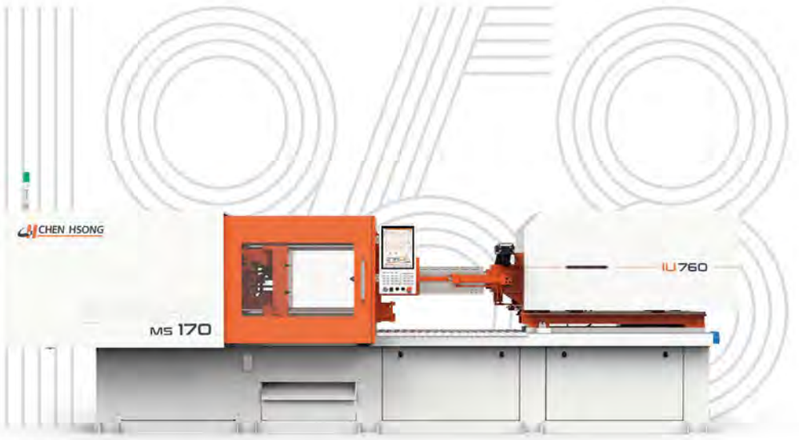
CHEN HSONG

SPARK MS

Electric Injection Molding Machine

90-1700T

SINCE 1978



CHEN HSONG

Powering Your Future in Intelligent Injection Molding

Driven by its founding principle, "Your Vision is Our Mission", the Chen Hsong Group, established in 1958 and publicly listed in Hong Kong since 1991, has evolved over nearly 70 years from an injection molding machine manufacturer into a one-stop total solutions provider in plastics manufacturing. As one of the world's largest producers of injection molding machines, Chen Hsong achieves unmatched quality through complete in-house manufacturing. This vertically integrated approach means controlling everything from ductile iron castings, parts fabrication and core components (such as advanced controllers) to final assembly. With a comprehensive product matrix serving diverse industries like automotive and medical, we are also spearheading smart manufacturing upgrades through the iChen™ Smart Family Suite, including the iChen™ Smart Factory MES, iChen™ Cloud platform, and iChen™ AI Molder, making the path to Industry 4.0 easily accessible for our global clientele.

1,000,000m²
R&D and Production Facilities (Five locations)

85+
Countries Globally

1,000,000+
Injection Molding Machines in the Field

120+
Global Technical & Service Centres

Hong Kong Headquarters


Shenzhen Industrial Park Facility — 560000m²


Taiwan Taoyuan Facility — 30000m²


Foshan Shunde - Two Facilities — 150000m²


Zhejiang Ningbo Facility — 70000m²


Shanwei Luhe Facility — 62360m²

Over 1 Million+ Chen Hsong Machines Are in Operation Worldwide.

They all use Chen Hsong.

BYD · &alongs · CHANGHONG · JAKI · DEFY
ALPHA GROUP · SM TOYS · 華隆玩具有限公司 Wah Lung Toys Co., Ltd. · mindray · arçelik
Porsche · Mercedes-Benz · Dawlance · Foxconn · GREE
TTI · Zen Global · CHINT · Jingjin Equipment Inc. · DAIKIN
FAW · beko · Haier · Midea · Skyworth
vtech · Rotoplas · DONLIM · AEQUS ecosystems of efficiency
BOE · Joybos · PICA · GREEN LEAF

Electric Injection Molding Machine

Precision Efficiency Smart Adaptability

More Energy-Efficient, A One-Step Electric Upgrade.

In the injection moulding industry, speed is competitiveness, and precision is leverage. From precision electronics to medical accessories, from auto parts and home appliances to daily necessities – the market is always asking: **Can it be faster? More stable? More economical?**

* The above product pictures are for reference only. Please refer to actual product drawings.

Electric Injection Molding Machine

Energy Saving: Servo motor system + high-efficiency technology combination, saving 30%-50% more energy than traditional hydraulic machines — every kilowatt-hour saved is pure profit.

Increased Efficiency and Production: Significantly increased production efficiency, yielding more output with the same working hours.

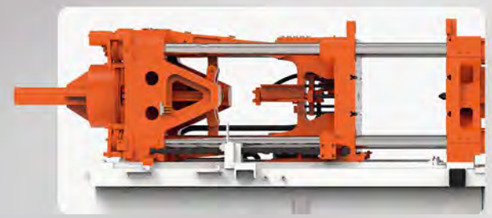
Material Saving During Mold Trials: AI Molder intelligently adjusts parameters, enabling rapid mold trials and saving mold trial time and material costs.

Worry-free Waste Reduction: Automatic process correction, high pass rate, reducing waste loss.

Easy Maintenance: Electric drive, greatly reduced oil stain pollution, cleaner workshop, simpler equipment maintenance.

Win with precision, profit with energy saving

* The above product pictures are for reference only. Please refer to actual product drawings.



High Precision | Stability is the Key

±0.01mm Repeatability: Servo motors directly drive injection and mold opening/clamping of each actuator, with repeatability stable at ±0.01mm, easily handling precision parts.

Standard Hydraulic Core Pulls: Built-in hydraulic system, no need for an external oil tank, meeting complex mold process requirements across various industries—connectors, home appliances, automotive parts, forming complex structures in one shot.

High Efficiency | Ahead of Schedule

Standard 160mm/s High Injection Speed: Meets the high-speed filling requirements for most products.

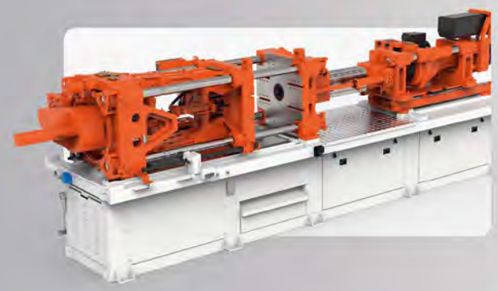
Electric parallel plasticizing + Ejection on Fly Technology: Actions performed concurrently, greatly shortening cycle time.

Servo Motor System Drive: Faster response, crisper movements.

High Intelligence | Letting Machines “Think”

AI Molder Mold Adjustment Assistant: Intelligent software system, supporting automatic parameter adjustment, automatic process correction, achieving high pass rates even with recycled materials.

More Worry-free Process Optimisation: Automated molding parameters, continuously improving CPK process capability index, making the production process more stable and controllable.



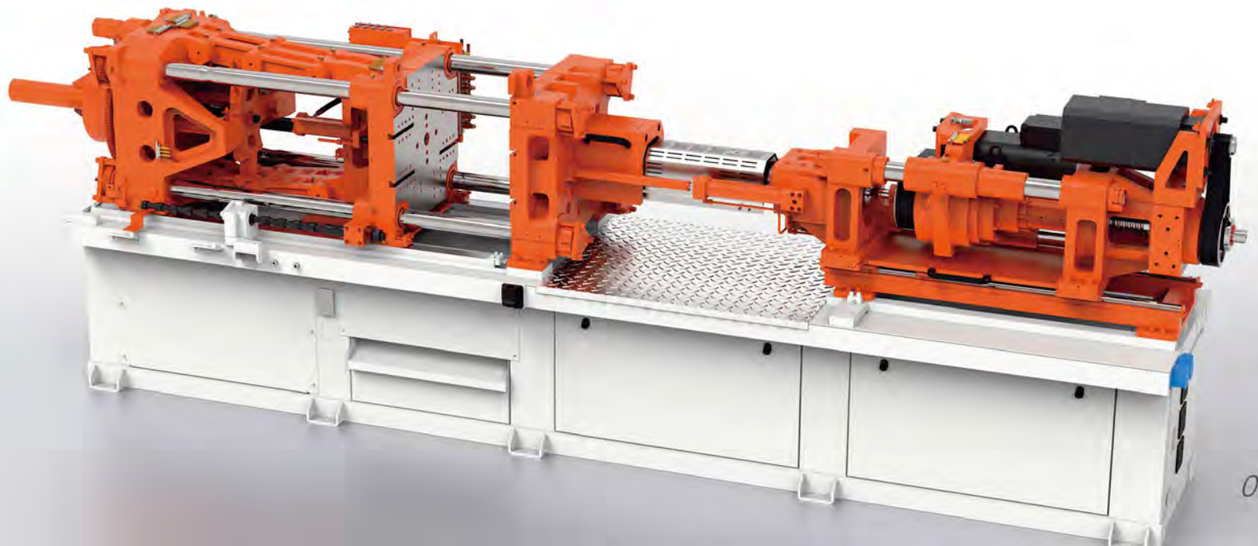
High Adaptability | There’s Always a Match for Your Production

Chen Hsong **MS Series covers clamping forces from 30 to 1700 tons**, with up to 14 electric clamping machine models to choose from, meeting all scenario requirements from precision small parts to large structural components.

Can be configured with various injection units and nitrided screws, whether for 3C electronics, automotive parts, home appliances, medical, connectors, daily necessities toys and more.

Modular Injection Unit Configuration

	IU380	IU570	IU760	IU1100	IU1600	IU2500	IU3150	IU4600	IU5400	IU6800	IU9400	IU12000	IU15500	IU19000
MS90	31/36/41													
MS130	31/36/41	36/41/46												
MS170	31/36/41	36/41/46	41/46/52											
MS210		36/41/46	41/46/52	46/52/60										
MS260			41/46/52	46/52/60	52/60/65									
MS330				46/52/60	52/60/65	60/67/75								
MS400					52/60/65	60/67/75	67/75/83							
MS470						60/67/75	67/75/83	75/83/90						
MS570						60/67/75	67/75/83	75/83/90						
MS670							67/75/83	75/83/90	83/90/98					
MS800							67/75/83	75/83/90	83/90/98	90/98/110				
MS1000								75/83/90	83/90/98	90/98/110	98/110/120			
MS1200									83/90/98	90/98/110	98/110/120	110/120/130		
MS1400										90/98/110	98/110/120	110/120/130	120/130/140	
MS1700											98/110/120	110/120/130	120/130/140	130/140/150



* The above product pictures are for reference only.
Please refer to actual product drawings.

SPARK MS | Applications

Consumer Electronics (3C)

Fan Impeller (With Inlaid Ceramic Insert)

Cavities: 4
Material: PPS+GF30 %
Weight: 5.3 g
Cycle Time: 10 s

Challenges:
- Requires exceptional dynamic balance.
- Handles high melt temperatures of 300°C.

Automotive Optics

Light Guide

Cavities: 2
Material: PC
Weight: 45 g
Cycle Time: 80 s

Challenges:
- Must prevent material yellowing.
- Requires extremely low light attenuation rates.

Medical and Healthcare

Insulin Pump Reservoir Tube

Cavities: 8
Material: PP
Weight: 9.6 g
Cycle Time: 8 s

Challenges:
- Strict requirements for dimensional fit and high precision.
- Must meet high cleanliness and hygiene standards.

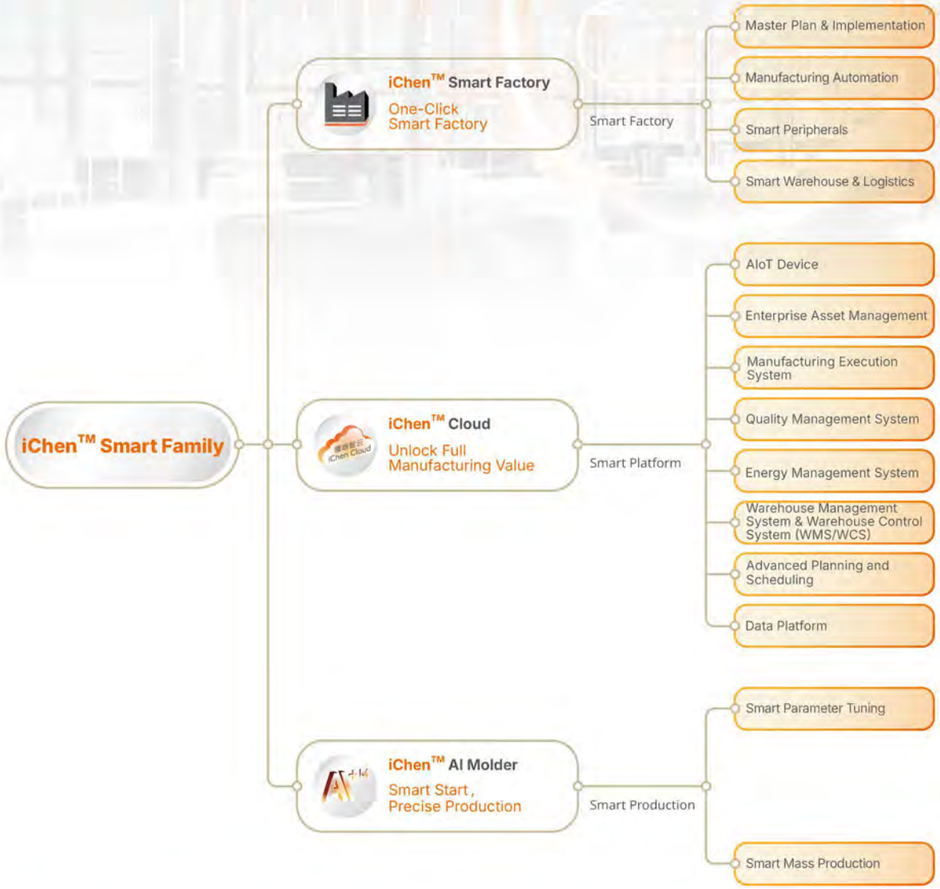
High-Precision Toy Components

Precision Shock Absorber

Cavities: 8
Material: PBT+30 % GF
Weight: 4.8 g
Cycle Time: 14 s

Challenges:
- Demands ultra-high dimensional precision.
- Tolerance errors must not exceed 0.02mm.

iChen™ Smart Family



iChen™ Smart Factory

One-Click Smart Factory

iChen™ Smart Factory delivers plant-wide, end-to-end line engineering and integration. Covering planning and design, auxiliary-system configuration, automation, smart peripherals, and warehouse and logistics setup, we integrate the entire production chain and deliver complete turnkey factory projects.

iChen™ Cloud

Unlock Full Manufacturing Value

iChen™ Cloud is a Smart Manufacturing Operations Management Platform covering Artificial Intelligence Internet of Things (AIoT), Enterprise Asset Management (EAM), Manufacturing Execution System (MES), Quality Management System (QMS), Energy Management System (EMS), Warehouse Management System & Warehouse Control System (WMS/WCS), Advanced Planning and Scheduling (APS) , and the Data Platform. Together, these enable end-to-end digital control with real-time visibility and executive dashboards for faster, data-driven decisions.

iChen™ AI Molder

Smart Start, Precise Production

iChen™ AI Molder is an AI-driven injection-molding solution developed by Chen Hsong Group in collaboration with industry–academia research teams. It integrates AI with injection-molding process expertise to recommend and optimize parameters, stabilize mass production, reduce defects, and increase yield.

iChen™ Smart Family

SPARK MS | Specifications

SPECIFICATIONS	UNIT	MS90			MS-130						MS-170									MS-210								
INJECTION UNIT		380			380			570			380			570			760			570			760			1100		
Screw Diameter	mm	31	36	41	31	36	41	36	41	46	31	36	41	36	41	46	41	46	52	36	41	46	41	46	52	46	52	60
Screw L/D Ratio	L/D	24.4	21.0	18.4	24.4	21.0	18.4	23.9	21.0	18.7	24.4	21.0	18.4	23.9	21.0	18.7	23.6	21.0	18.6	23.9	21.0	18.7	23.6	21.0	18.6	23.7	21.0	18.2
Theoretical Shot Volume	cm^3	135	183	237	135	183	237	208	270	340	135	183	237	208	270	340	303	382	488	208	270	340	303	382	488	432	552	735
Shot Weight (PS) (Max.)	g	123	167	216	123	167	216	189	246	309	123	167	216	189	246	309	276	348	444	189	246	309	276	348	444	393	502	669
Injection Pressure (Max.)	MPa	280	210	160	280	210	160	273	210	167	280	210	160	273	210	167	250	200	156	273	210	167	250	200	156	255	200	150
Holding Pressure (Max.)	MPa	224	168	128	224	168	128	218	168	133	224	168	128	218	168	133	200	160	124	218	168	133	200	160	124	204	160	120
Injection Rate (Max.)	cm^3/s	136	183	238	136	183	238	179	233	293	136	183	238	183	238	299	238	299	382	183	238	299	238	299	382	299	382	509
Injection Stroke (Max.)	mm/s	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180
Plasticising Capacity (Max.)	mm	180			180			205			180			205			230			205			230			260		
Screw Speed (Max.)	rpm	300			300			300			300			300			280			300			280			280		
Nozzle Contact Force (Max.)	kN	45			45			45			45			45			45			45			45			60		
Nozzle Stroke (Max.)	mm	250			250			250			250			250			250			250			250			280		
CLAMPING UNIT																												
Clamping Force (Max.)	kN	900			1300						1700									2100								
Mold Opening Stroke (Max.)	mm	340			370						420									490								
Mold Dimensions	mm	540x540			570x570						670x670									740x740								
Space Between Tie Bars (HxV)	mm	360x360			410x410						470x470									530x530								
Mold Thickness (Min.-Max.)	mm	125-380			145-450						160-520									180-550								
Max. Daylight	mm	720			820						940									1010								
Ejector Force (Max.)	kN	34			42						42									67								
Ejector Stroke (Max.)	mm	120			120						140									150								
Locating Ring Diameter	mm	100			100						125									125								
OTHER UNITS																												
Total Power Capacity	KW	35		37		42		43		47		52		47		52		57										
Rated Current (Max.)	A	61		65		74		75		83		91		83		91		101										
Heating Power (Max.)	kW	9.3		9.3		13.2		9.3		13.2		16.5		13.2		16.5		20.0										
Temperature Control Zones	Zone	3+1		3+1		3+1		3+1		3+1		3+1		3+1		3+1		4+1										
Hydraulic Motor Power	kW	8.0		8.0		9.8		9.0		9.8		15.0		9.8		15.0		19.4										
Hydraulic System Pressure	MPa	17.5		17.5						17.5						17.5												
Oil Tank Capacity	L	60		80						80						100												
Machine Dimensions (LxWxH)	m	5.0x1.38x1.87		5.23x1.44x1.98		5.23x1.44x1.98		5.88x1.5x2.06		5.88x1.5x2.06		5.88x1.5x2.06		6.36x1.64x2.19		6.36x1.64x2.19		6.36x1.64x2.19										
Machine Weight	T	3.5		4.5						5.6						7.5												

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SPARK MS | Specifications

SPECIFICATIONS	UNIT	MS-260									MS-330									MS-400								
INJECTION UNIT		760			1100			1600			1100			1600			2500			1600			2500			3150		
Screw Diameter	mm	41	46	52	46	52	60	52	60	67	46	52	60	52	60	67	60	67	75	52	60	67	60	67	75	67	75	83
Screw L/D Ratio	L/D	23.6	21.0	18.6	23.7	21.0	18.2	24.2	21.0	18.8	23.7	21.0	18.2	24.2	21.0	18.8	23.5	21.0	18.8	24.2	21.0	18.8	23.5	21.0	18.8	23.5	21.0	19.0
Theoretical Shot Volume	cm^3	303	382	488	432	552	735	637	848	1057	432	552	735	637	848	1057	1060	1322	1656	637	848	1057	1060	1322	1656	1322	1656	2028
Shot Weight (PS) (Max.)	g	276	348	444	393	502	669	580	772	962	393	502	669	580	772	962	965	1203	1507	580	772	962	965	1203	1507	1203	1507	1845
Injection Pressure (Max.)	MPa	250	200	156	255	200	150	251	190	151	255	200	150	251	190	151	236	190	150	251	190	151	236	190	150	238	190	155
Holding Pressure (Max.)	MPa	200	160	124	204	160	120	200	152	120	204	160	120	200	152	120	188	152	120	200	152	120	188	152	120	190	152	124
Injection Rate (Max.)	cm^3/s	238	299	382	299	382	509	382	509	635	299	382	509	382	509	635	509	635	795	382	509	635	509	635	795	635	795	974
Injection Stroke (Max.)	mm/s	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180
Plasticising Capacity (Max.)	mm	230			260			300			260			300			375			300			375			375		
Screw Speed (Max.)	rpm	280			280			280			280			280			250			280			250			230		
Nozzle Contact Force (Max.)	kN	45			60			90			60			90			90			90			90			90		
Nozzle Stroke (Max.)	mm	250			280			330			280			330			360			330			360			420		
CLAMPING UNIT																												
Clamping Force (Max.)	kN	2600									3300									4000								
Mold Opening Stroke (Max.)	mm	530									640									700								
Mold Dimensions	mm	810x845									945x945									1030x1030								
Space Between Tie Bars (HxV)	mm	580x580									680x680									760x710								
Mold Thickness (Min.-Max.)	mm	195-570									220-680									250-730								
Max. Daylight	mm	1100									1320									1430								
Ejector Force (Max.)	kN	77									77									111								
Ejector Stroke (Max.)	mm	170									170									220								
Locating Ring Diameter	mm	125									125									160								
OTHER UNITS																												
Total Power Capacity	KW	57			63			72			65			74			86			91			96			118		
Rated Current (Max.)	A	101			111			127			114			131			152			160			169			208		
Heating Power (Max.)	kW	16.5			20.0			25.2			20.0			25.2			32.8			25.2			32.8			40.3		
Temperature Control Zones	Zone	3+1			4+1			4+1			4+1			4+1			4+1			4+1			4+1			4+1		
Hydraulic Motor Power	kW	15.0			19.4			24.6			19.4			24.6			27.8			24.6			27.8			30.7		
Hydraulic System Pressure	MPa	17.5									17.5									17.5								
Oil Tank Capacity	L	100									150									150								
Machine Dimensions (LxWxH)	m	7.01x1.72x2.39			7.01x1.72x2.39			7.01x1.72x2.39			7.7x1.79x2.42			7.7x1.79x2.42			7.7x1.79x2.42			8.36x2.04x2.28			8.36x2.04x2.28			8.36x2.04x2.28		
Machine Weight	T	8.7									14.0									17.6								

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SPARK MS | Specifications

SPECIFICATIONS	UNIT	MS-470									MS-570									MS-670								
INJECTION UNIT		2500			3150			4600			2500			3150			4600			3150			4600			5400		
Screw Diameter	mm	60	67	75	67	75	83	75	83	90	60	67	75	67	75	83	75	83	90	67	75	83	75	83	90	83	90	98
Screw L/D Ratio	L/D	23.5	21.0	18.8	23.5	21.0	19.0	23.2	21.0	19.4	23.5	21.0	18.8	23.5	21.0	19.0	23.2	21.0	19.4	23.5	21.0	19.0	23.2	21.0	19.4	23.9	22.0	20.2
Theoretical Shot Volume	cm^3	1060	1322	1656	1322	1656	2028	1987	2434	2862	1060	1322	1656	1322	1656	2028	1987	2434	2862	1322	1656	2028	1987	2434	2862	2434	2862	3394
Shot Weight (PS) (Max.)	g	965	1203	1507	1203	1507	1845	1808	2215	2604	965	1203	1507	1203	1507	1845	1808	2215	2604	1203	1507	1845	1808	2215	2604	2215	2604	3089
Injection Pressure (Max.)	MPa	236	190	150	238	190	155	231	190	160	236	190	150	238	190	155	231	190	160	238	190	155	231	190	160	222	190	160
Holding Pressure (Max.)	MPa	188	152	120	190	152	124	184	152	128	188	152	120	190	152	124	184	152	128	190	152	124	184	152	128	177	152	128
Injection Rate (Max.)	cm^3/s	509	635	795	635	795	974	707	866	1018	509	635	795	635	795	974	707	866	1018	635	795	974	707	866	1018	866	1018	1207
Injection Stroke (Max.)	mm/s	180	180	180	180	180	180	160	160	160	180	180	180	180	180	180	160	160	160	180	180	180	160	160	160	160	160	160
Plasticising Capacity (Max.)	mm	375			375			450			375			375			450			375			450			450		
Screw Speed (Max.)	rpm	250			230			230			250			230			230			230			230			190		
Nozzle Contact Force (Max.)	kN	90			90			90			90			90			90			90			90			90		
Nozzle Stroke (Max.)	mm	360			420			420			420			420			420			420			420			460		
CLAMPING UNIT																												
Clamping Force (Max.)	kN	4700									5700									6700								
Mold Opening Stroke (Max.)	mm	820									870									920								
Mold Dimensions	mm	1160x1160									1230x1230									1300x1300								
Space Between Tie Bars (HxV)	mm	830x830									860x860									920x920								
Mold Thickness (Min.-Max.)	mm	300-850									350-880									380-920								
Max. Daylight	mm	1670									1750									1840								
Ejector Force (Max.)	kN	166									166									182								
Ejector Stroke (Max.)	mm	220									250									265								
Locating Ring Diameter	mm	160									160									200								
OTHER UNITS																												
Total Power Capacity	KW	107			118			152			132			141			152			154			152			171		
Rated Current (Max.)	A	188			208			268			231			248			268			271			268			301		
Heating Power (Max.)	kW	32.8			40.3			46.8			32.8			40.3			46.8			40.3			46.8			57.0		
Temperature Control Zones	Zone	4+1			4+1			5+1			4+1			4+1			5+1			4+1			5+1			5+1		
Hydraulic Motor Power	kW	27.8			30.7			32.5			30.7			32.5			35.3			32.5			35.3			41.2		
Hydraulic System Pressure	MPa	17.5									17.5									17.5								
Oil Tank Capacity	L	150									200									200								
Machine Dimensions (LxWxH)	m	8.97x2.04x2.28			8.97x2.04x2.28			8.97x2.04x2.28			9.11x2.08x2.36			9.11x2.08x2.36			9.11x2.08x2.36			10.95x2.13x2.28			10.95x2.13x2.28			10.95x2.13x2.28		
Machine Weight	T	21.0									22.3									24.6								

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SPARK MS | Specifications

SPECIFICATIONS	UNIT	MS-800												MS-1000												MS-1200											
INJECTION UNIT		3150			4600			5400			6800			4600			5400			6800			9400			5400			6800			9400			12000		
Screw Diameter	mm	67	75	83	75	83	90	83	90	98	90	98	110	75	83	90	83	90	98	90	98	110	98	110	120	83	90	98	90	98	110	98	110	120	110	120	130
Screw L/D Ratio	L/D	23.5	21.0	19.0	23.2	21.0	19.4	23.9	22.0	20.2	24.0	22.0	19.6	23.2	21.0	19.4	23.9	22.0	20.2	24.0	22.0	19.6	24.7	22.0	20.2	23.9	22.0	20.2	24.0	22.0	19.6	24.7	22.0	20.2	24.0	22.0	20.3
Theoretical Shot Volume	cm^3	1322	1656	2028	1987	2434	2862	2434	2862	3394	3180	3771	4751	1987	2434	2862	2434	2862	3394	3180	3771	4751	4148	5226	6220	2434	2862	3394	3180	3771	4751	4148	5226	6220	5701	6785	7963
Shot Weight (PS) (Max.)	g	1203	1507	1845	1808	2215	2604	2215	2604	3089	2894	3432	4323	1808	2215	2604	2215	2604	3089	2894	3432	4323	3775	4756	5660	2215	2604	3089	2894	3432	4323	3775	4756	5660	5188	6174	7246
Injection Pressure (Max.)	MPa	238	190	155	231	190	160	222	190	160	214	180	150	231	190	160	222	190	160	214	180	150	227	180	151	222	190	160	214	180	150	227	180	151	210	180	151
Holding Pressure (Max.)	MPa	190	152	124	184	152	128	177	152	128	171	144	120	184	152	128	177	152	128	171	144	120	181	144	120	177	152	128	171	144	120	181	144	120	168	144	120
Injection Rate (Max.)	cm^3/s	564	707	866	707	866	1018	866	1018	1207	1018	1207	1520	707	866	1018	866	1018	1207	1018	1207	1520	1207	1520	1810	866	1018	1207	1018	1207	1520	1207	1520	1810	1520	1810	2124
Injection Stroke (Max.)	mm/s	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160
Plasticising Capacity (Max.)	mm	375			450			450			500			450			450			500			550			450			500			550			600		
Screw Speed (Max.)	rpm	230			230			190			170			230			190			170			150			190			170			150			150		
Nozzle Contact Force (Max.)	kN	90			90			90			16.7			90			90			167			167			90			167			167			167		
Nozzle Stroke (Max.)	mm	420			420			460			560			420			460			560			595			460			560			595			700		
CLAMPING UNIT																																					
Clamping Force (Max.)	kN	8000												10000												12000											
Mold Opening Stroke (Max.)	mm	1050												1230												1310											
Mold Dimensions	mm	1440x1440												1630x1630												1770x1770											
Space Between Tie Bars (HxV)	mm	1020x1020												1160x1160												1250x1250											
Mold Thickness (Min.-Max.)	mm	400-1000												450-1160												500-1250											
Max. Daylight	mm	2050												2390												2560											
Ejector Force (Max.)	kN	182												215												215											
Ejector Stroke (Max.)	mm	280												320												320											
Locating Ring Diameter	mm	250												250												250											
OTHER UNITS																																					
Total Power Capacity	KW	160			156			171			232			182			193			232			247			222			236			260			330		
Rated Current (Max.)	A	280			275			301			407			319			339			407			436			391			415			459			580		
Heating Power (Max.)	kW	40.3			46.8			57.0			61.7			46.8			57.0			61.7			81.9			57.0			61.7			81.9			92.1		
Temperature Control Zones	Zone	4+1			5+1			5+1			5+1			5+1			5+1			5+1			6+1			5+1			5+1			6+1			6+1		
Hydraulic Motor Power	kW	35.3			41.2			44.3			48.6			41.2			44.3			48.6			54.5			44.3			48.6			54.5			60.0		
Hydraulic System Pressure	MPa	17.5												17.5												17.5											
Oil Tank Capacity	L	250												250												300											
Machine Dimensions (LxWxH)	m	11.52x2.36x2.54			11.52x2.36x2.54			11.52x2.36x2.54			11.52x2.36x2.54			12.8x2.56x3.27						12.8x2.56x3.27						13.03x2.72x3.39						13.03x2.72x3.39					
Machine Weight	T	36.0												48.7												58.8											

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SPARK MS | Specifications

SPECIFICATIONS	UNIT	MS-1400												MS-1700											
INJECTION UNIT		6800			9400			12000			15500			9400			12000			15500			19000		
Screw Diameter	mm	90	98	110	98	110	120	110	120	130	120	130	140	98	110	120	110	120	130	120	130	140	130	140	150
Screw L/D Ratio	L/D	24.0	22.0	19.6	24.7	22.0	20.2	24.0	22.0	20.3	23.8	22.0	20.4	24.7	22.0	20.2	24.0	22.0	20.3	23.8	22.0	20.4	23.7	22.0	20.5
Theoretical Shot Volume	cm^3	3180	3771	4751	4148	5226	6220	5701	6785	7963	7351	8627	10005	4148	5226	6220	5701	6785	7963	7351	8627	10005	9290	10775	12369
Shot Weight (PS) (Max.)	g	2894	3432	4323	3775	4756	5660	5188	6174	7246	6689	7851	9105	3775	4756	5660	5188	6174	7246	6689	7851	9105	8454	9805	11256
Injection Pressure (Max.)	MPa	214	180	150	227	180	151	210	180	151	211	180	155	227	180	151	210	180	151	211	180	155	210	180	155
Holding Pressure (Max.)	MPa	171	144	120	181	144	120	168	144	120	168	144	124	181	144	120	168	144	120	168	144	124	168	144	124
Injection Rate (Max.)	cm^3/s	1018	1207	1520	1207	1520	1810	1520	1810	2124	1810	2124	2463	1207	1520	1810	1520	1810	2124	1810	2124	2463	2124	2463	2827
Injection Stroke (Max.)	mm/s	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160
Plasticising Capacity (Max.)	mm		500			550			600			650			550			600			650			700	
Screw Speed (Max.)	rpm		170			150			150			130			150			150			130			130	
Nozzle Contact Force (Max.)	kN		167			167			167			167			167			167			167			167	
Nozzle Stroke (Max.)	mm		560			595			700			720			595			700			720			800	
CLAMPING UNIT																									
Clamping Force (Max.)	kN	14000												17000											
Mold Opening Stroke (Max.)	mm	1500												1600											
Mold Dimensions	mm	2030x1930												2190x2070											
Space Between Tie Bars (HxV)	mm	1450x1350												1550x1430											
Mold Thickness (Min.-Max.)	mm	650-1400												700-1500											
Max. Daylight	mm	2900												3100											
Ejector Force (Max.)	kN	352												352											
Ejector Stroke (Max.)	mm	400												400											
Locating Ring Diameter	mm	250												250											
OTHER UNITS																									
Total Power Capacity	KW	266			290			330			374			311			333			374			464		
Rated Current (Max.)	A	466			510			580			656			546			586			656			815		
Heating Power (Max.)	kW	61.7			81.9			92.1			92.5			81.9			92.1			92.5			125.2		
Temperature Control Zones	Zone	5+1			6+1			6+1			6+1			6+1			6+1			6+1			7+1		
Hydraulic Motor Power	kW	48.6			54.5			60.0			65.2			54.5			60.0			65.2			72.8		
Hydraulic System Pressure	MPa	17.5												17.5											
Oil Tank Capacity	L	300												300											
Machine Dimensions (LxWxH)	m	14.76x3.26x3.5						14.76x3.26x3.5						15.8x3.28x3.62						15.8x3.28x3.62					
Machine Weight	T	81.7												102.0											

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SPARK MS | Features

Note: ● Standard, ○ Optional, × Not available, Numbers indicate required quantities.

INJECTION UNIT	SPARK MS
1. Ceramic Heater Bands	●
2. Barrel Insulation Cover	●
3. Nitrided Barrel	●
4. Chrome-Plated Mixing Screw	●
5. Quick Barrel/Screw Change System	●
6. Screw Speed Display	●
7. Synchronous Plasticising During Mold Opening	●
8. Automatic PID Temperature Control	●
9. Independent PID Nozzle Temperature Control	●
10. Proportional Back Pressure Control	●
11. Adjustable Injection Speed Response	●
12. Injection Pressure Display	●
13. Carriage Movement Pressure Protection	●
14. Carriage Holding Pressure Control	●
15. Linear Guide Rails for Injection Unit	●
16. Nozzle Safety Guard	●
17. Cold Start Prevention Protection	●
18. Thermocouple Break Detection	●

OTHERS	SPARK MS
1. 3-Phase 380V 32A Power Supply (1 Set), 3-Phase 380V 16A Power Supply (1 Set)	90~260T
2. 3-Phase 380V 32A Power Supply (2 Sets), 3-Phase 380V 16A Power Supply (1 Set)	330~800T
3. 3-Phase 380V 32A Power Supply (3 Sets), 3-Phase 380V 16A Power Supply (1 Set)	1000~1700T
4. Single-Phase 220V 32A Power Supply	●
5. Single-Phase 220V 10A Power Supply	●
6. 8 Sets of D10 Quick Couplers for Mold Cooling Water	●

CLAMPING UNIT	SPARK MS
1. Patented High-Strength Circular Platen	●
2. Automatic Clamping Force Adjustment	●
3. Fully Automatic Centralised Lubrication System	●
4. Hydraulic Core Pull	●
5. High-Speed Mold Clamping	●
6. High-Strength Chrome-Plated Tie Bars	●
7. Safety Door Electromagnetic Lock	●
8. Secondary Mold Clamping	●
9. Synchronous Ejection During Mold Opening	●
10. Double Ejection	●
11. Centre Ejector Rod Pull-Back	●
12. Robot Mounting Holes	●
13. Mechanical Safety Protection Device	●
14. Platen with T-Slots and Mold Mounting Holes	●
15. Triple Safety Interlock (Electric, Mechanical, and Electromagnetic) for Safety Door	●
16. Additional Core Pull Circuits	○
17. Additional Air Blow Circuits	○
18. Extended Ejector Stroke or Increased Mold Height	○
19. Platen Insulation Boards	○
20. Mold Lifting Crane	○
21. SPI Standard Platen Drilling	○
22. Magnetic Clamping Platens	○
23. Hydraulic Mold Clamps	○

CONTROLLER UNIT	SPARK MS
1. Chen Hsong Europe Controller	●
2. 15" HD TFT Touch Screen Display	●
3. Multi-Language Operation Interface	●
4. Unit Conversion (Metric/Imperial)	●
5. High-Dynamic Response Safety Servo Components (STO Compliant)	●
6. High-Precision Mold Safety Protection	●
7. Injection Compression Function	●
8. High-Speed Control Technology Based on EtherCAT	●
9. USB Interface	●
10. OPC-UA Interface	●
11. Flexible I/O Configuration	●
12. LED Backlight	●
13. Tri-Colour LED Alarm Light	●
14. One-Touch Servo Rigidity Adjustment System	●
15. Solid State Relays (SSR)	●
16. Robot Interface (Non-Euromap)	●
17. Synchronous Mold Opening, Plasticising, and Ejection	●
18. Injection Speed and Pressure Curve Display	●
19. EU12/EU67 Robot Interface Programme	○
20. Hot Runner Control Interface	○
21. Sequential Injection Control (Valve Gate Control)	○
22. AI Molder	○
23. In-Mold Cutting	○
24. Stack Mold Capability	○

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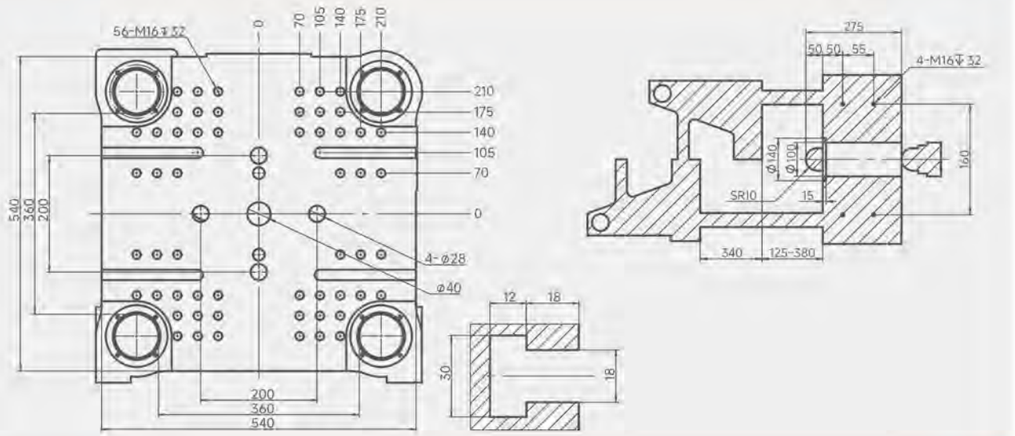
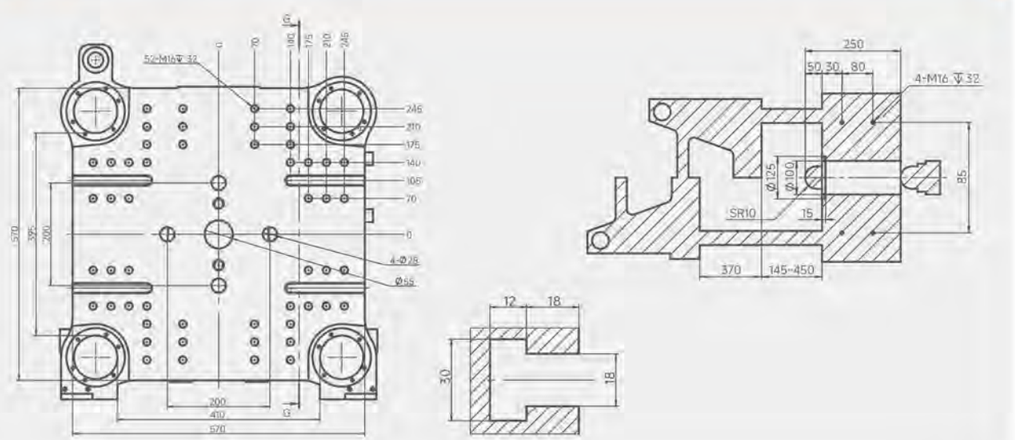
SPARK MS | Mold Dimensions

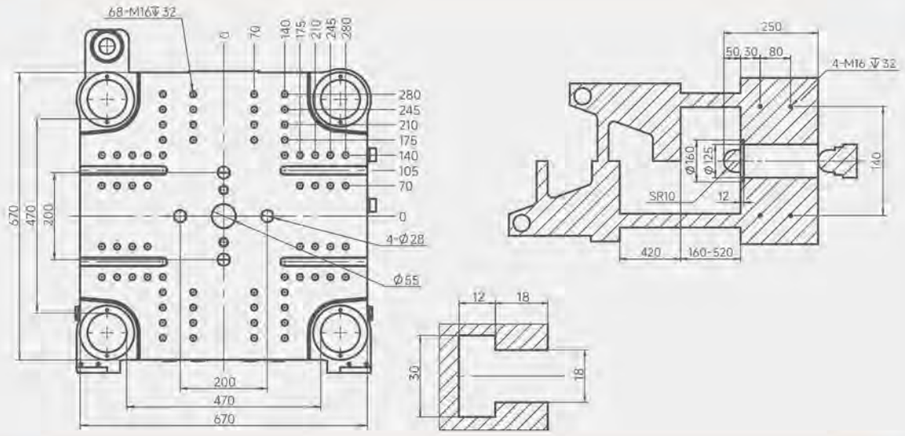
JM90-MS



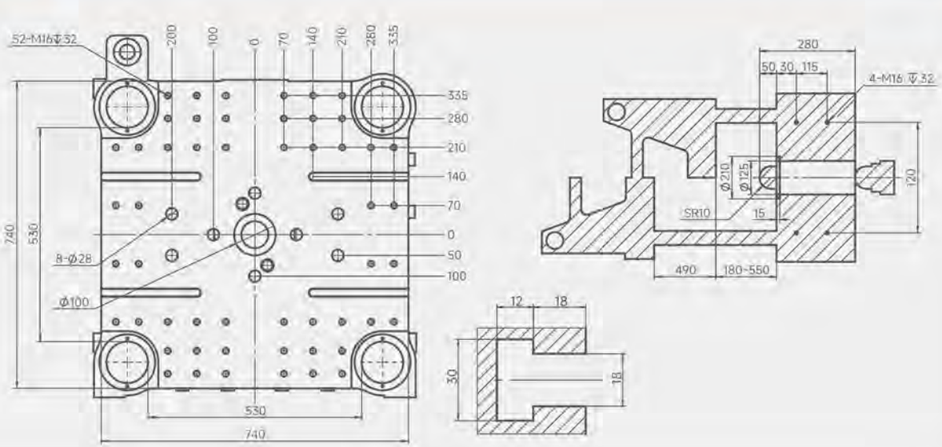
JM130-MS



JM170-MS



JM210-MS



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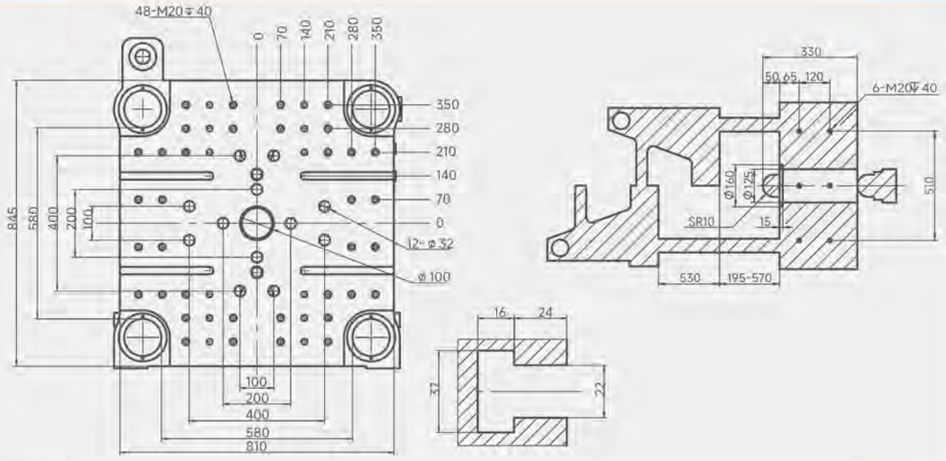
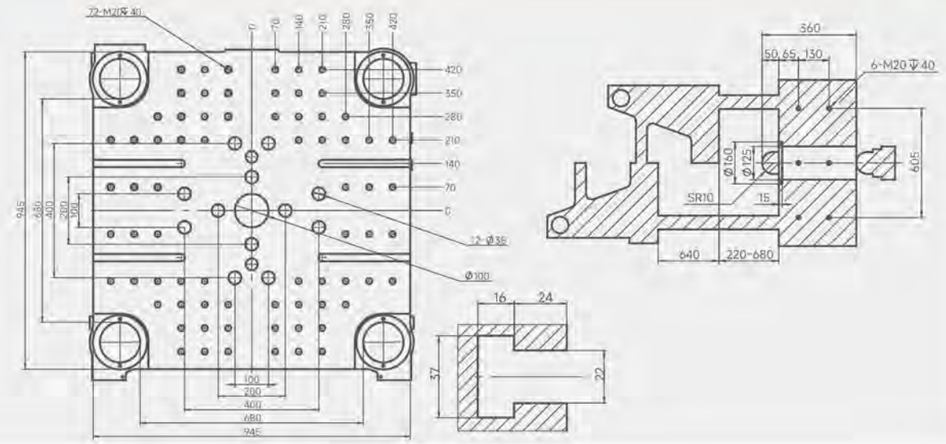
SPARK MS | Mold Dimensions

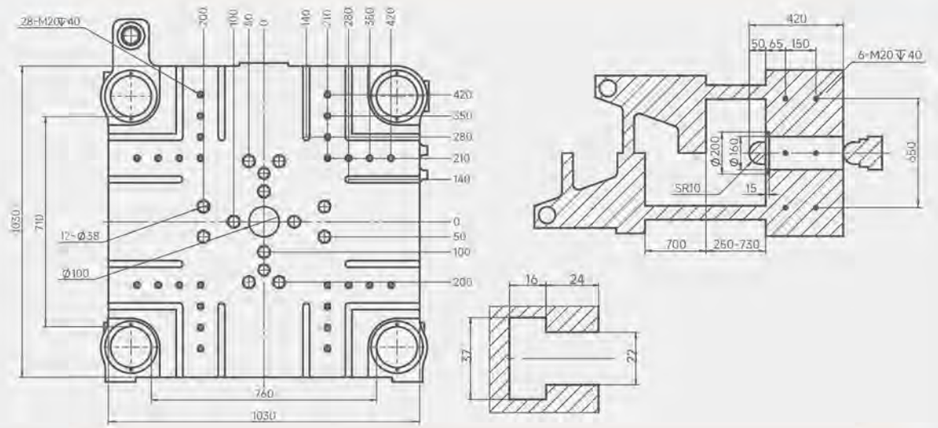
JM260-MS



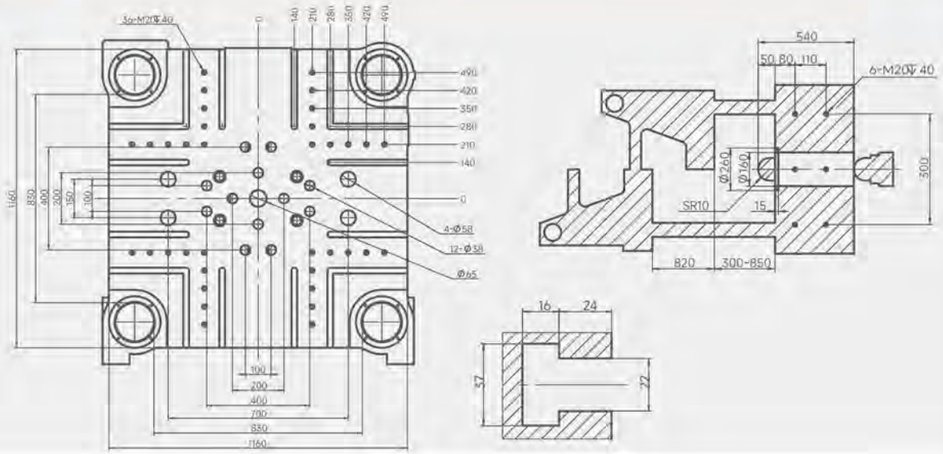
JM330-MS



JM400-MS



JM470-MS



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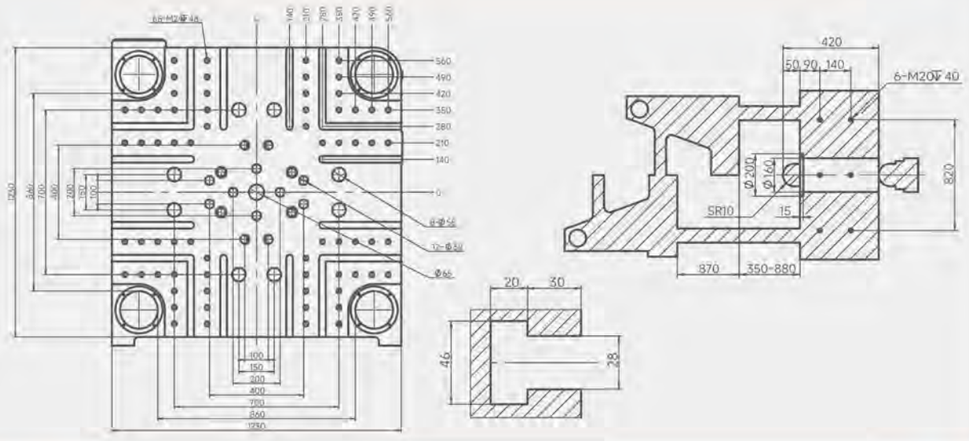
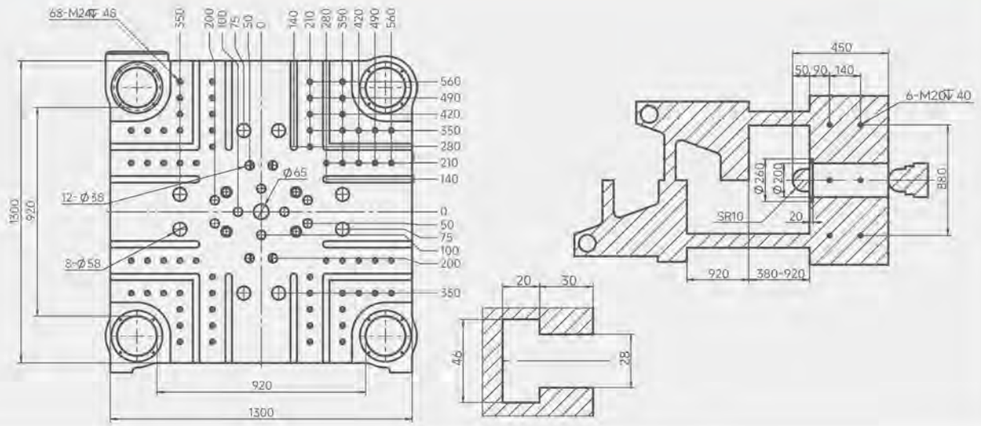
SPARK MS | Mold Dimensions

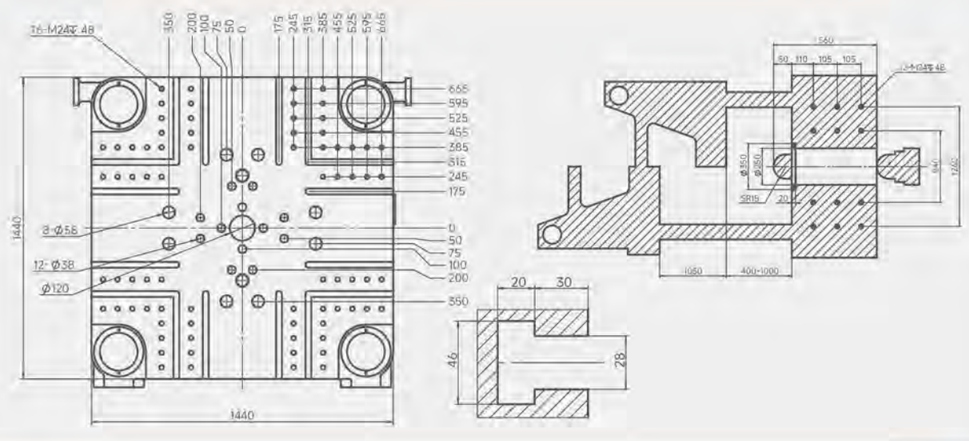
JM570-MS



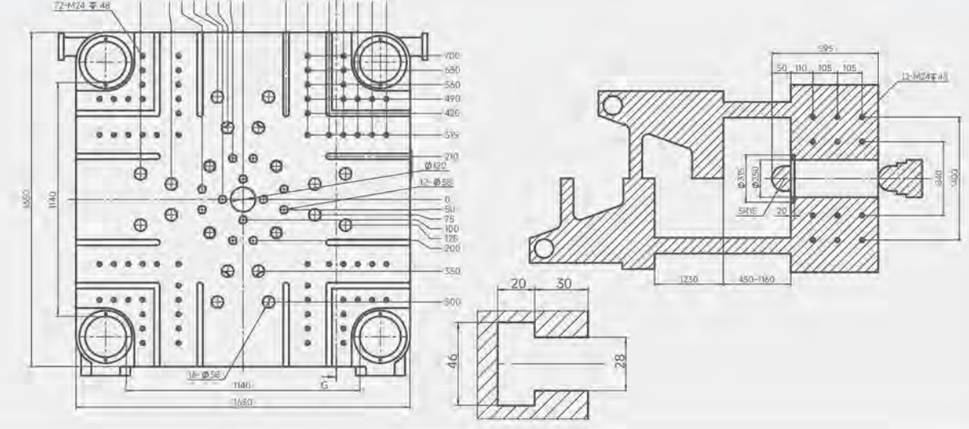
JM670-MS



JM800-MS



JM1000-MS



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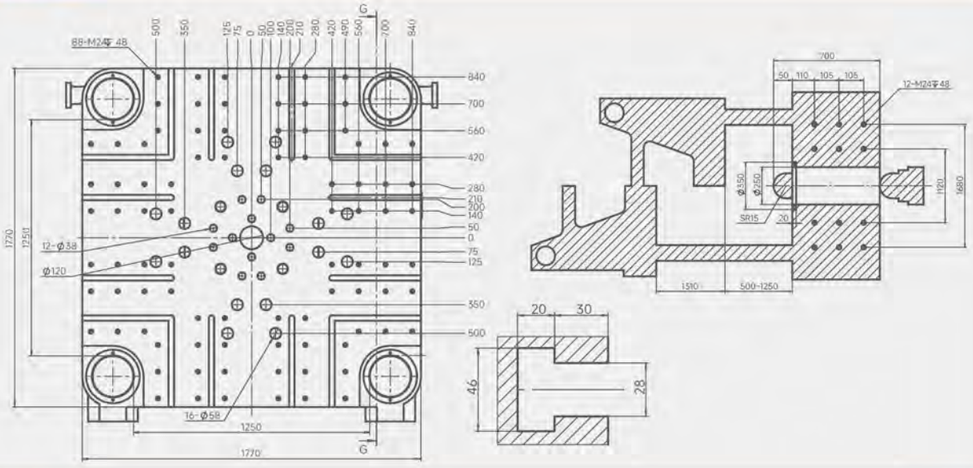
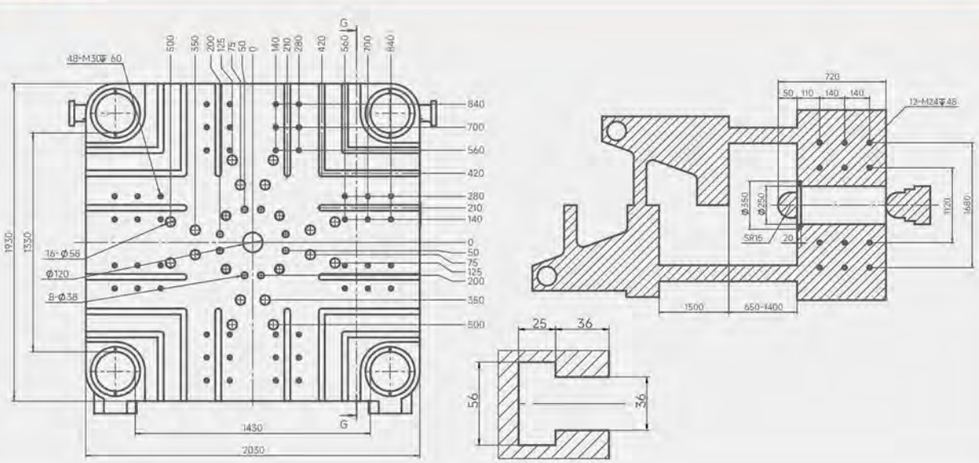
SPARK MS | Mold Dimensions

JM1200-MS



JM1400-MS



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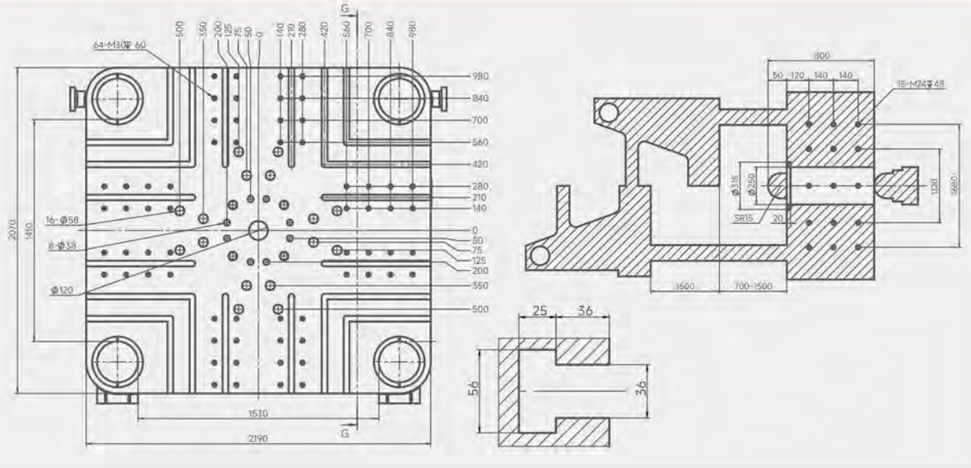
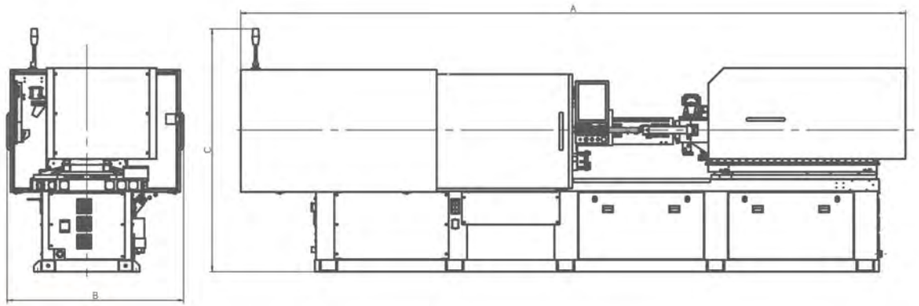
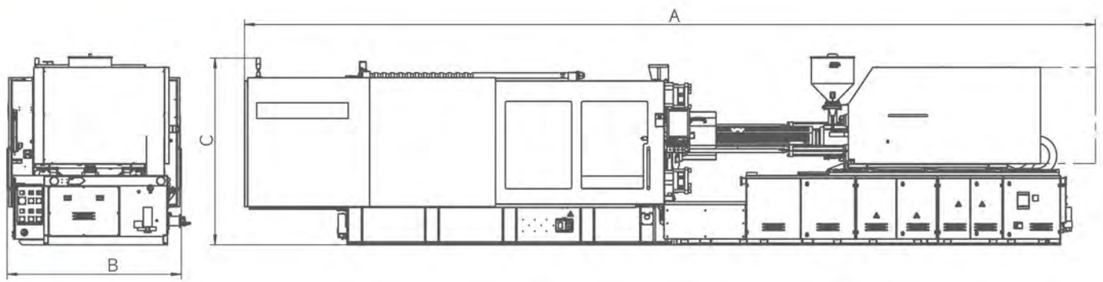
JM1700-MS



SPARK MS | Machine Dimensions



	MS-90	MS-130	MS-170	MS-210	MS-260	MS-330
A	4794	5050	5650	6250	6850	7250
B	1328	1400	1500	1600	1700	1800
C	1930	2000	2000	2100	2300	2400



	MS-400	MS-470	MS-570	MS-670	MS-800	MS-1000	MS-1200	MS-1400	MS-1700
A	8150	8650	8950	10200	11450	12150	13150	14150	15150
B	1900	2000	2100	2100	2500	2700	2800	3200	3300
C	2300	2400	2400	2240	2500	3400	3500	3500	3700

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