







## HST-400S/D/DS

### ■ Features

-  **280–450 tf**
-  **3/5-axis**
-  **Dual support type**
-  **Reduced overall height type**
-  **On robot body**
-  **E-touch II\***

### Built Lighter & Faster

The shape and structure of most HST components were formed with design optimization technology for lighter weight. This innovation trimmed 72.5kg from the HST's moving components, 25.4% lighter than the previous RAIL- $\alpha$ -HS series model. The HST achieves 9.2% faster speeds than the RAIL- $\alpha$ -HS without a motor size increase.<sup>1</sup>

### Shorter Settling Times

Design Optimization + CFRP + Anti-Vibration Controls

The HST's extensive design optimization studied traits including natural oscillation and damping characteristics to dramatically improve vibration control. Settling time (time required for oscillations to calm down to within a set value) was reduced by 98.6%.<sup>2</sup>

<sup>1</sup> Measured on the HST-400  
<sup>2</sup> Measured on the HST-150

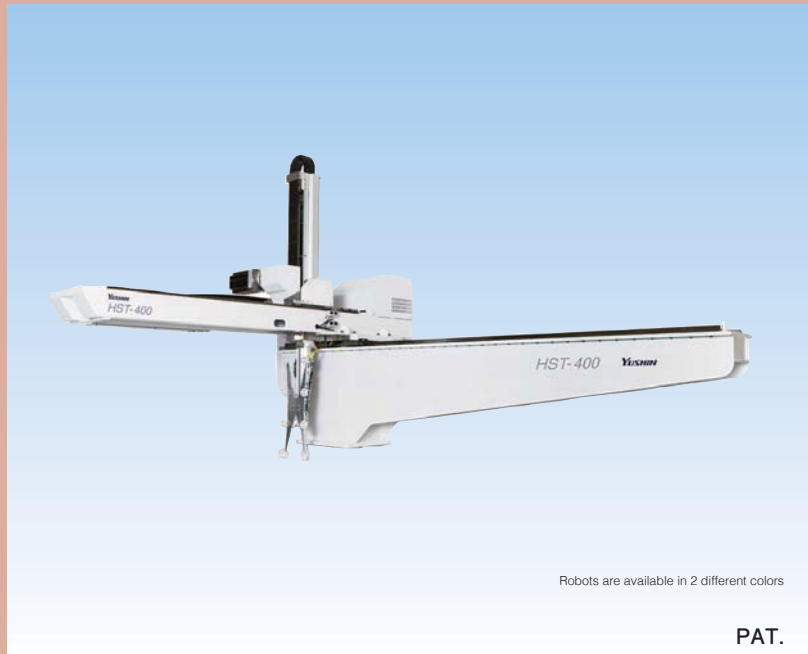
\* Smaller E-touch compact II controller also available.

### ■ Standard Specifications

| Power source                       | Driving method               | Control method         | Air pressure  | Wrist flip angle |
|------------------------------------|------------------------------|------------------------|---|------------------|
| 3 phase AC200V/220V/230V (50/60Hz) | Digital servo motor 3/5-axis | Micro computer control | 0.49MPa<br>Maximum allowable air pressure (factory)<br>0.7MPa | 90deg            |

| Model     | Power consumption             | Traverse stroke (mm)               | Kick stroke (mm) |         | Vertical stroke (mm) |                | Air consumption (NL/cycle) | Payload (kg) | Clamping force (tf) |
|-----------|-------------------------------|------------------------------------|------------------|---------|----------------------|----------------|----------------------------|--------------|---------------------|
|           |                               |                                    | Main arm         | Sub arm | Main arm             | Sub arm        |                            |              |                     |
| HST-400S  | 3 phase AC200V<br>17.3 A Max. | 1700<br>[1900]<br>[2200]<br>[2500] | 950              | —       | 1100<br>[1300]       | —              | 5.4                        | 10           | 280 ~ 450           |
| HST-400D  | 3 phase AC200V<br>23.1 A Max. |                                    | 750              | 750     |                      | 1100<br>[1300] |                            |              |                     |
| HST-400DS | 3 phase AC200V<br>26.0 A Max. |                                    | 850              | 850     | 1100<br>[1300]       | 10.6           |                            |              |                     |

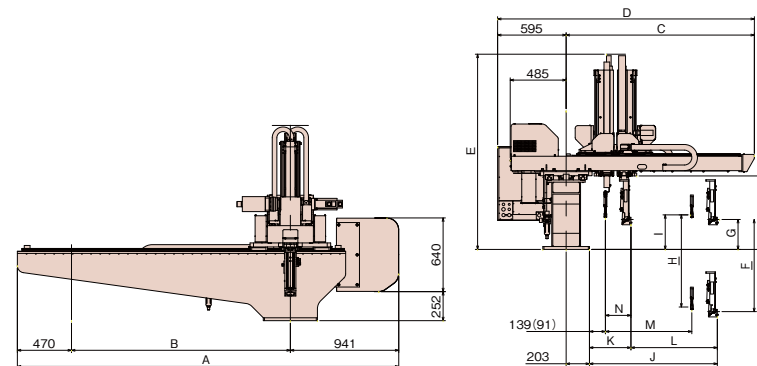
S type: Robot is equipped with product take-out arm only. D type: Robot is equipped with product take-out arm and runner take-out arm.  
 DS type: Robot is equipped with 2 product take-out arms.  
 [ ]: Modified traverse stroke  
 Payload includes the end-of-arm tool.



Robots are available in 2 different colors

PAT.

### ■ Dimensions (mm)



| Model     | A                              | B                                  | C    | D    | E              | F              | G   | H             | I   | J    | K   | L   | M   | N   |
|-----------|--------------------------------|------------------------------------|------|------|----------------|----------------|-----|---------------|-----|------|-----|-----|-----|-----|
| HST-400S  | 311<br>[331]<br>[361]<br>[391] | 1700<br>[1900]<br>[2200]<br>[2500] | 1634 | 2229 | 1695<br>[1787] | 1100<br>[1300] | 260 | —             | —   | 1100 | 160 | 950 | —   | —   |
| HST-400D  |                                |                                    |      |      |                |                |     | 300<br>[1300] | 260 | 1210 | 360 | 750 | 750 | 222 |
| HST-400DS |                                |                                    | 1734 | 2329 |                |                |     |               |     |      |     | 850 | 850 | 269 |

[ ]: Modified stroke  
 < >: DS type dimensions