

ERGOSPEED II™

200mm SMIF Load Port

Features

- Ergonomic SMIF robot
- 32s loading time by pre-positioning of SMIF pods
- 9s actual load time by utilizing the tool adapted load option
- Various loading arms covering all requirements
- Safety sensors and FLYSWAT™ wafer reseater
- Integrated FFU to generate a horizontal airflow
- Flexible software control (SECS I/II, ASCII)
- CE, SEMI E15, E19.4, S2 and S8 conformance
- Various options and accessory equipment for customization

Benefits

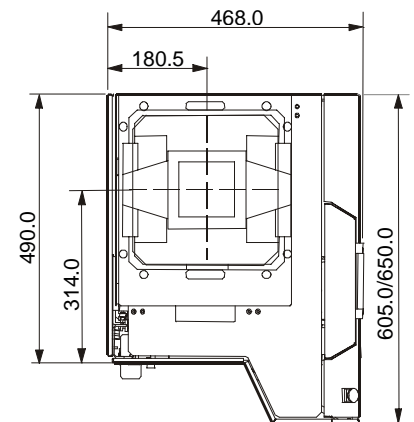
- Contamination-free wafer environment
- Short loading time provides highest throughput and maximum productivity
- Safety sensors and FLYSWAT™ prevent costly wafer breakage. Result: Maximum yield and timely ROI
- Highest reliability
- Easy service access via removable doors
- Low maintenance
- Minimized footprint
- Operator comfort through ergonomic loading height

Description

The ERGOSPEED II™ has evolved from the standard-setting ergonomic SMIF robot introduced in 1995 by our company. By bridging the gap between an ergonomically comfortable loading height of SMIF pods for the operator and the actual loading level of each individual tool, the ERGOSPEED II maximizes throughput and ensures operator safety and comfort.



ERGOSPEED II with SMIF pod at ergonomic loading height of 900mm.



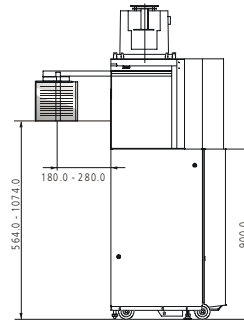
ERGOSPEED II™ footprint

ERGOSPEED II™

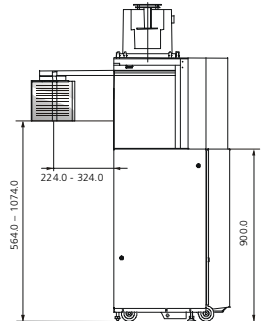
Technical Features

Height	930mm 990mm (H-Move)
Width	468mm
Depth	490mm (on loading bay side) 602/647mm (on service access side)
Weight	80 – 115kg as per type
Ergonomic loading height	900mm 960mm (H-Move)
Ergonomic reach	314mm (front end to port plate center)
Variable reach	155 – 280mm (LPT, Rev, X-Rot) 224 – 324mm (LPT, Rev, X-Rot long) 230 – 254mm (H-Move)
Load time	32s (LPT, Rev, X-Rot)* 36s (LPT, Rev, X-Rot long)* 57s (H-Move)*
PWP	$<1 \times 10^{-5}$ particle/cm ² /pass with tool in idle state particle size $>0.1 \mu\text{m}$
Cleanliness	under EN ISO 14644: ISO 1 under US Fed. Std. 209E: \leq Class 0.01
Ambient	under EN ISO 14644: ISO 6 under US Fed. Std. 209E: \leq Class 1000
MTTR	0.5h
MTBF	$> 6,000\text{h}$
Filter Fan Unit	Filter Rate EU 15, efficiency 99.9995% of most penetrating particle size. PTFE filter optional
Protection	Class 1, IP 20
Electrical Safety	EN 60 204 T1/06.93
Control	8 bit microcontroller, RS 232 link to tool, compliant to ASCII or SECS I/II, Parallel Interface optional
Compressed air supply	0.6Mpa Consumption $< 10\text{l/cycle}$
Power Supply	100–120 or 200–240VAC, 50–60Hz, max. power consumption 250W

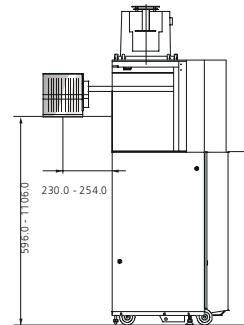
* with pre-positioned SMIF-pod



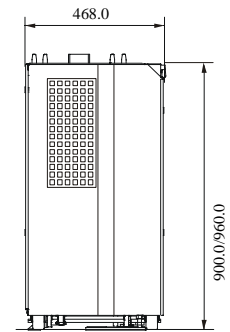
side view: LPT, Rev, X-Rot



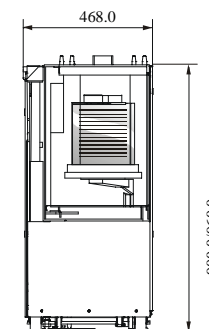
side view: LPT, Rev, X-Rot (long)



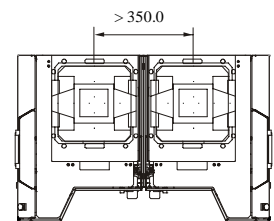
side view: H-Move



view from operator side



view from tool side



top view of double configuration



Corporate Headquarters
 Brooks Automation, Inc.
 15 Elizabeth Drive
 Chelmsford, MA 01824 U.S.A.
 Tel: (978) 262-2400
 Fax: (978) 262-2500
 Email: info@brooks.com
 Web: www.brooks.com