

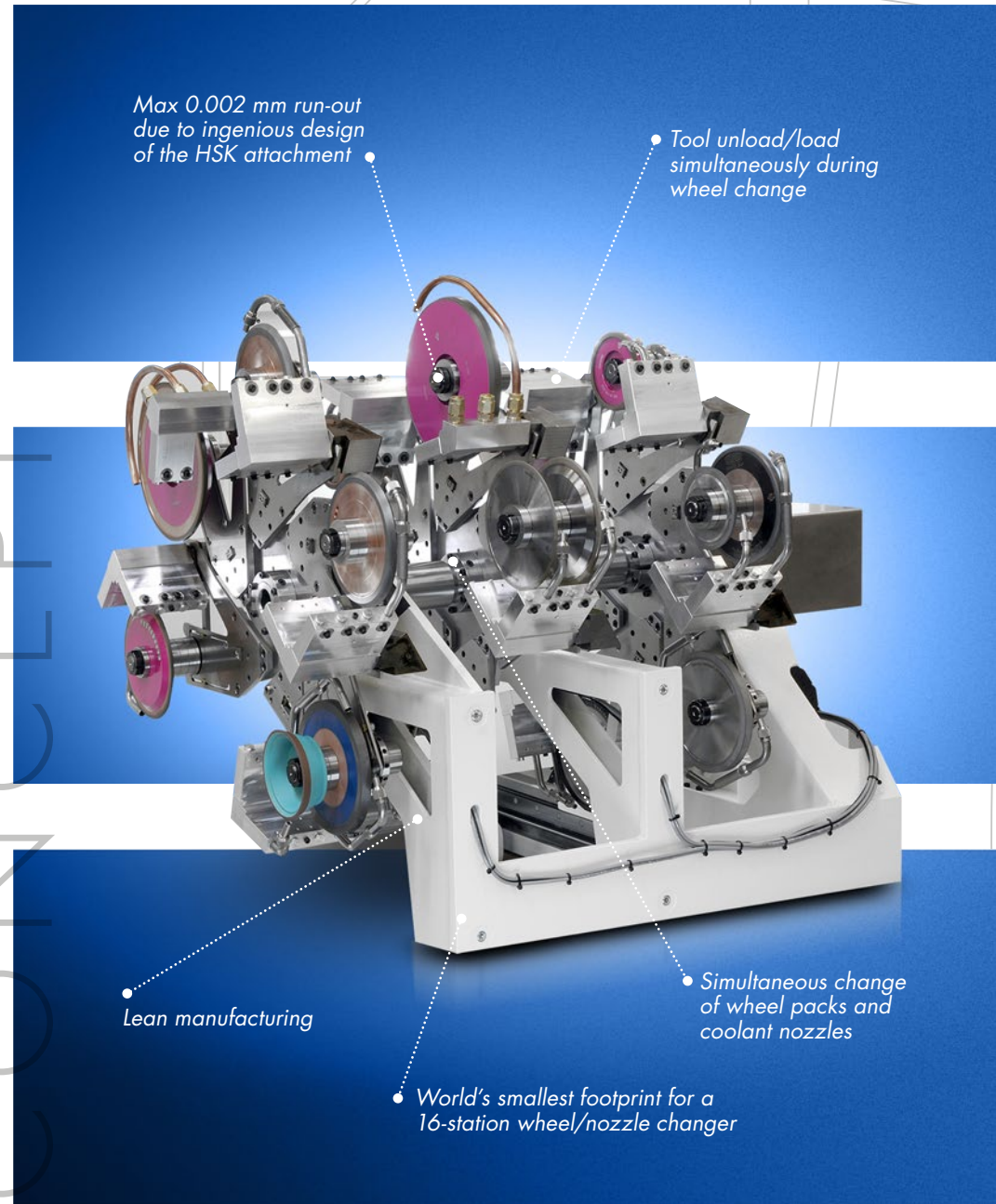
GRINDSMART® 629XW3

THREE TIMES MORE AUTONOMY
AND FLEXIBILITY

The GrindSmart®629XW3 is a 6-axis super-precision grinding center with the latest automatic wheel/nozzle changer that holds up to 16 wheel packs. It was developed to meet the needs of the demanding market for enhanced autonomy, precision and embedded intelligence. Combined with Virtual Grind®Pro software and integrated ability to program with a high level of flexibility and control for the production of large or small series, this innovation increases the unattended grinding of complex and different shapes of tools without human intervention.



EXPERT
PRECISION
LEAN
MANUFACTURING



Max 0.002 mm run-out due to ingenious design of the HSK attachment

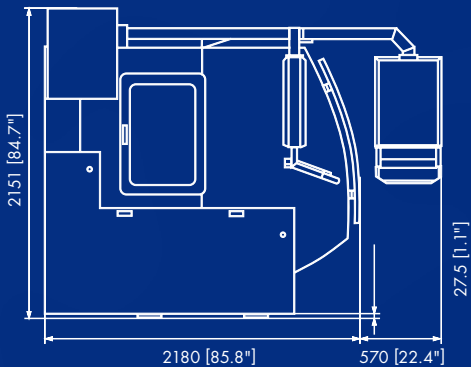
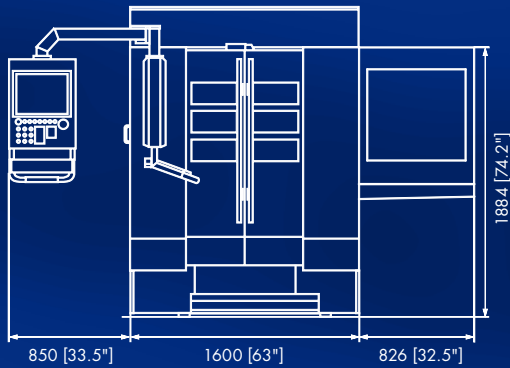
Tool unload/load simultaneously during wheel change

Lean manufacturing

Simultaneous change of wheel packs and coolant nozzles

World's smallest footprint for a 16-station wheel/nozzle changer

GRINDSMART®629XW3 TECHNICAL DATA (MM)



GRINDING RANGE \varnothing 0.1 – 20.0 mm (.004" – .75")

CONTROL FANUC 30iMB

X axis	Stroke	300 mm (11.8")
	Fast travel	12 m/min. (473"/min.)
	Encoder type	Absolute linear scale
Y axis	Resolution	0.00001 mm (.0000004")
	Stroke	220 mm (8.6")
	Fast travel	12 m/min. (473"/min.)
Z axis	Encoder type	Absolute linear scale
	Resolution	0.00001 mm (.0000004")
	Stroke	180 mm (7")
A axis	Fast travel	12 m/min. (473"/min.)
	Encoder type	Absolute linear scale
	Resolution	0.00001 mm (.0000004")
B axis	Stroke	-50° to 90° (140°)
	Fast rotation	6480°/min.
	Encoder type	Rotary glass scale
C axis	Resolution	0.0000125°
	Stroke	-75° to 135° (210°), direct drive
	Fast rotation	8640°/min.
C axis	Encoder type	Rotary measuring encoder
	Resolution	0.00005°
	Stroke	Tool rotation
C axis	Fast rotation	300 r.p.m.
	Encoder type	Rotary, on AC motor
	Resolution	0.0001°

GRINDING MOTOR SYNCHRONOUS

Power	11 kW (15 HP), direct drive
Peak Power	14 kW (19 HP)
Rotation speed	500 – 12000 r.p.m.
Grinding wheels	\varnothing Max. 200 mm (7.9")

WHEEL CHANGER SMARTCHANGER

Wheel pack capacity	16
Number of wheels per pack	4
Attachment	HSK50E

CLAMPING

Clamping system	Adapters Schaublin and Nann
Clamping range	\varnothing 0.5 – 20.0 mm (.02" – .75")
Clamping type	Pneumatic

ROBOT LOAD & UNLOAD

Number of tools	Up to 1000 (3 cassettes)
Shank diameter	1.0 – 20.0 mm (.04" – .75")
Max. overall length	300 mm (12")
Speed	65 m/min (2560"/min.)
Clamping	Hydraulic

TOOL SUPPORTS

Shank support	«V» clamping, Hydraulic
Cutting portion support	«V» or Half moon, Hydraulic

MACHINE

L x W x H	2180 x 2240 x 2151 mm (85.8" x 88" x 84.7")
Weight	3500 kg (7716 lbs)
Total power	Maximum 18 kW 3 x 400V/25A

* Specifications are subject to change without notice