Hilectro Automation

High Performance Servo Robot
Automation Solution

2020

About Us

Company Profile

Ningbo Haitian Drive Systems Co., Ltd. focuses on four different industries: control technology, automation technology, new energy systems and hydraulic transmission. A main project for Haitian Drive Systems is Hilectro Automation, which has developed into a leading manufacturer of industrial robots and custom automation. With products ranging from servo robots to magnetic platens Hilectro Automation has the capacity to meet your automation needs. Benefiting from the Haitian Group's expertise in injection molding machines, Hilectro Automation offers turn-key solutions for injection molding machines and machinery peripherals, which enables the customer to realize automatic production lines.

Servo robots and peripheral automation

Servo robots with payload capacity from 8 to 80 kg, for 60 to 4,000 ton injection molding machines. Application specific robots are also available.

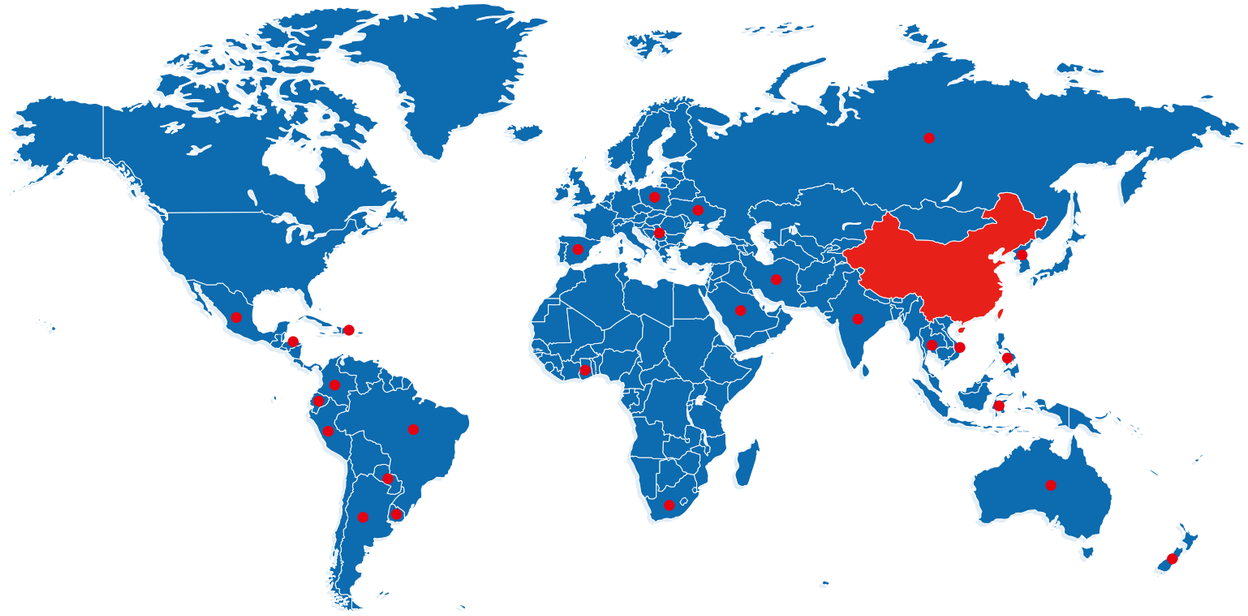
Automation solutions

Automation solutions tailored for injection molding machine industry and other machinery industries.

Turn-key solutions

Fully automated injection molding cells complete with turn-key automation, air and water management and material handling.

Our Presence



LOW INVESTMENT COSTS

Profound experience in production bring not only expertise and efficiency but also an excellent price-performance ratio for our customers.

LOW SERVICE COSTS

Low-maintenance machine designs, flexible service teams, and a transparent policy on replacement parts: That's our precept.

WIDE RANGE OF APPLICATIONS

Machines from 60 to 4,000 T for all market requirements – with special industry solutions.

SHORT DELIVERY TIMES

Partners in more than 60 countries with machines in stock for modifi-cations tailored to the customer. Machines in stock for modifi-cations tailored to the customer. We are ready worldwide.

Quality First

▲ Assembly lines

▼ Components production management

R&D and Testing

CAE Structure optimization

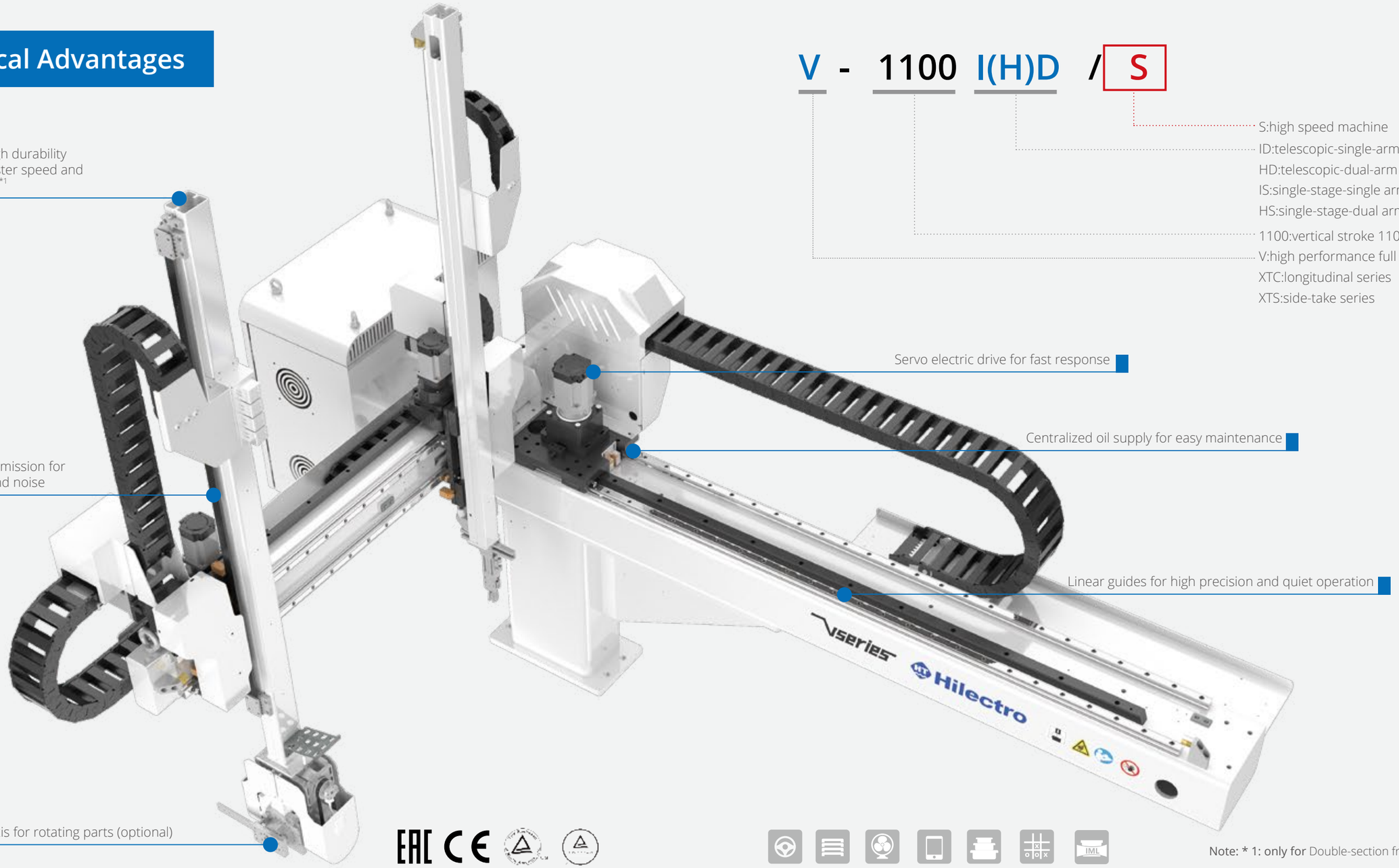
Optimal structure design based on advanced software

Mechanical Advantages

C-type structure for high durability
Twin arm design for faster speed and higher loading capacity*1

High quality belt transmission for lower maintenance and noise

Extendable axis for rotating parts (optional)



Servo electric drive for fast response

Centralized oil supply for easy maintenance

Linear guides for high precision and quiet operation

V - 1100 I(H)D / S

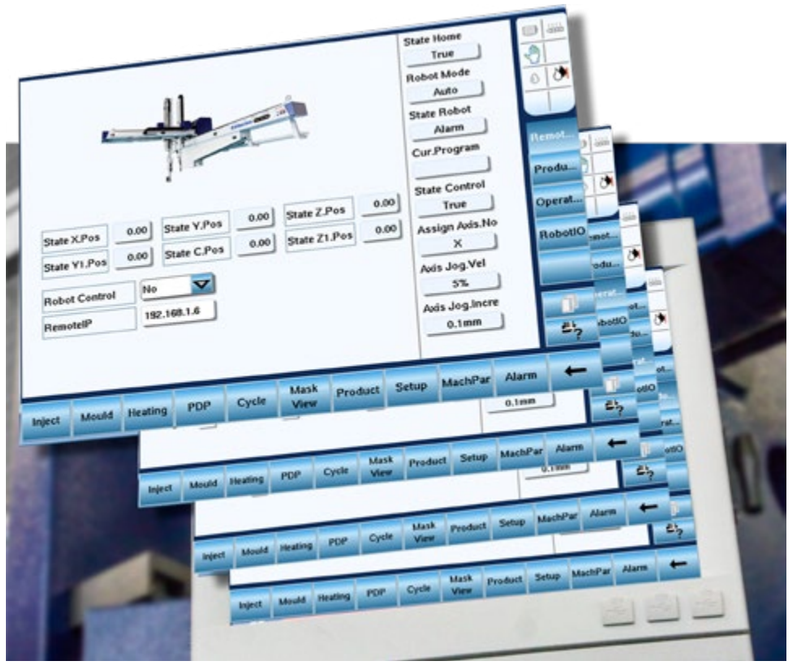
- S:high speed machine
- ID:telescopic-single-arm
- HD:telescopic-dual-arm
- IS:single-stage-single arm
- HS:single-stage-dual arm
- 1100:vertical stroke 1100mm
- V:high performance full servo series
- XTC:longitudinal series
- XTS:side-take series

Note: * 1: only for Double-section frame

01	Small V series servo robots V-800I(H)S, V-900I(H)S, V-1000I(H)S	60-380T	10-11	16-17
02	Medium V series servo robots V-1100I(H)D, V-1300I(H)D, V-1500I(H)D, V-1700I(H)D	380-1300T	12-13	18-19
03	Big V series servo robots V-2000I(H)D, V-2500ID, V-3000ID	800-4000T	14-15	20-21

Control System

The control system from in-house development, perfect integration with control system from injection molding machines and easy to operate.



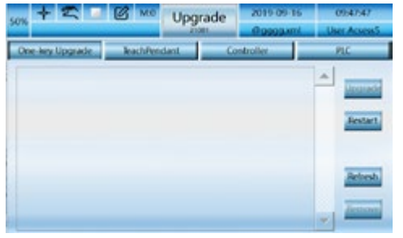
EtherCAT Fieldbus

> EtherCAT fieldbus applied in the control, IO module and servo drive system
> Communication speed up to 150Mbps for highly efficient and stable transmission

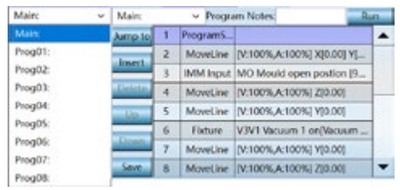
Easy to operate

> 7.0 inch IPS screen, with emergency stop, three-phase switch
> Ergonomic design for easy operation

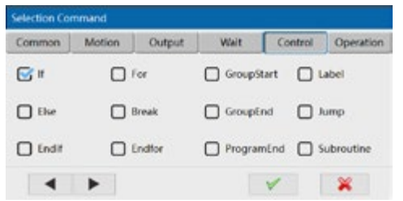
> Multiple modes for a wide variety of working conditions. Functions on/off upon on-site requirement.



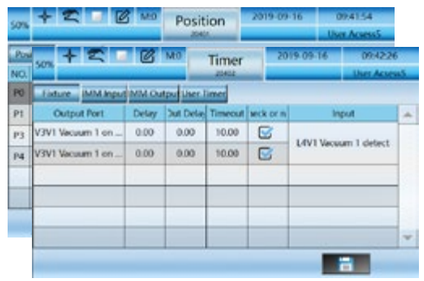
> Software upgrade interface for flexible improvements of individual software in the system.



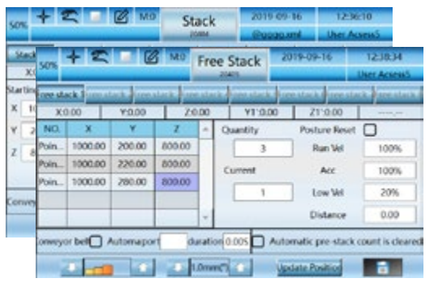
> Clean and intuitive interface with 8-line program display with parameters.



> Instructions such as “If, else”, “for” available



> The individual “position setting” and “timer setting” interfaces for easy change of position and timers.



> 8 matrix stacking for max. setting of 100 stacking positions.
> 8 free stacking, max. setting of 50 stacking positions for free stacking.

V-I(H)S

Small

Full servo / suspension structure

For IMM from 60 to 380T

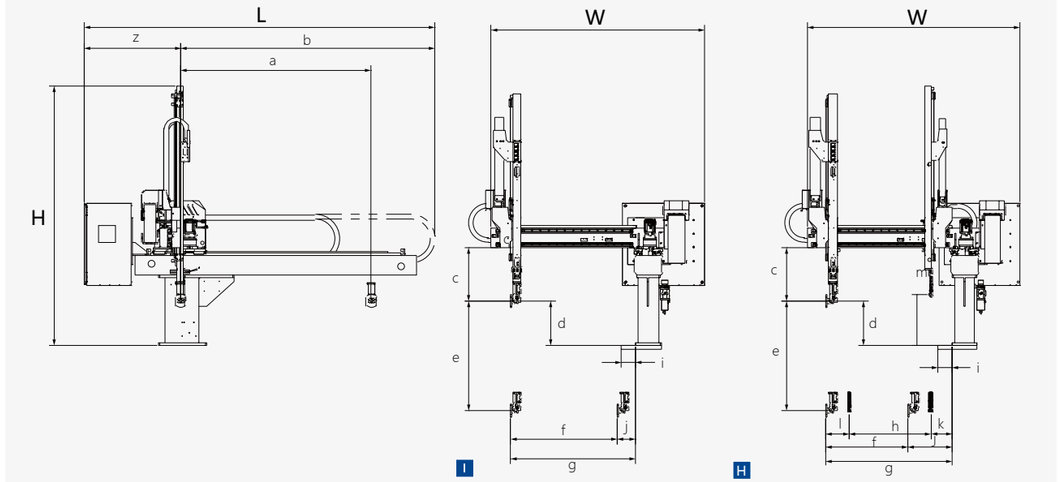
Efficient
Stable
Fast

Parameters

Unit \ Model		V-800IS	V-800HS	V-900IS	V-900HS	V-1000IS	V-1000HS
Form of boom	-	Single-cut suspension					
IMM	ton	60~200	60~200	200~250	200~250	250~320	250~320
Length	mm	2570	2570	2750	2750	2750	2750
Width	mm	1570	1570	1570	1570	1570	1570
Height	mm	1800	1890	2040	2070	2160	2190
Power to be consumed	Kw	1.2	2.1	1.2	2.1	1.2	2.1
Power supply	-	1PH 200-240V 50/60HZ					
Capacity of power supply equipment	KWA	3	3	3	3	3	3
Air pressure	Mpa	0.49	0.49	0.49	0.49	0.49	0.49
Amount of air to be consumed	NL/cycle	5.2	5.2	5.4	5.4	5.6	5.6
Type of drive	-	Full servo drive					
Minimum pickup time	s	1.66	1.66	1.68	1.68	1.7	1.7
Full-circulation time (not including fixture)	s	6.52	6.52	6.7	6.7	7	7
Maximum load (including fixture)	kg	8	8	8	8	8	8
Post torque	N.m	13	13	13	13	13	13
Weight	kg	295	320	305	330	310	340
Repeated positioning accuracy	mm	±0.1					

Automotive · Logistics · Household appliance · Civilian

Dimension



Type	V-800		V-900		V-1000		Type
	V-800IS	V-800HS	V-900IS	V-900HS	V-1000IS	V-1000HS	
a	1400	1400	1600	1600	1600	1600	a
b	1863	1863	2043	2043	2043	2043	b
c	391	391	391	391	391	391	c
d	320	320	370	370	370	370	d
e	800	800	900	900	1000	1000	e
f	790	600	790	600	790	600	f
g	900	900	900	900	900	900	g
h	/	600	/	600	/	600	h
i	100	100	100	100	100	100	i
j	110	300	110	300	110	300	j
k	/	150	/	150	/	150	k
l	/	150	/	150	/	150	l
m	/	365	/	415	/	415	m
z	690	690	690	690	690	690	z
Note							

Standard configuration

- Servomotors with independent management of 3\5 servo axes
- Small models: V800-1000, Single arm suspension
- Power supply: 380VAC, 3PH+N+PE
- Hilectro H5 controller 7 inch touch screen
- DELTA A2 servo system
- Standard pneumatic C-axis
- EUROMAP 67 interface

Option

- Electrical cabinet on the floor (with QMC plug)
- CE electrical sockets
- EUROMAP 12 interface
- The fence gate and the emergency stop signal 1 pair each
- Digital input and output 20 sets each reserve
- Connected with injection mold machine
- Servo A\B\C axis (2 in 3 axes)
- Pneumatic A\B axis (1 in 2 axes)
- Automatic lubrication
- Vacuum 4 sets & gripping 4 sets

Functions & controls

- Multi-language available (Chinese, German, English, Japanese etc.)
- Emergency stop chain protection
- Safety door chain protection
- Tutorial function
- Packaging function (Max. 8)
- Automatic termination of production
- Production monitoring function
- Data modification in automatic (micro tuning)
- Air Pressure Detection Function
- Vacuum or gripping confirmation function
- Mold profile data memory 5000 sets (support USB)
- 5 password control
- Alarm record
- Warning record
- 3 color alarm lamp (red/yellow/green)
- Vacuum 2 sets & gripping 2 sets
- The fence gate and the emergency stop signal 1 pair each

V-I(H)D

Medium

Full servo / suspension structure

For IMM from 380 to 700T

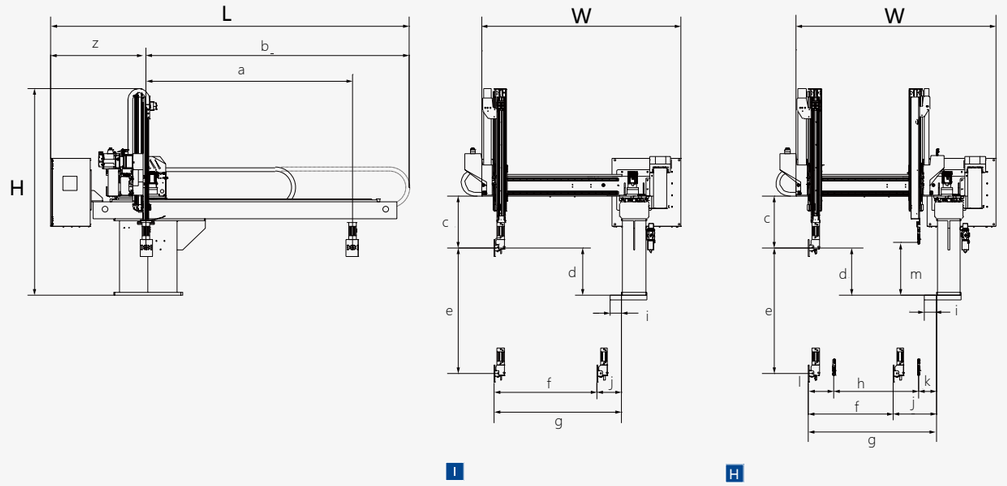
Efficient
Stable
Fast

Parameters

Unit \ Model		V-1100ID	V-1100HD	V-1300ID	V-1300HD
Form of boom	-	Double-section frame			
IMM	ton	380~530	530~700	380-530	530-700
Length	mm	3100	3100	3340	3340
Width	mm	1780	1780	1780	1780
Height	mm	1740	1740	1850	1850
Power to be consumed	kw	2.1	2.9	2.1	2.9
Power supply	-	1PH 200-240V 50/60HZ			
Capacity of power supply equipment	KWA	3	3	3	3
Air pressure	Mpa	0.6	0.6	0.6	0.6
Amount of air to be consumed	NL/ cycle	10.8	10.8	11.6	11.6
Type of drive	-	Full servo drive			
Minimum pickup time	s	2.84	2.84	3.42	3.42
Full-circulation time (not including fixture)	s	11.4	11.4	11.92	11.92
Maximum load (including fixture)	kg	12	12	12	12
Post torque	N.m	25	25	25	25
Weight	kg	496	544	520	580
Repeated positioning accuracy	mm	±0.1			

Household appliance Civilian Toy

Dimension



Type	V-1100		V-1300		Type
	V-1100ID	V-1100HD	V-1300ID	V-1300HD	
a	1800	1800	2000	2000	a
b	2226	2226	2226	2226	b
c	410	410	410	410	c
d	410	410	410	410	d
e	1100	1100	1300	1300	e
f	880	650	880	650	f
g	1100	1100	1100	1100	g
h	/	650	/	650	h
i	100	100	100	100	i
j	220	450	220	450	j
k	/	150	/	150	k
l	/	300	/	300	l
m	/	460	/	460	m
z	871	871	871	871	z
Note					

Standard configuration

- Servomotors with independent management of 3\5 servo axes
- Middle models: V1100-1700, Dual arms suspension
- Power supply: 380VAC, 3PH+N+PE
- Hilectro H5 controller 7 inch touch screen
- DELTA A2 servo system
- Standard pneumatic C-axis
- EUROMAP 67 interface
- Standard centralized lubrication including middle models

Option

- Electrical cabinet on the floor (with QMC plug)
- CE electrical sockets
- EUROMAP 12 interface
- The fence gate and the emergency stop signal 1 pair each
- Digital input and output 20 sets each reserve
- Connected with injection mold machine
- Servo A\B\C axis (2 in 3 axes)
- Pneumatic A\B axis (1 in 2 axes)
- Automatic lubrication
- Vacuum 4 sets & gripping 4 sets

Functions & controls

- Multi-language available (Chinese, German, English, Japanese etc.)
- Emergency stop chain protection
- Safety door chain protection
- Tutorial function
- Packaging function (Max. 8)
- Automatic termination of production
- Production monitoring function
- Data modification in automatic (micro tuning)
- Air Pressure Detection Function
- Vacuum or gripping confirmation function
- Mold profile data memory 5000 sets (support USB)
- 5 password control
- Alarm record
- Warning record
- 3 color alarm lamp (red/yellow/green)
- Vacuum 2 sets & gripping 2 sets
- The fence gate and the emergency stop signal 1 pair each

V-I(H)D

Large

Full servo / telescopic frame structure

For IMM from 700 to 4,000T

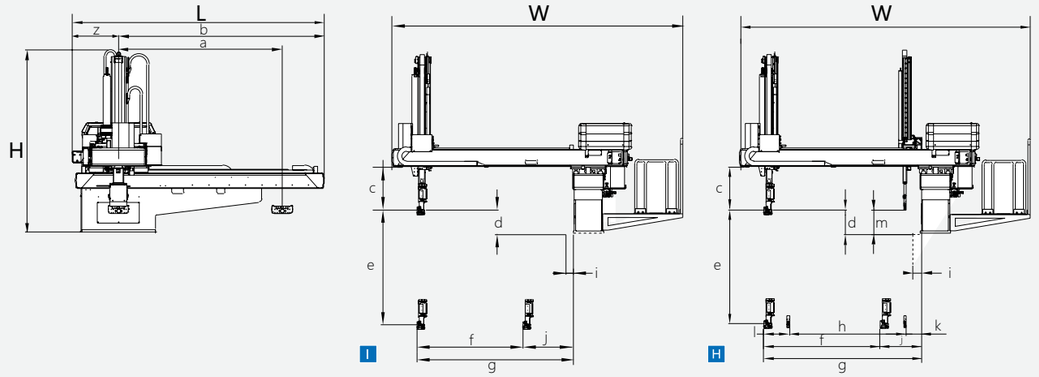
Efficient
Stable

Parameters

Unit \ Model		V-1500ID	V-1500HD	V-1700ID	V-1700HD	V-2000I(H)D	V-2500ID	V-3000ID
Form of boom	-	Double-section frame						
IMM	ton	700~1000		1000~1300		800~1600	1600~4000	1600~4000
Length	mm	3990	3990	3990	3990	4015	5000	5400
Width	mm	2260	2260	2260	2260	3543	3870	3870
Height	mm	2340	2340	2460	2460	2274	3050	3290
Power to be consumed	kw	2	2.1	2	2.1	2.1/5.0	4.0	4.0
Power supply	-	AC Three-phase 200V±10% 50/60HZ						
Capacity of power supply equipment	KWA	5	5	5	5	6	10	10
Air pressure	Mpa	0.35	0.35	0.35	0.35	0.59	0.59	0.59
Amount of air to be consumed	NL/cycle	6.7	6.7	6.7	6.7	27/67	33.3	41.67
Type of drive	-	Full servo drive						
Minimum pickup time	s	3.61	3.61	3.61	3.61	5.53	6.04	8.04
Full-circulation time (not including fixture)	s	12.7	12.7	12.7	12.7	16.6	20	25
Maximum load (including fixture)	kg	20	20	20	20	35	40	80
Post torque	N.m	45	45	45	46	88	64	123
Weight	kg	850	890	865	905	1274/1341	2630	4400
Repeated positioning accuracy	mm	±0.1						

Automotive · Logistics · Household appliance · Civilian

Dimension



Type	V-1500		V-1700		V-2000		V-2500	V-3000	Type
	V-1500ID	V-1500HD	V-1700ID	V-1700HD	V-2000ID	V-2000HD	V-2500ID	V-3000ID	
a	2500	2500	2500	2500	3000	3000	3600	4000	a
b	3075	3075	3075	3075	3405	3405	4300	4700	b
c	580	580	580	580	555	555	761.5	761.5	c
d	490	490	490	490	650	650	803	803	d
e	1500	1500	1700	1700	2000	2000	2500	3000	e
f	1280	1055	1280	1055	1590	1415	1600	1600	f
g	1530	1530	1530	1530	1800	1800	2150	2150	g
h	/	1055	/	1055	/	1415	/	/	h
i	/	/	/	/	10	10	40	40	i
j	250	475	250	475	300	525	550	550	j
k	/	225	/	225	/	180	/	/	k
l	/	250	/	250	/	310	/	/	l
m	/	135	/	135	/	300	/	/	m
z	708	708	708	708	610	610	700	700	z
Note									

Standard configuration

- Servomotors with independent management of 3\5 servo axes
- Big models: V2000-2500, Double section structure
- Power supply: 380VAC, 3PH+N+PE
- Hilectro H5 controller 7 inch touch screen
- DELTA A2 servo system
- Standard pneumatic C-axis
- EUROMAP 67 interface
- Standard centralized lubrication including middle models

Option

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- Vacuum 2 sets & gripping 2 sets
- The fence gate and the emergency stop signal 1 pair each

About Us

Premier Moulding Machinery

Haitian International is the world's largest moulding machine manufacturer with over 50 years' history serving over 130 countries around the world.

Premier Moulding Machinery (PMM) is the official UK Sales and Service Partner for Haitian, Zhafir Moulding Machines and Hilectro robots. Formed in 2005, PMM has installed over 300 moulding machines in the UK and Ireland.

The machinery portfolio covers Haitian Plastics Machinery servo-hydraulic machines, Zhafir electric machines for high-tech production of precision plastic parts and Hilectro 3 and 5 axis robots.

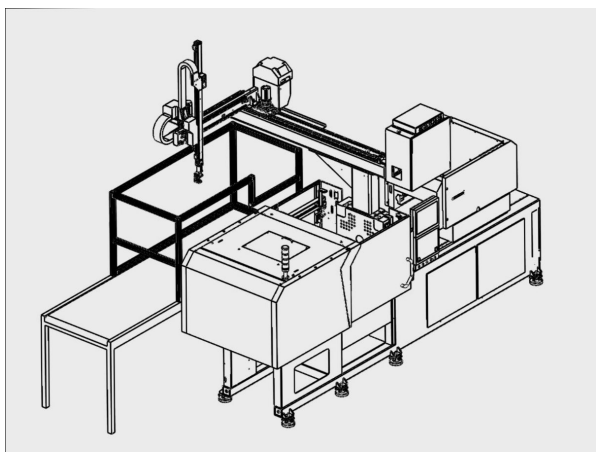
PMM are supported by the Haitian International Technology Centre in Germany, giving us access to over 150 stock machines with an extensive range of spare parts.

All new machines carry a 3 year warranty and service package from installation.

Based in Quainton, Buckinghamshire, the PMM team provide national sales, engineering and service support. Our complete ownership of installation and servicing, combined with extensive knowledge of the moulding process, provides PMM customers with a winning formula for energy efficient machines that pay for themselves and deliver in terms of reliability and performance.

Complete Cells

PMM have in house cad designers to design complete cells. We can supply moulding machine, robot, conveyor, guarding, EOAT and ce cell approval.



Hilectro

pmm PREMIER moulding machinery

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