

HAS IIe-650/850SW(GW-V)

I.M.M. Size
650TYPE
550~650ton
850TYPE
650~850ton

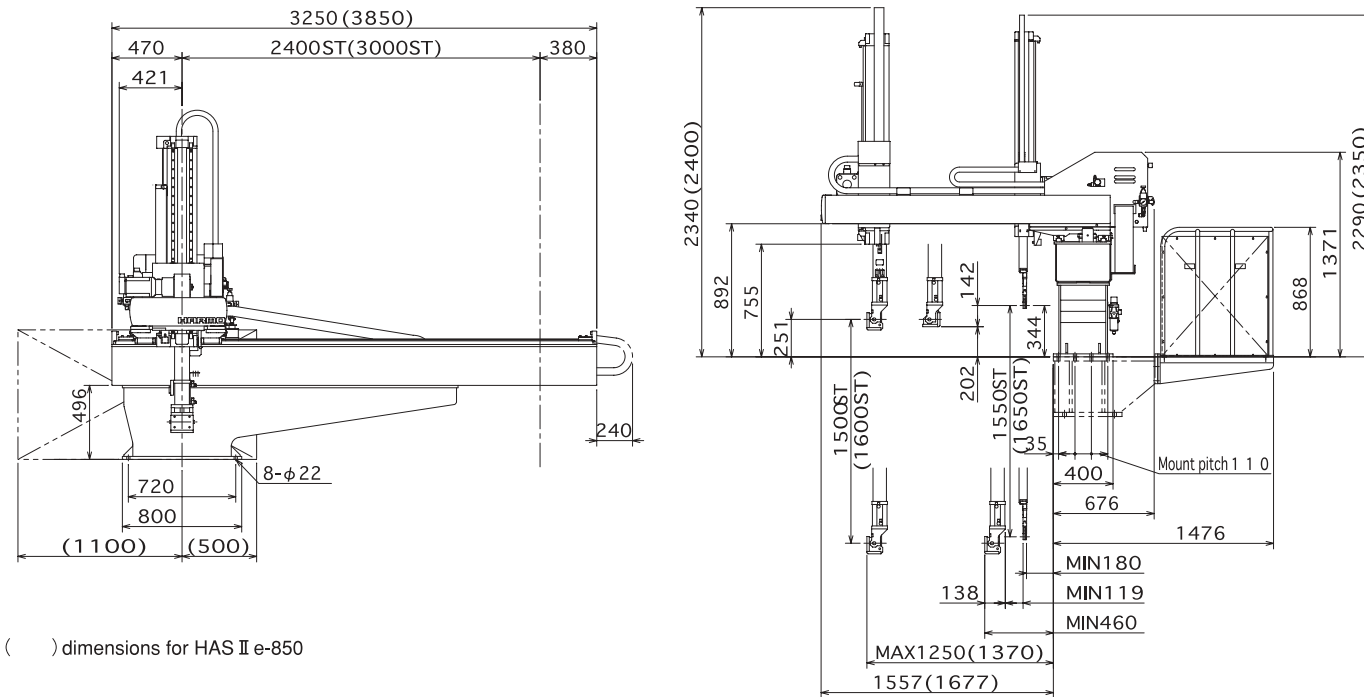
※The step at the rear of HAS II e robot is mounted standard.
The height of a spacer depends on your request.

Specifications

Items	HAS IIe-650SW	HAS IIe-650GW-V	HAS IIe-850SW	HAS IIe-850GW-V
Main arm vertical stroke (mm)	1500		1600	
Sub arm vertical stroke (mm)	—	1550	—	1650
Main arm strip stroke (mm)	980 (270~1250)	790 (460~1250)	1100 (270~1370)	910 (460~1370)
Sub arm strip stroke (mm)	—	790 (180~970)	—	910 (180~1090)
Traverse stroke (mm)	2400		3000	
Gripper center to top platen (mm)	251 (Excluding a spacer)			
Main arm to fixed platen (mm)	1250		1370	
Sub arm to fixed platen (mm)	—	180	—	180
Max. weight capacity (kg)	20 (including attachment)			
Weight (kg)	1200	1250	1300	1350
Working air pressure (Mpa)	0.6			
Air consumption (Nℓ/cyc)	23.6*	28.0*	25.0*	29.8*
Drive system	Digital AC servo motor (traverse, main & sub vertical, main & sub strip)			
Control system	PTP · CP			
Power Supply (V)	AC200 ±10%, 3 phase (50Hz/60Hz)			

※Additional 107N ℓ/min is needed when vacuum ejector is used.

Dimensions (mm)



() dimensions for HAS II e-850

Manufacturer:
HARMO CO., LTD.

INTERNATIONAL MARKETING DEPT.
4124-1, MINAMI-MINOWA KAMIINA-GUN NAGANO-PREF.399-4595 JAPAN
TEL.+81-265-73-8820, FAX.+81-265-73-8964

ISO9001 CERTIFIED

<http://www.harmo-net.co.jp>

CE specification is also available. Please, consult us for details.



This catalogue uses 100% recycled paper.

HAS IIe-ser-1E 041115KP

HARMO

I.M.M. Size
40~850ton

HAS II e SERIES

Sophisticated, High Cost Performance Digital Servo Pick & Place Robot

HARMO Offers New e Series Robots.



HAS IIe-80 G-V
(Rear side release type)

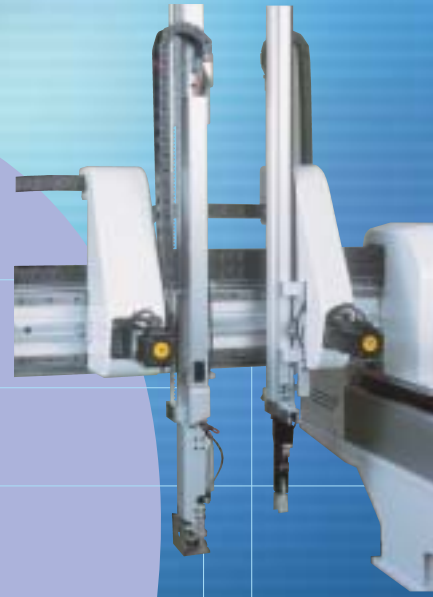


(80~200 Series)

e Sophisticated, High Cost Performance Digital Servo Pick & Place Robot -HARMO Offers New e Series Robots.

Sufficient stroke

Vertical stroke for main arm is 800mm long enough to enlarge applicable I.M.M. size.



Winning great popularity

HAS IIe-150/200(G-V)

CE compliance available

I.M.M. Size
150TYPE
100~220ton
200TYPE
220~350ton

【Standard Specification】

One vacuum ejector circuit _ One parts grip circuit _ One main sprue grip circuit _ Palletizing (99 points each axis) _ En-route wrist flip _ Error history _ Internal 50 mold data memory _ Initial rejected parts counter _ Position adjustment in auto operation _ Fixed/movable side strip _ Home position selection (above mold/out traverse)

Reliable HASII body succeeded

Succeeded is reliable, light, and rigid HASII body constructed using aluminum extrusions.

Light, rigid, and reliable.

Winning great popularity

HAS IIe-150/200SW(GW-V)

CE compliance available

I.M.M. Size
150TYPE
100~220ton
200TYPE
220~350ton



Compact regulator meter.

【Standard Specification】

One vacuum ejector circuit _ One parts grip circuit _ One main sprue grip circuit _ Palletizing (99 points each axis) _ En-route wrist flip _ Error history _ Internal 50 mold data memory _ Initial rejected parts counter _ Position adjustment in auto operation _ Fixed/movable side strip _ Home position selection (above mold/out traverse)

New HRS-200 controller, adopted in e series robots, presents careful selections of frequently used operations & settings for user-friendly operation. HAS II e series robots are released to offer more reasonable HAS I series robots. We are sure that you'll be satisfied.

Winning great popularity HRS-200

- Compact pendant with nice grip feeling
- 6.5 inch color LCD
- 800g of light weight
- Touch panel for easy operation
- 50 mold data memory
- 7 years of battery change interval

User-friendly

Controller on Body

Controller is installed on body rather than on floor. This achieves space saving for free shop layout. A compact pendant held in your palm gives you all operations.





Sophisticated, High Cost Performance Digital Servo Pick & Place Robot -HARMO Offers New **e** Series Robots.

Winning great popularity
HAS II e-80S(G-V)
HAS II e-80SW(GW-V)

CE compliance available

I.M.M. Size
40~80ton

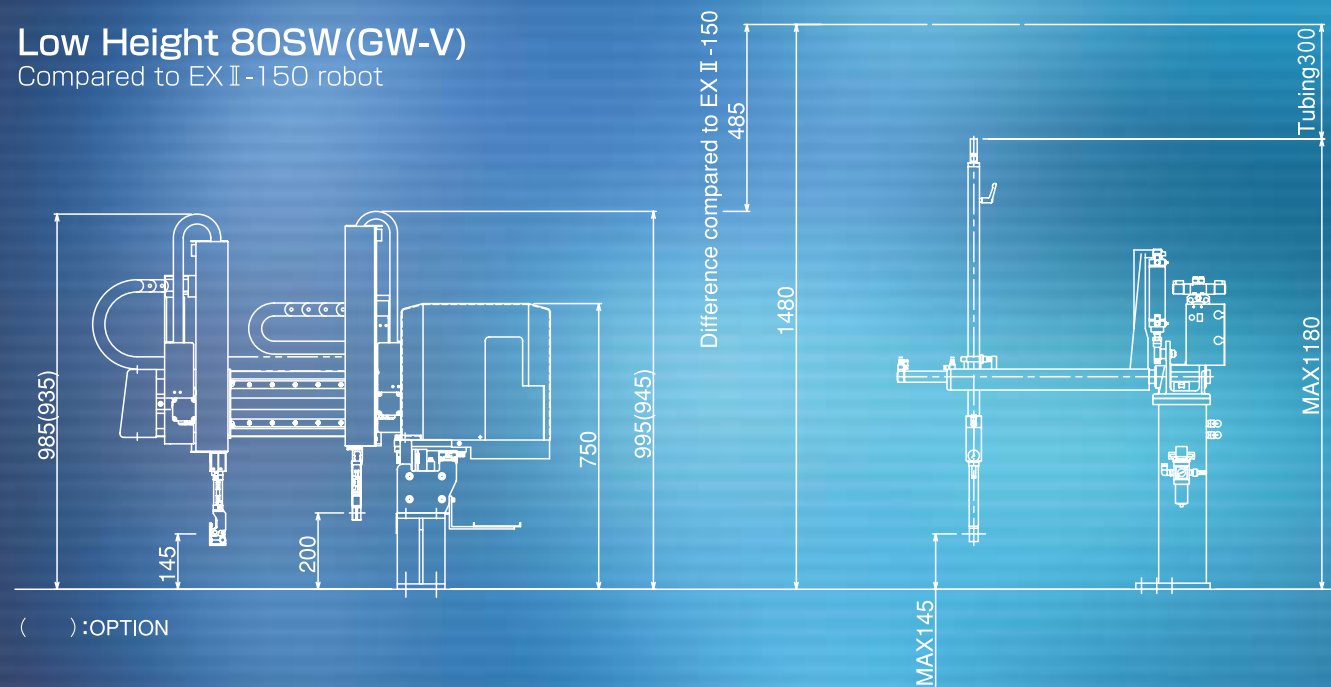


【Standard Specification】

One vacuum ejector circuit _ One parts grip circuit _ One main sprue grip circuit _ Palletizing (99 points each axis) _ En-route wrist flip _ Error history _ Internal 50 mold data memory _ Initial rejected parts counter _ Position adjustment in auto operation _ Fixed/movable side strip _ Home position selection (above mold/out traverse)

Low Height 80SW(GW-V)

Compared to EX II-150 robot



HAS II e-80 robot is a unique 80t double type robot for installation in a low overhead area.
 HAS II e-80 robot can be installed at low-ceilinged plants where only swing type robots are used.

User-Friendly HRS-200 Controller

Convenient functions succeeded, more user-friendly controller



Teach screen

Motion setting



▲Select an item to set.

Point setting



▲Teach point by actual moving each axis using + and - buttons.

Palletizing



▲Set pitches and points for XYZ.

Timer setting



▲Set each timer using ten key

Teach



▲Select function to set.

Counter setting



▲Set initial rejected parts counts.

EOAT weight setting



▲Set EOAT weight for optimum servo motor motions.

Speed setting



▲Set each speed using ten key.

Step confirmation



▲Make a step confirmation run to check your program.

HAS IIe-80S(G-V) HAS IIe-80SW(GW-V)

I.M.M. Size
40~80ton

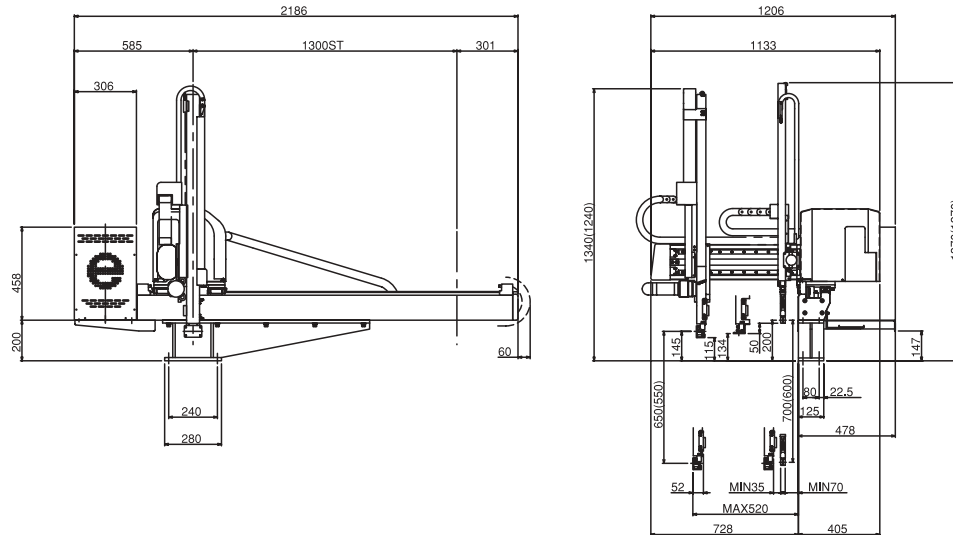
Specifications

Items	HAS IIe-80S	HAS IIe-80G-V	HAS IIe-80SW	HAS IIe-80GW-V
Main arm vertical stroke (mm)	[450] [550] 650		[550] 650	
Sub arm vertical stroke (mm)	—	[500] [600] 700	—	[600] 700
Main arm strip stroke (mm)	420 (100~520)		410 (100~510)	
Sub arm strip stroke (mm)	—	230 (70~300)	—	200 (100~300)
Traverse stroke (mm)	1300 [1700]		1300 [1700]	
Gripper center to top platen (mm)	145	— 145 200	145	145 200
Max. distance between main arm and fixed platen (mm)	520		510	
Min. distance between sub arm and fixed platen (mm)	—	70	—	100
Max. weight capacity (kg)	3 (Including attachment)			
Weight (kg)	195	215	200	225
Working air pressure (Mpa)	0.6			
Air consumption (Nl/cyc)	0.7 ^{**}	0.8 ^{**}	0.7 ^{**}	0.8 ^{**}
Drive system	Digital AC servo motor (traverse, main & sub vertical, main & sub strip)			
Control system	PTP·CP			
Power Supply (V)	200VAC(±10%, 3 phase (50Hz/60Hz))			
Current consumption (A)	9	13.2	9	13.2
Power consumption (kW)	1.35	1.95	1.35	1.95
Apparent power (kVA)	1.8	2.6	1.8	2.6

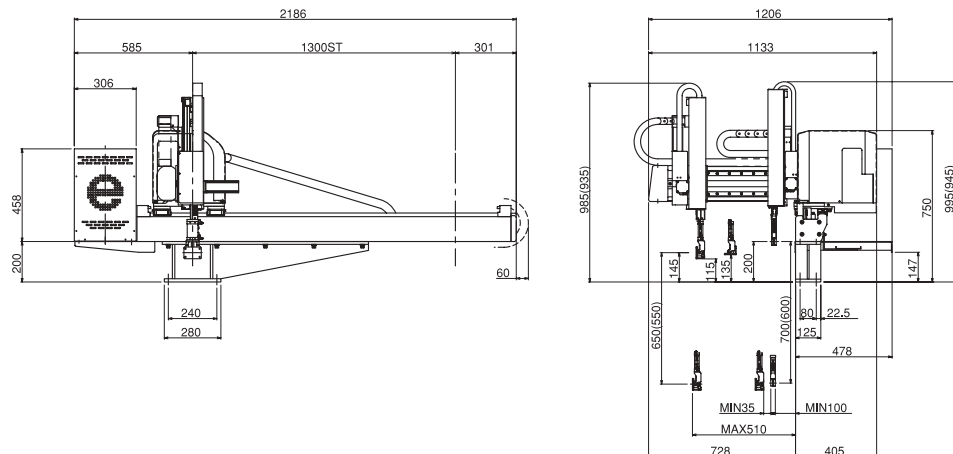
* Additional 63N l /min is needed when vacuum ejector is used.
[] dimensions are optional.

Dimensions

HAS II e-80G-V



HAS II e-80GW-V



() OPTION

HAS IIe-150S(G-V) HAS IIe-200S(G-V)

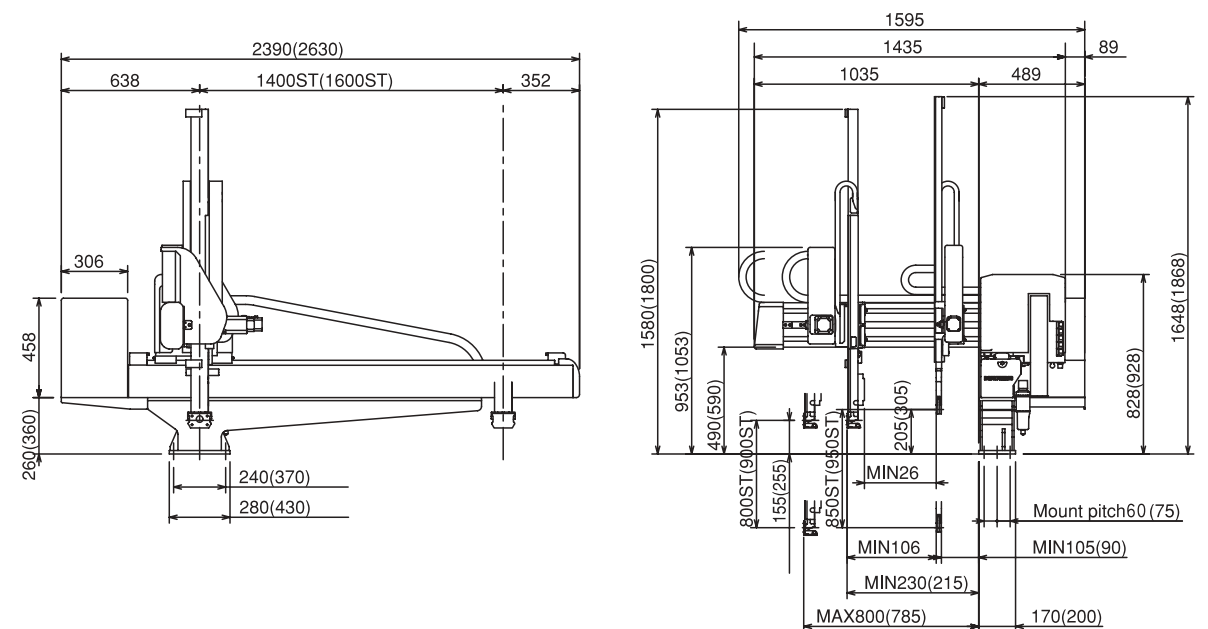
I.M.M. Size
150TYPE
100~220ton
200TYPE
220~350ton

Specifications

Items	HAS IIe-150S	HAS IIe-150G-V	HAS IIe-200S	HAS IIe-200G-V
Main arm vertical stroke (mm)	[700] 800		900 [1000]	
Sub arm vertical stroke (mm)	—	[750] 850	—	950 [1050]
Main arm strip stroke (mm)	700 (100~800)	570 (230~800)	695 (90~785)	570 (215~785)
Sub arm strip stroke (mm)	—	585 (105~690)	—	585 (90~675)
Traverse stroke (mm)	1400 [1600] [1800] [2000]		1600 [1800] [2000]	
Gripper center to top platen (mm)	155	155 205	255	255 305
Max. distance between main arm and fixed platen (mm)	800		785	
Min. distance between sub arm and fixed platen (mm)	—	105	—	90
Max. weight capacity (kg)	5 (Including attachment)			
Weight (kg)	305	325	315	340
Working air pressure (Mpa)	0.6			
Air consumption (Nl/cyc)	2.7 [*]	2.9 ^{**}	2.7 [*]	2.9 ^{**}
Drive system	Digital AC servo motor (traverse, main & sub vertical, main & sub strip)			
Control system	PTP·CP			
Power Supply (V)	200VAC(±10%, 3 phase (50Hz/60Hz))			
Current consumption (A)	11.1	15.3	11.1	15.3
Power consumption (kW)	1.7	2.3	1.7	2.3
Apparent power (kVA)	2.22	3.06	2.22	3.06

** Additional 63N l /min is needed when vacuum ejector is used.
[] dimensions are optional.

Dimensions



() dimensions for HAS II e-200

HAS IIe-150SW(GW-V) HAS IIe-200SW(GW-V)

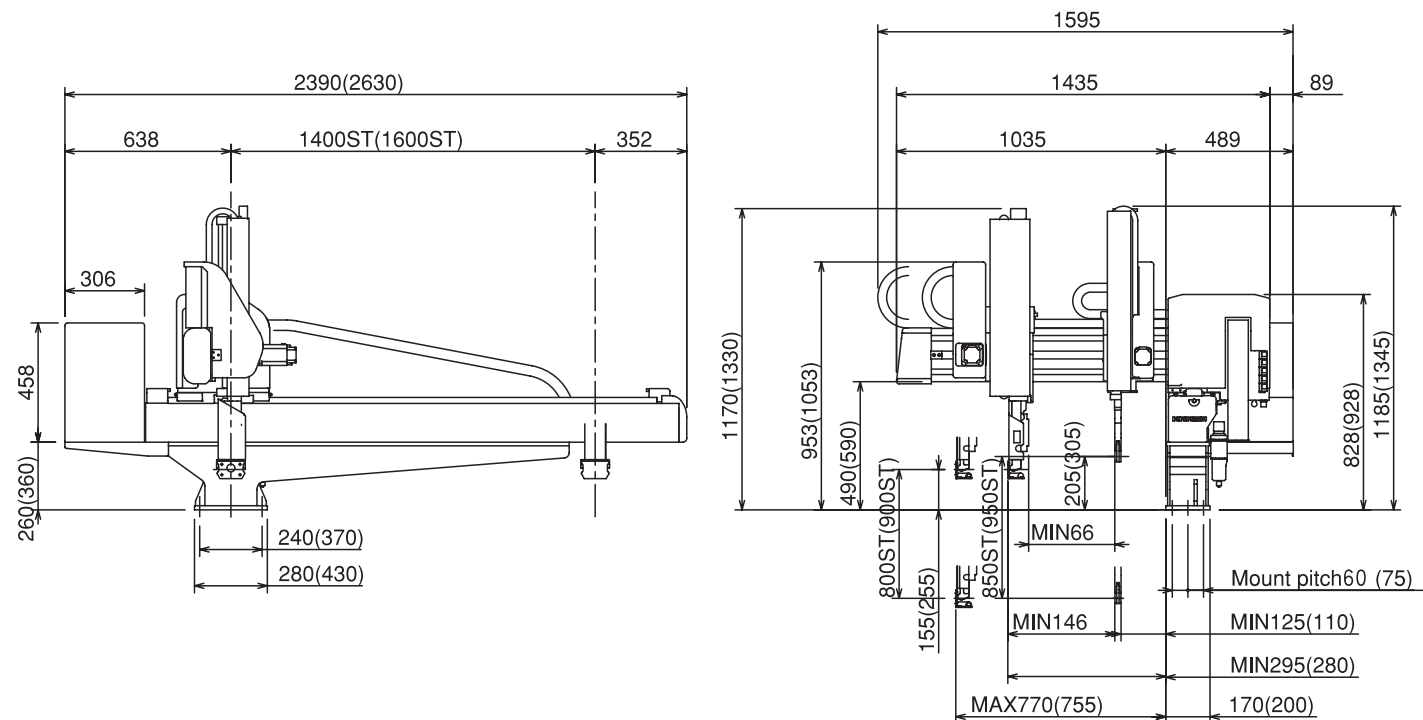
I.M.M. Size
150TYPE
100~220ton
200TYPE
220~350ton

Specifications

Items		HAS IIe-150SW	HAS IIe-150GW-V	HAS IIe-200SW	HAS IIe-200GW-V
Main arm vertical stroke (mm)		[700] 800		900 [1000]	
Sub arm vertical stroke (mm)		—	[750] 850	—	950 [1050]
Main arm strip stroke (mm)		680 (90~770)	475 (295~770)	680 (75~755)	475 (280~755)
Sub arm strip stroke (mm)		—	480 (125~605)	—	480 (110~590)
Traverse stroke (mm)		1400 [1600] [1800] [2000]		1600 [1800] [2000]	
Gripper center to top platen (mm)		155	155 205	255	255 305
Max. distance between main arm and fixed platen (mm)		770		755	
Min. distance between sub arm and fixed platen (mm)		—	125	—	110
Max. weight capacity (kg)		5 (Including attachment)			
Weight (kg)		295	315	315	345
Working air pressure (Mpa)		0.6			
Air consumption (Nℓ/cyc)		2.7*	2.9*	2.7*	2.9**
Drive system		Digital AC servo motor (traverse, main & sub vertical, main & sub strip)			
Control system		PTP·CP			
Power Supply (V)		200VAC ±10%, 3 phase (50Hz/60Hz)			
Current consumption (A)		11.1	15.3	11.1	15.3
Power consumption (kW)		1.7	2.3	1.7	2.3
Apparent power (kVA)		2.22	3.06	2.22	3.06

* Additional 63N ℓ /min is needed when vacuum ejector is used.
[] dimensions are optional.

Dimensions



() dimensions for HAS II e-200

NEW STYLE

HAS IIe-300SW(GW-V)

【Standard Specification】

One vacuum ejector circuit _ One parts grip circuit _ One main sprue grip circuit _ Palletizing (99 points each axis) _ En-route wrist flip _ Error history _ Internal 50 mold data memory _ Initial rejected parts counter _ Position adjustment in auto operation _ Fixed/movable side strip _ Home position selection (above mold/out traverse)

I.M.M. Size
260~450ton

NEW STYLE

HAS IIe-500SW(GW-V)

【Standard Specification】

One vacuum ejector circuit _ One parts grip circuit _ One main sprue grip circuit _ Palletizing (99 points each axis) _ En-route wrist flip _ Error history _ Internal 50 mold data memory _ Initial rejected parts counter _ Position adjustment in auto operation _ Fixed/movable side strip _ Home position selection (above mold/out traverse)

I.M.M. Size
400~650ton

NEW STYLE

HAS IIe-650/850SW(GW-V)

I.M.M. Size
650TYPE
550~650ton
850TYPE
650~850ton

【Standard Specification】

One vacuum ejector circuit _ One parts grip circuit _ One main sprue grip circuit _ Palletizing (99 points each axis) _ En-route wrist flip _ Error history _ Internal 50 mold data memory _ Initial rejected parts counter _ Position adjustment in auto operation _ Fixed/movable side strip _ Home position selection (above mold/out traverse)

HAS IIe-300SW(GW-V)

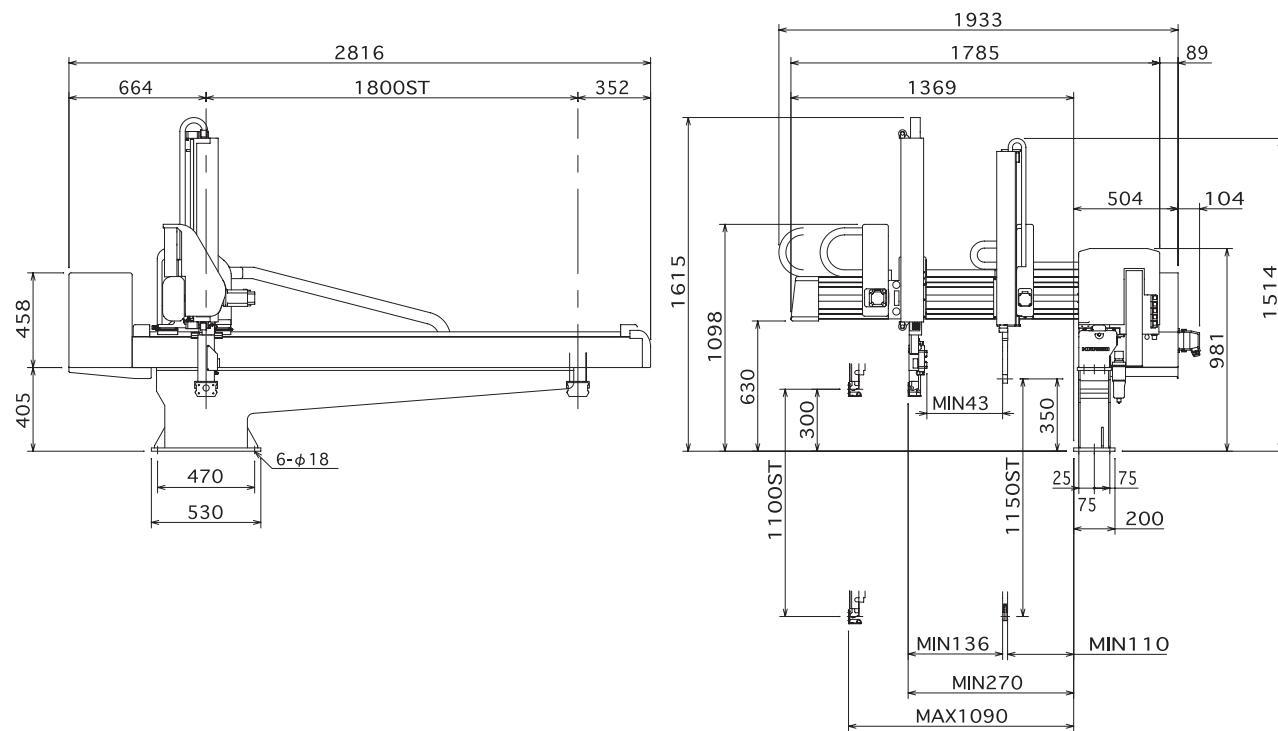
I.M.M. Size
260~450ton

Specifications

Items	HAS IIe-300SW	HAS IIe-300GW-V	
Main arm vertical stroke (mm)	1100		
Sub arm vertical stroke (mm)	—	1150	
Main arm strip stroke (mm)	1025 (65~1290)	820 (270~1090)	
Sub arm strip stroke (mm)	—	820 (270~1090)	
Traverse stroke (mm)	1800 (2000)		
Gripper center to top platen (mm)	300	300	350
Main arm to fixed platen (mm)	1090		
Sub arm to fixed platen (mm)	—	110	
Max. weight capacity (kg)	10 (including attachment)		
Weight (kg)	370	400	
Working air pressure (Mpa)	0.6		
Air consumption (Nℓ/cyc)	2.7*	2.9*	
Drive system	Digital AC servo motor (traverse, main & sub vertical, main & sub strip)		
Control system	PTP·CP		
Power Supply (V)	AC200 ±10%, 3 phase (50Hz/60Hz)		

※Additional 63N ℓ/min is needed when vacuum ejector is used.
() dimensions for option.

Dimensions (mm)



HAS IIe-500SW(GW-V)

Slim design & high-rigidity beam robot for large-size injection molding machines

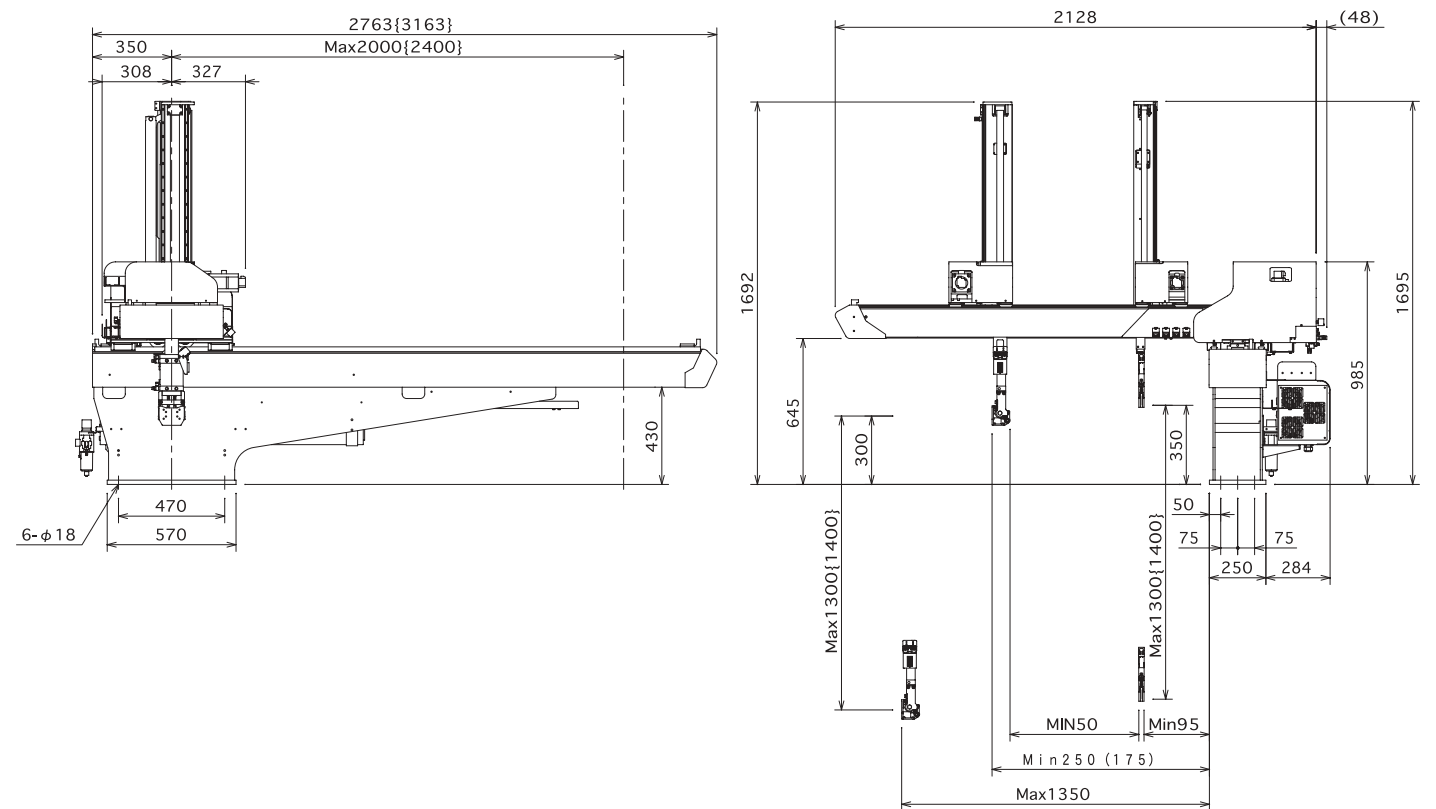
I.M.M. Size
400~650ton

Specifications

Items	HAS IIe-500SW	HAS IIe-500GW-V	
Main arm vertical stroke (mm)	1300 (1400)		
Sub arm vertical stroke (mm)	—	1300 (1400)	
Main arm strip stroke (mm)	1175 (175~1350)	1100 (250~1350)	
Sub arm strip stroke (mm)	—	1080 (140~1260)	
Traverse stroke (mm)	2000 (2400)		
Gripper center to top platen (mm)	300		
Max. distance between main arm and fixed platen (mm)	1350		
Min. distance between sub arm and fixed platen (mm)	—	95	
Max. payload (kg)	15 (Including attachment)		
Weight (kg)	473		
Working air pressure (Mpa)	0.5		
Air consumption (Nℓ/cyc)	12.5*		
Drive system	Digital AC servo motor (traverse, main & sub vertical, main & sub strip)		
Control system	PTP·CP		
Power supply (V)	200VAC±10%, 3-phase(50Hz/60Hz)		

※Additional 63N ℓ/min is needed when vacuum ejector is used.
() dimensions for option.

Dimensions (mm)



() OPTION