

SMEC

SLV 1000/1000M

VERTICAL TURNING CENTER



- 1988 - Started as Samsung Heavy Industries Machine Tools Business
- 1989 - Horizontal and vertical machining center technology partnership with OKK Japan
- 1991 - Turning center and vertical machining center technology partnership with Mori Seiki
- 1996 - 5-sided processing center technology partnership with Toshiba
- 1999 - Spun out from Samsung Aerospace Industries and established SMEC Co., Ltd



SLV 1000/1000M

A Type : Chuck Size 24"
B Type : Chuck Size 32"

Strongest in class with superb structural design
Simultaneous heavy duty and precision turning

- High speed, precision and high rigidity spindle
- Stable machine structure
- Significantly reduced non-cutting time and high productivity

High Accuracy, High Rigidity Spindle

Main Spindle Structure

High torque main spindle motor is supported by strong Double Cylindrical Roller bearings and Angular Thrust bearings which allow heavy duty cutting and minimize acceleration/deceleration times.

Spindle nose(ASA) : **A2-15**

Spindle bearing diameter(front) : **Ø200mm**

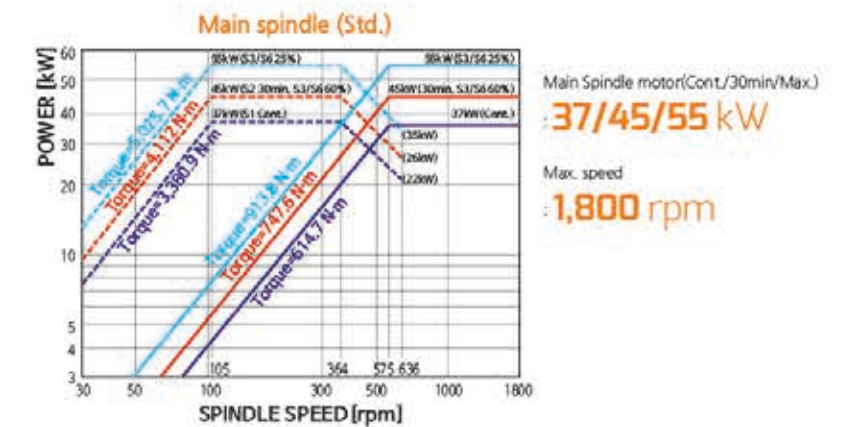
A2-15, 24"(32") chuck available



2 Step Gear Box (Std.)



Spindle Power & Torque Diagram



An innovative high precision, heavy duty CNC Lathe, integrated with all of **SMEC's** advanced technology - **SLV 1000/1000M**



Spindle speed
1,800 rpm (24")
800 rpm (32")

Max. machining diameter
1,000 mm

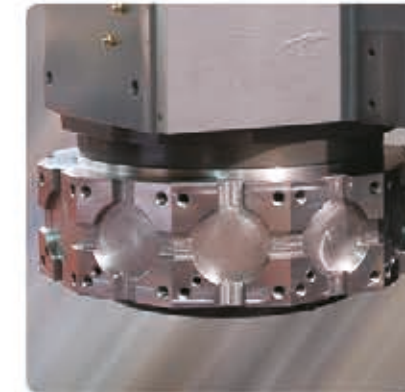
Max. machining length
955 mm

Rapid traverse(X/Z)
20/20 m/min

Highly Reliable and Rigid Structural Design

Ensure heavy duty and precision cutting with excellent structural design.

SLV 1000 (Standard Turret)



SLV 1000M (Mill Turret)



Indexing Time

0.3 sec(60Hz)

Number of tool positions

12 stations

High Speed, Heavy Duty Servo Turret

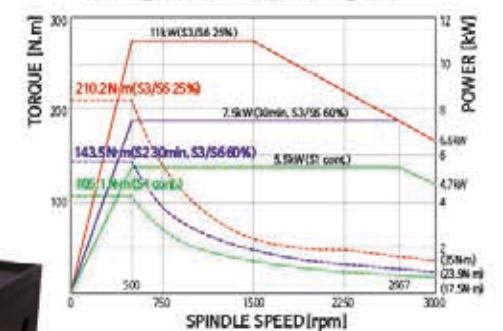
Driven by a reliable high torque servo motor, the 12-station heavy-duty turret indexes nonstop, bi-directionally with a fast 0.3 second from station to station. Large diameter 3 pieces precision Curvic coupling with 148.9kN(33,484lbs) of turret clamping force enables precision as well as heavy-duty cutting. SLV 1000/1000M is equipped with standard 12-station BMT85 turret, capable of accepting rotary tools at any station.

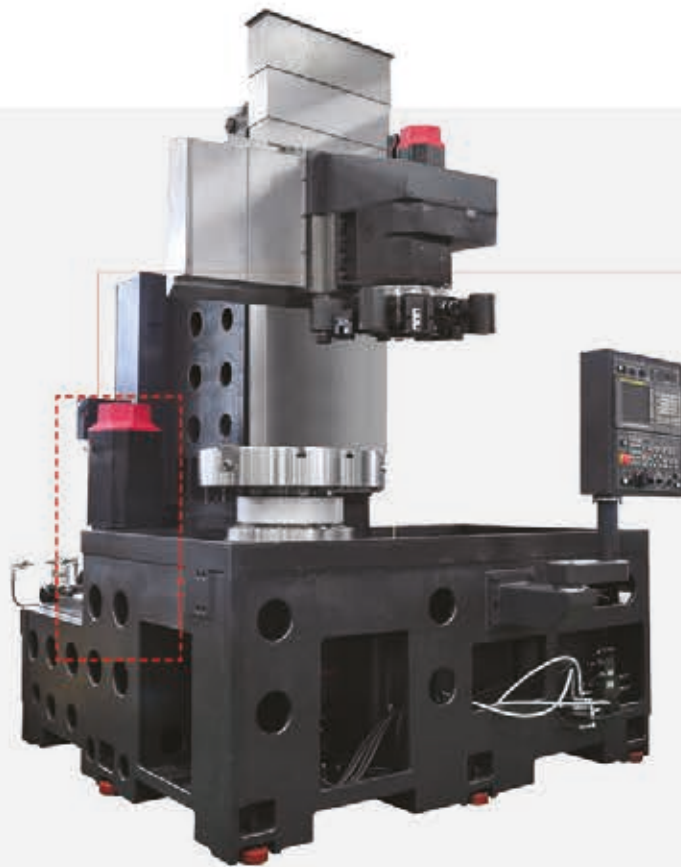
CLAMP FORCE

148.9kN (TOTAL)



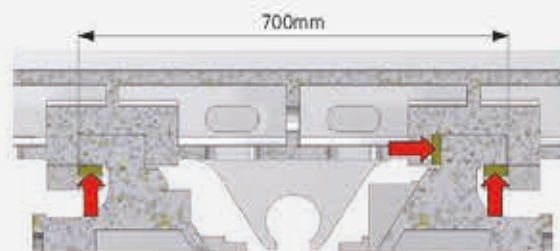
Milling Motor Torque Diagram





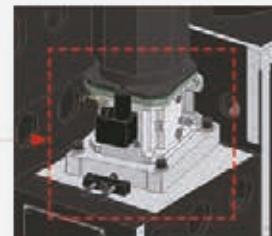
Main Body Construction

The main body of SLV1000_M is consisted of one piece meehanite cast iron bed, wide column, anti-heat displacement spindle and headstock, and integral Box way construction with anti-friction mating way surfaces that ensure unsurpassed long term rigidity and superior accuracy.

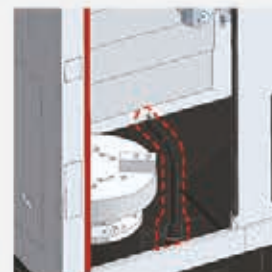


Three(3) adjustable Gibs on X and Z axis provide easier maintenance as well as long term rigidity and accuracy

Column Span : The largest in its class
700mm



2 Step Gear Box



Tool Presetter
(Special Option)

X/Z Linear Scale
(Special Option)

- Spec. : $\pm 5\mu m$



Easy Chip Removal and High Volume Coolant System.

Large volume of flushing coolant allows minimal chip build-up, and slanted splash guard design effectively removes the chip out from the machine.



Motor

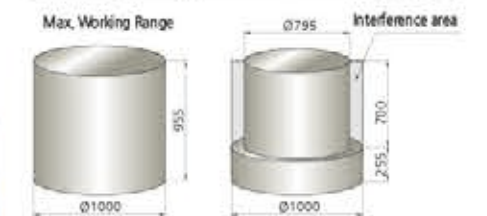
1.1 kW

Discharge Capacity

300 L/min

Working Range

Unit : mm



Swivel Operation Panel

Swivel operation panel of 10.4 inch color TFT LCD monitor can turn to 90 degree, providing operators with easy access to the control panel while working on the machine

Pre-tensioned and Double Anchored Ballscrews

All axes ballscrews are pre-tensioned, heat treated, and fixed by double anchors on both ends, providing ultimate rigidity and minimal thermal growth.



Reliable Lubrication Dispenser

Maintenance free piston distributors automatically dispense a precise quantity of oil to each lubrication point.

Capacity : **4 Liter**



High Precision

Surface Roughness



Model : SLV 1000

Roundness

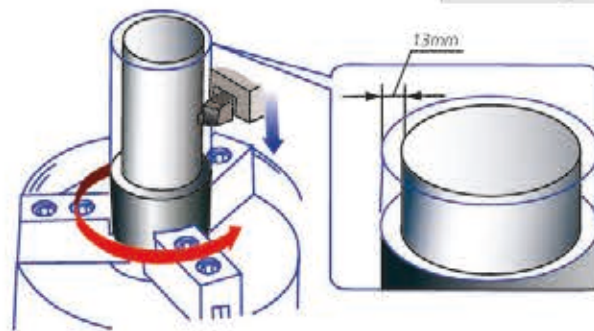


Cutting condition	
Tool	Diamond tool (nose radius 0.020 inch)
Material	AL150<Aluminum>
Cutting speed	198 m/min
Feedrate	0.05 mm/rev
Depth of cut	0.1 mm
Outer diameter	200 mm
Filter	1-50

Processing Speed

Turning Performance (material:SM45C) SLV 1000

Heavy-duty cutting (O.D) <32mm×32mm qualified tool>



Spindle speed
357 rpm

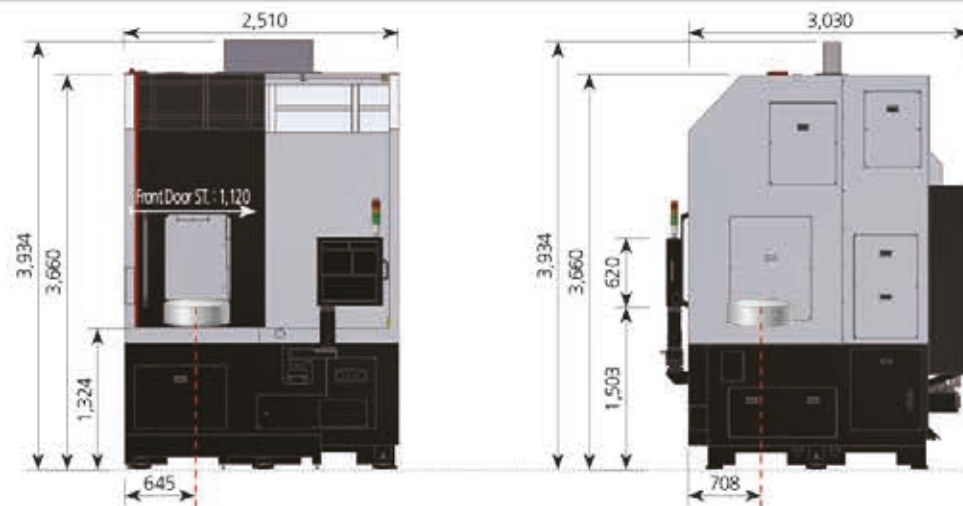
Cutting speed
142 m/min

Depth of cut
13 mm <Spindle Load 65%>

Feedrate
0.3 mm/rev

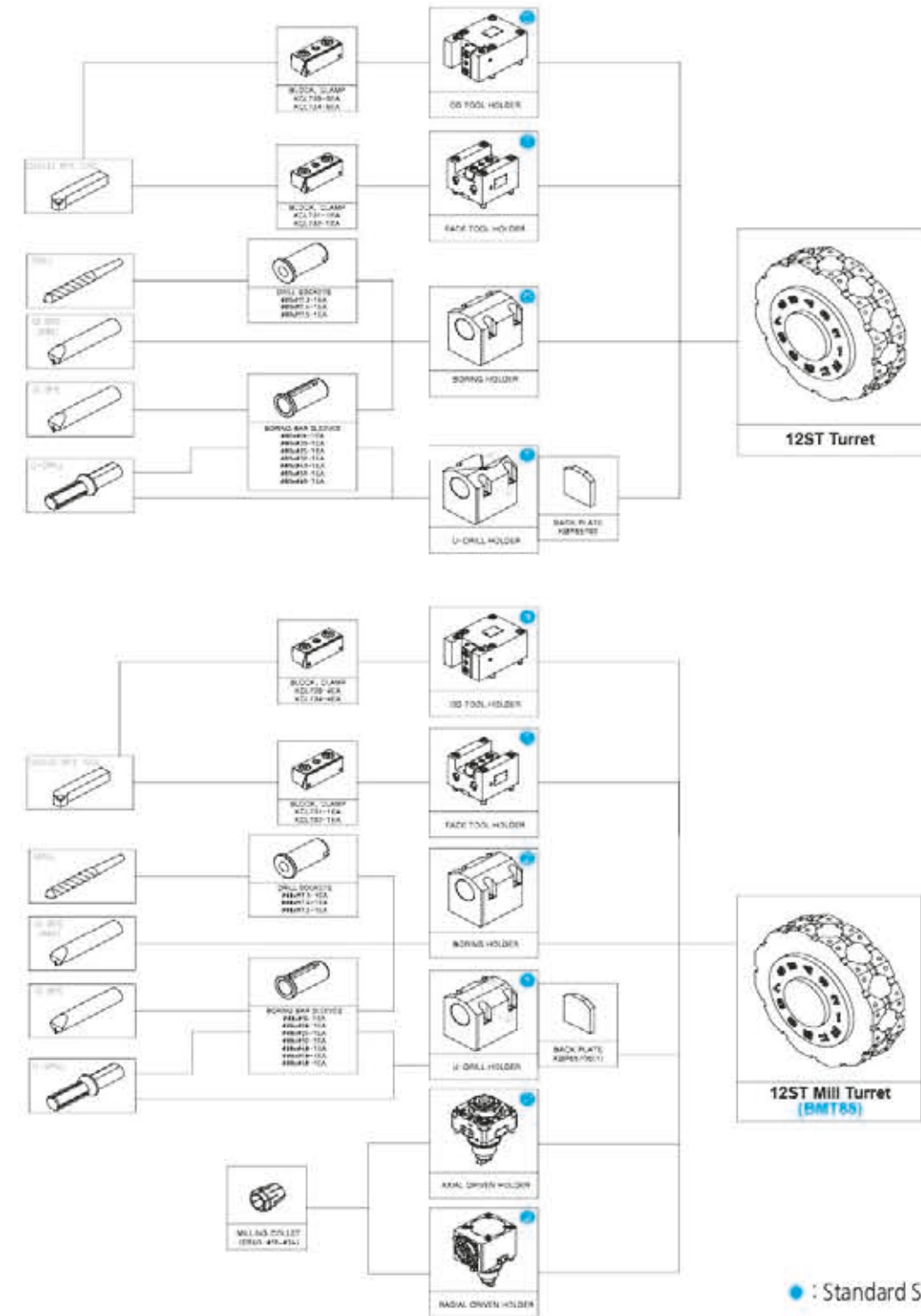
Machine Dimensions

Unit : mm



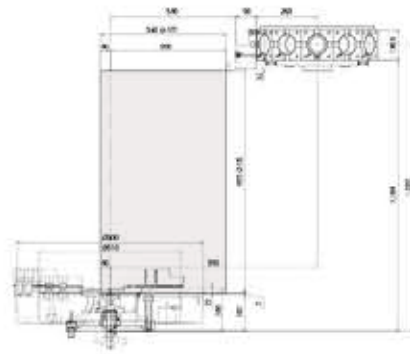
Tool Holders & Sleeves

Unit : mm

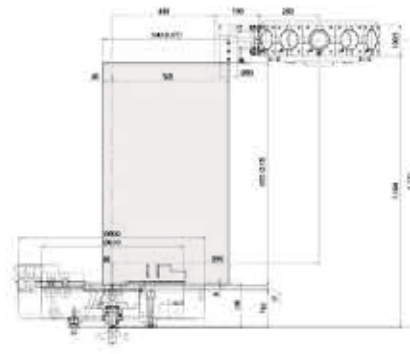


Work Range

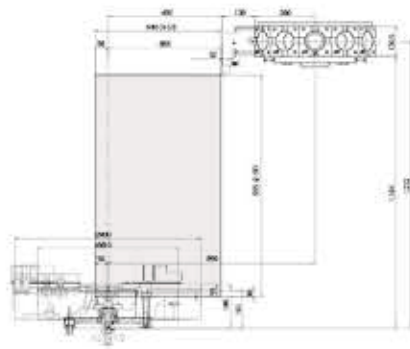
Unit : mm



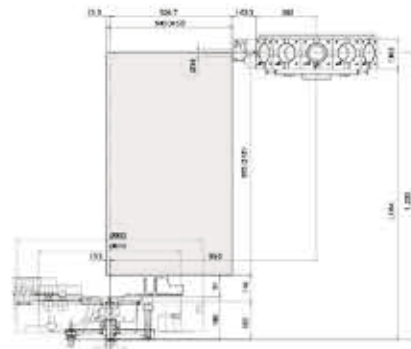
O.D HOLDER



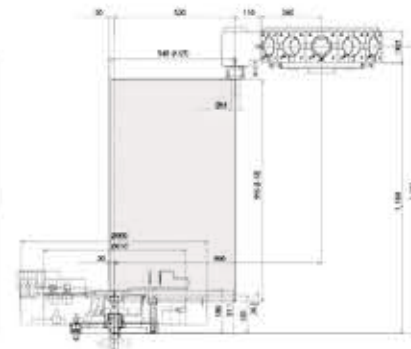
I.D HOLDER



FACE HOLDER



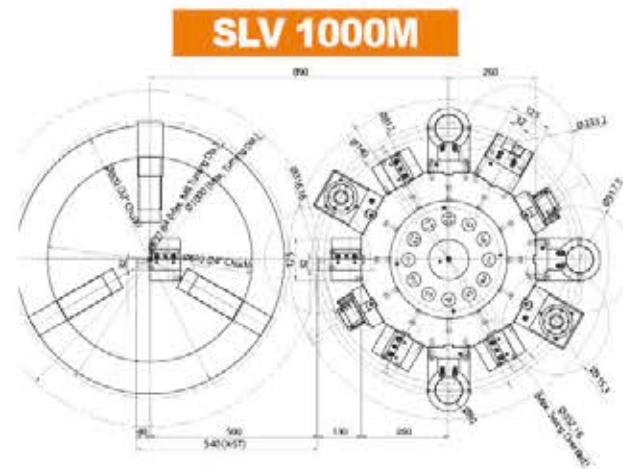
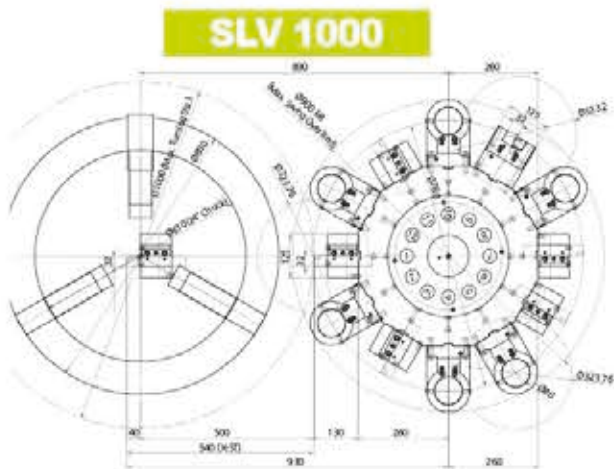
STRAIGHT MILLING HOLDER



ANGULAR MILLING HOLDER

Turret Interference

Unit : mm



Major Specifications

DESCRIPTION			SLV 1000		SLV 1000M	
			A type	B type	A type	B type
Chuck	Chuck size	inch	24"	32"	24"	32"
	Swing over bed	mm	1,100	1,100	1,100	1,100
Capacity	Swing over cross slide	mm	795	795	795	795
	Max. turning diameter	mm	1,000	1,000	1,000	1,000
	Max. milling diameter	mm	-	-	827	827
	Max. machining length	mm	955	955	955	955
	Spindle speed	rpm	1,800	800	1,800	800
Spindle	Spindle nose	ASA	A2-15	A2-15	A2-15	A2-15
	Draw tube ID	mm	-	-	-	-
	Spindle bore diameter	mm	100	100	100	100
	Spindle motor (Cont./Max)	kW	37/55	37/55	37/55	37/55
Travels	X-axis travel	mm	540	540	540	540
	Z-axis travel	mm	955	955	955	955
	X-axis Rapid traverse rate	m/min	20	20	20	20
	Z-axis Rapid traverse rate	m/min	20	20	20	20
	Number of tool stations	ea	12	12	12 (BMT85)	12 (BMT85)
Turret	Turning tool shank size	mm	32	32	32	32
	Boring bar diameter	mm	80	80	80	80
	Turret index time(next station swivel time)	sec	0.30	0.30	0.30	0.30
	Rotary tool speed	rpm	-	-	3,000	3,000
	Rotary tool motor (Cont./Max)	kW	-	-	5.5/11	5.5/11
Tailstock	Quill diameter	mm	-	-	-	-
	Quill stroke	mm	-	-	-	-
	Spindle taper	MT	-	-	-	-
Machine	Size (with Side Chip conveyor) L×W×H	mm	2,510(3,741) × 3,030 × 3,934		2,510(3,741) × 3,030 × 3,934	
	Size (with Rear Chip conveyor) L×W×H	mm	2,510 × 3,030(4,519) × 3,934		2,510 × 3,030(4,519) × 3,934	
	weight	kg	17,000	17,000	17,200	17,200
	Coolant tank capacity	Liter	350		350	
Electric power supply		KVA/V	75/220	75/220	80/220	80/220
Controller			FANUC			

* Design and specifications subject to change without notice.

| : Option

Standard Accessories

- 24" hollow 3 jaws chuck (A Type)
- 32" hollow 3 jaws chuck (B Type)
- Chuck clamp confirmation
- Chuck clamp foot switch
- Chuck pressure switch
- Coolant system
- Door interlock
- Full splash guard with coolant tank
- Jaw (soft 3set, hard 1set)
- Leveling unit
- Manual/Part list (1set)
- Patrol lamp (3 colors)
- Safety precaution name plate
- Shower coolant unit
- Spindle gear box (2 step)
- Spindle orientation
- Tool box
- Tool holders
- Work light (LED lamp)

Optional Accessories

- Air blower
- Air conditioners (electric cabinet)
- Air gun
- Auto door
- Bar Feeder interface
- Chip bucket
- Chip conveyor
- Coolant blower
- Coolant chiller
- Coolant gun
- Coolant level switch
- Coolant pressure switch
- Counter (total, multi, tool, work)
- Dual pressure chucking
- High pressure coolant
- Linear scale (X, Z)
- Oil mist collector
- Oil skimmer
- Robot interface
- Special chuck
- Tool presetter (removable)
- Transformer



Fanuc Manual Guide i

Erstellen Sie Ihre Teileprogramme
in nur wenigen Schritten

Reduzieren Sie den Zeitaufwand bei der Überführung Ihrer Zeichnungen in die Produktion:

Mit dem FANUC MANUAL GUIDE i lassen sich sowohl einfache als auch hoch komplizierte Maschinenzyklen inklusive Dreh-, Fräs-, Bohr- und Messzyklen schnell und einfach umsetzen. Dabei unterstützt die Software Sie durch intuitive interaktive Benutzerführung sowie spezielle Funktionen zur einfachen Teileprogrammierung und Simulation.

Merkmale:

- Bedienerfreundliche Programmierumgebung
- Erweiterte Zyklusbearbeitung (Drehen und Schleifen)
- Leistungsstarke Profilberechnung
- Nahtloser Umgebungswechsel
- Werkzeugverwaltungsfunktion
- Messzyklen
- Restschnitt
- Bearbeitungssimulationen

Die benutzerfreundliche Software MANUAL GUIDE i zur Fertigungsprogrammierung vereinfacht den Betrieb Ihrer Maschine. Die innovative Programmierung ermöglicht die Entwicklung von der Zeichnung zum Werkstück in kürzester Zeit. Dank MANUAL GUIDE i die CNC-Maschinen von FANUC schnell und einfach für Dreh-, Schleif- und Verbundbearbeitungsprozesse programmiert werden.

Selbsterklärende Menüs und grafische Simulationen führen den Benutzer durch die Programmierung, was selbst bei komplexen Bearbeitungsvorgängen zu hocheffizienten Ergebnissen führt.



Siemens Sinumerik 828D

Mehr Produktivität mit SINUMERIK 828D
– Smart Operation

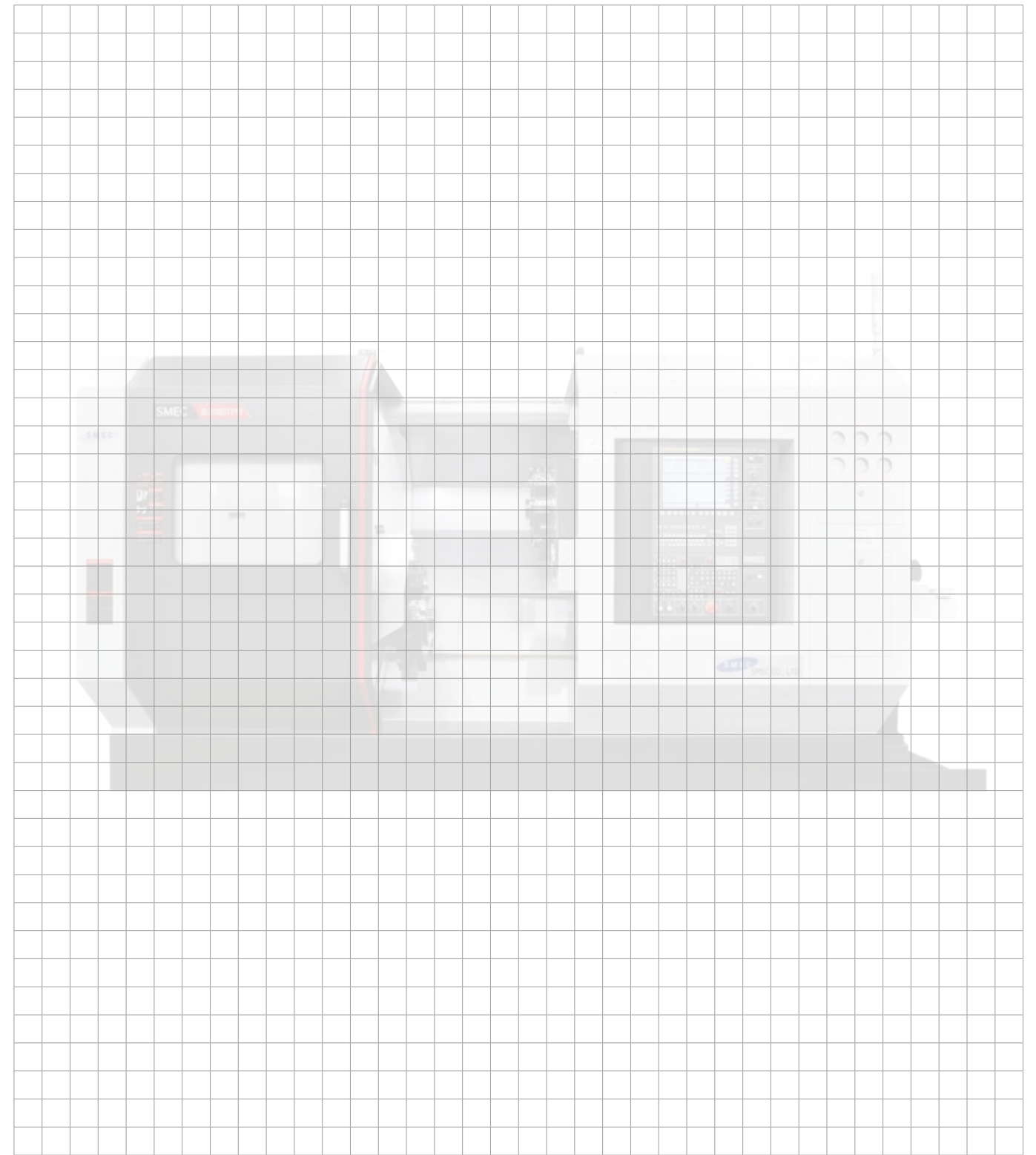
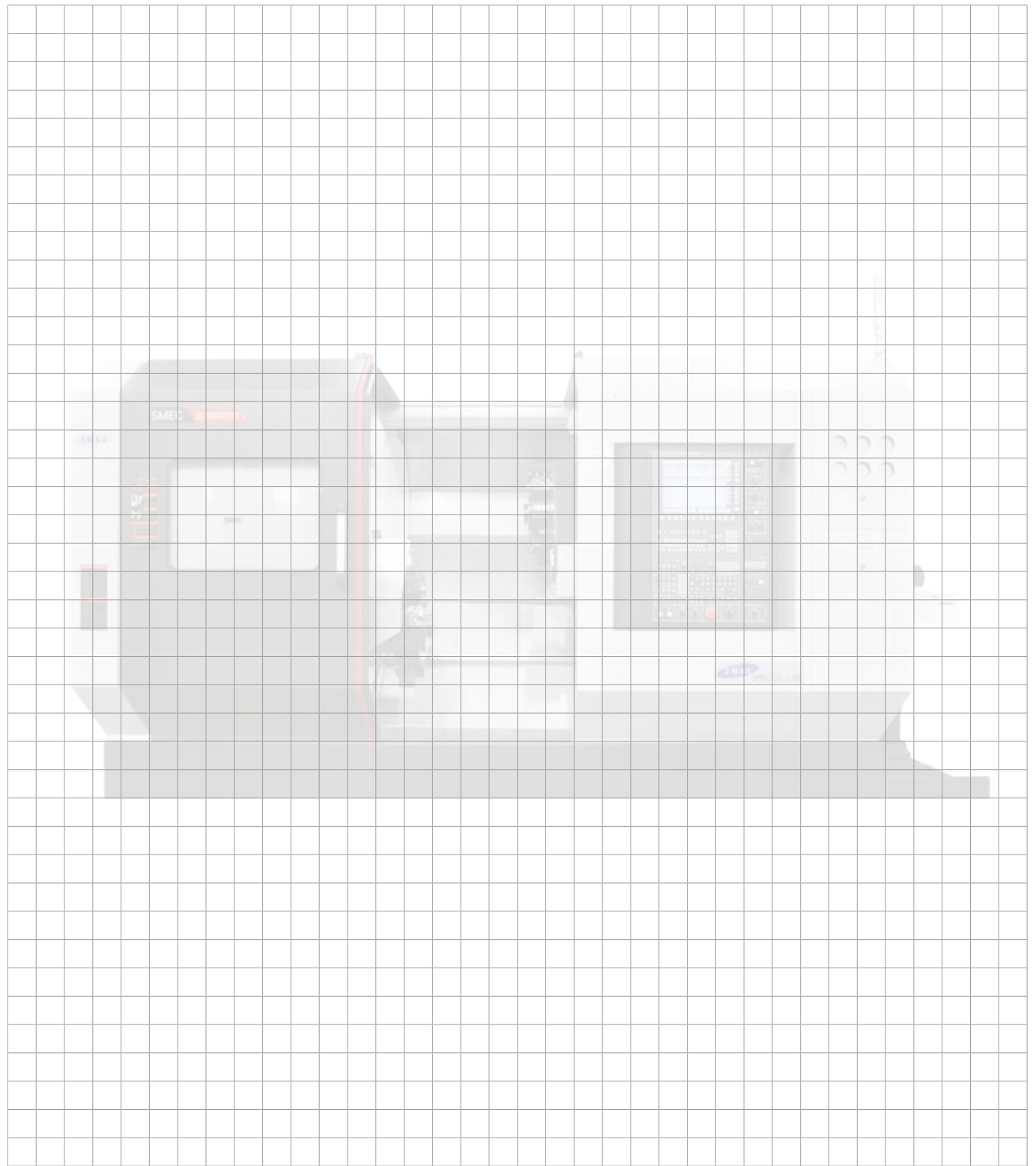
Robuste MultiTouch-Bedienung
kombiniert mit SideScreen

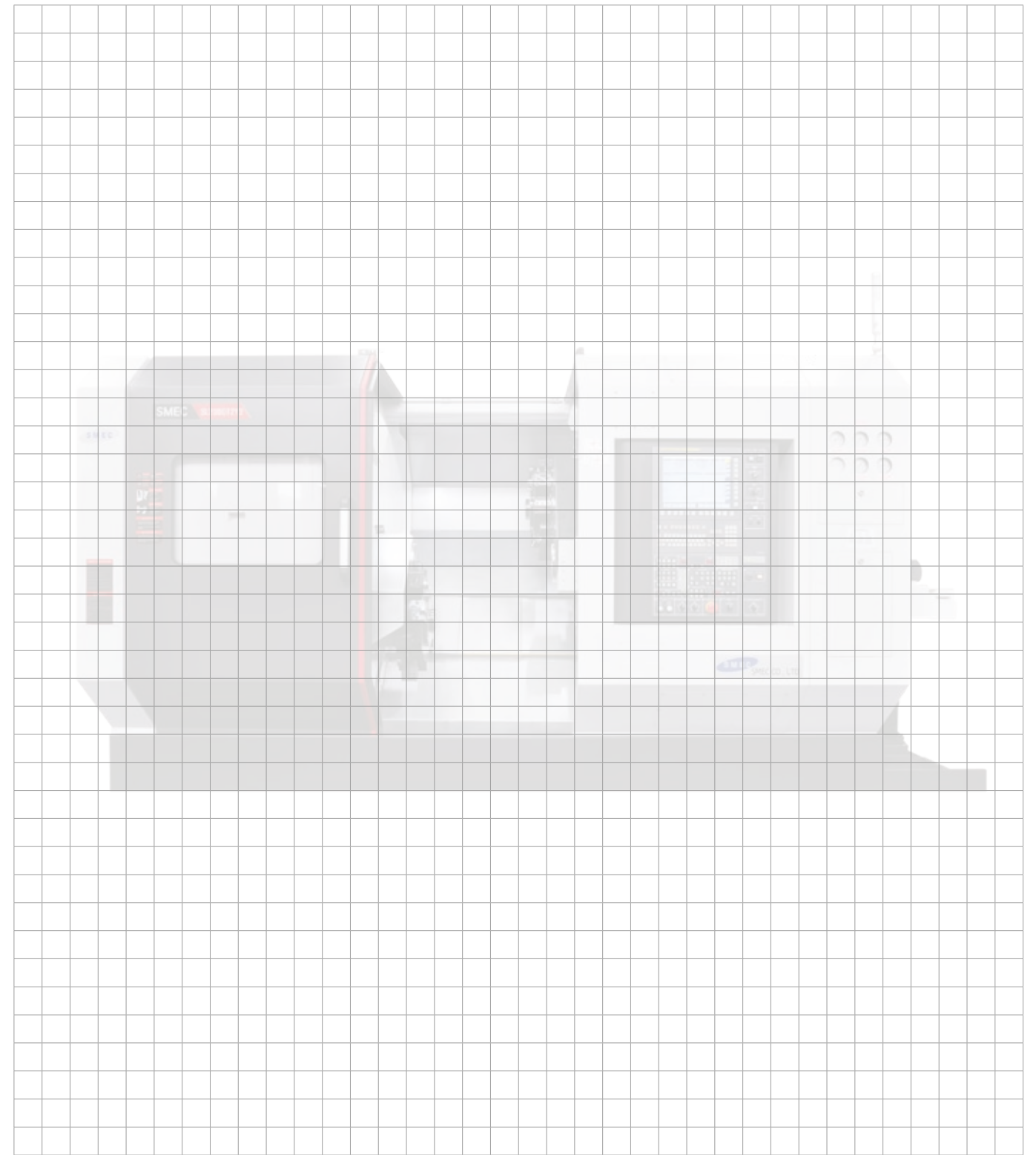
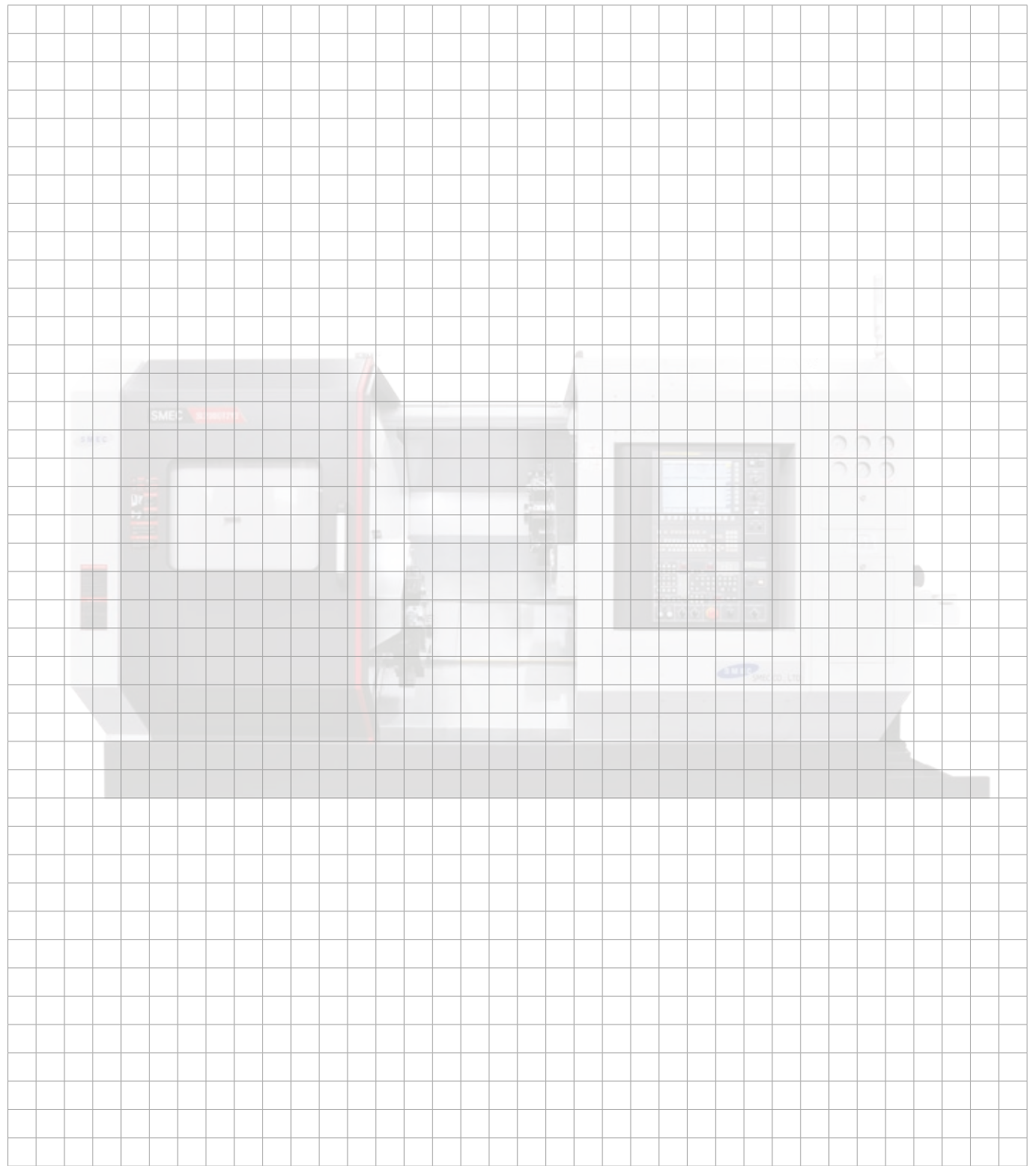
Für Werkstatt, Lohnfertigung und Großserienfertigung sind hochproduktive Automatisierungslösungen gefragt, die den Weg in die Digitalisierung begleiten.

Ob Einzelteil- oder Massenfertigung, einfache oder komplexe Werkstücke – die SINUMERIK CNC-Lösungen bieten Werkzeugmaschinenbetreibern immer die passende Lösung für ihre Anforderungen.

Durch die tägliche Nutzung von mobilen Geräten wie Smartphones, Tablets oder Computern haben wir eine bestimmte Art der Interaktion mit Maschinen entwickelt. Werkzeugmaschinen bilden hier keine Ausnahme mehr.

- Der Trend zu größeren Bildschirmen eröffnet die Möglichkeit, zusätzliche anpassbare Fenster in das HMI einzubinden.
- Änderung des Bildseitenverhältnis von 4:3 in 16:9.
- Zugleich stehen Lösungen bereit, mit denen die Benutzeroberfläche individuell an die Anforderungen der Kunden angepasst werden kann.
- So kann der Maschinenbediener wesentlich mehr Informationen parallel betrachten.





Gleich einspeichern und
ANGEBOT sichern!

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