

# SPINNER

Machine tools

The complete machine range for turning, milling and grinding



## Model range 2017



Tradition in Mechanical Engineering

[www.spinner.eu.com](http://www.spinner.eu.com)  
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**SB/PD series:**

Ultra-Precision Lathe for micro-finishing and hard-turning

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**TC series:**

Powerful Universal Lathe for high cutting performance

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**TTS series:**

High Productive Turning Center for simultaneous machining with up to three turrets

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**Bar feeders:**

Specially for SPINNER CNC-Lathes designed bar-loading system

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**U-Compact-Line series:**

Travelling-Column Machining Center with 3, 4 or 5-axes-machining, the entrylevel to the superior milling class

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**U-Advanced series:**

Travelling-Column Machining Center with up to 5 axes, for high-end applications in the 5-axes simultaneous machining and the series production

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**U-Production-Line series:**

Machining Center in long-bed design with linear motor and 5-axes, for the demanding mass producer

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**VC series:**

High-Speed Machining Center for demanding tasks in the workshop and in tool and mould making

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**VC-5A series:**

5-Axes Precision Machining Center for large workpieces

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**CM-Line series:**

Universal toolroom milling machines with an open working-area, for professional training and single-item production

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**SM100:**

THE Universal Toolgrinder for each workshop

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**Automation:**

Integrated standard solutions with robot or individual solution, ALL FROM ONE SOURCE

## Turning

*We have been perfecting and improving our machine tools for more than 50 years. Today, more than 550 employees in the SPINNER GROUP complete more than 1,000 machine tools each year. SPINNER machines are successfully being used in more than 60 countries of the world.*

*In order to satisfy your requirements, we offer a wide range of Turning Machine and Machining Centre products. Tens of thousands of customers throughout the world trust in our CNC machine tools.*

*Our machine tools are always used where a particular demand in precision and reliability is required. Innovation and practical solutions in detail are guaranteed by our extensive construction department. We manufacture all important components and assemblies ourselves in our production plants in order to be able to supply you with machine beds, guideways, spindles and turrets that are perfectly matched to one-another.*

*Our machine tools are sophisticated seriesbuilt products manufactured at a high level. High precision standards in all areas of the production and assembly ensure for the optimum constant quality of our products. Each machine is subjected to a strict final inspection of all parameters.*

*We supply turnkey projects with automation for large-scale production. In order to ensure that the use of our machine tools is successful, we offer training courses for the operation, programming and maintenance of our systems.*

*Our service hotline deals with technical queries concerning the programming and repair of your SPINNER machine tools at any time and at short notice.*

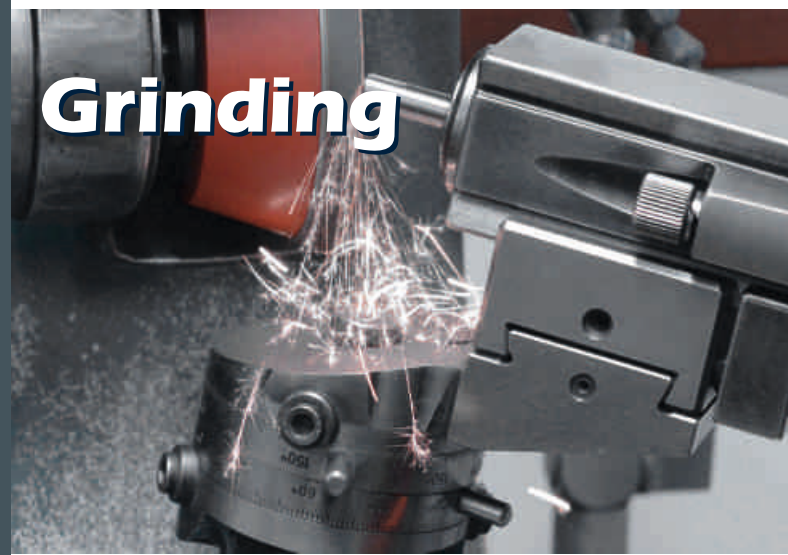
*Place your trust in our products as well and let us know what we can do for you.*



## Milling



## Grinding



## Automation



# SB, PD

## SPINNER

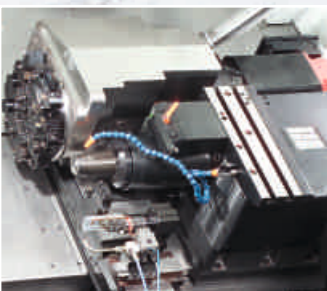
PD-CNC

Micro-finishing and diamond turning  
Hard turning > 60 HRC  
Perfect surface finishing

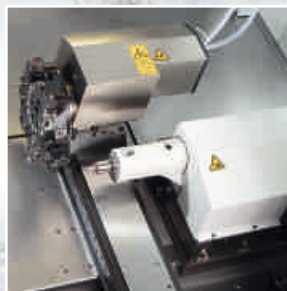
### Ultra Precision Lathes



- Most compact dimensions among precision turning machines
- Hardened and ground precision sliding guideways with high vibration damping
- 0,1  $\mu\text{m}$  resolution linear scales
- Micro-turning in sub  $\mu\text{m}$ -range
- The most precise spindles on the market with roundness < 0,1  $\mu\text{m}$
- Best slide positioning repeatability
- High accuracy process reliability



Turret and sub spindle



Turret and tailstock



Linear tooling

Optimal geometric tolerances  
 Precise clamping devices  
 Made in Germany

## For Micro-finishing and Hard-turning

Wide range of standardized auto-loading available by robots or special made solutions according to customers workpieces, or bar feeder



Part catcher

### Model sizes

	Collets/Chucks	Max. workpiece sizes
SB32	32/125 mm	Ø ~100 x 150 mm
SB42	42/140 mm	Ø ~100 x 150 mm
PD32	32/125 mm	Ø ~120 x 250 mm
PD42	42/140 mm	Ø ~120 x 250 mm

Universal  
Stable  
Compact

## Powerful Universal Lathes

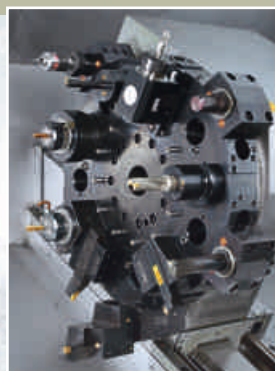


■ Hardened and ground sliding guideways for best vibration damping

- Solid sliding guideways with high damping
- Monoblock rigid casting design of machine body
- Tailstock or sub spindle
- Optional Y axis and driven tools
- Modern motor spindles (up to 85 mm)
- Gearboxes for high torques (from 110 mm)
- Latest control system Siemens 840D or Fanuc 32i



Available with automation



Turret VDI150  
of TC800-MC



Y axis fully integrated in  
the machine bed

Reliable technology  
High precision  
Durable

Turning length from 400 up to 1500 mm



Machine bed TC600



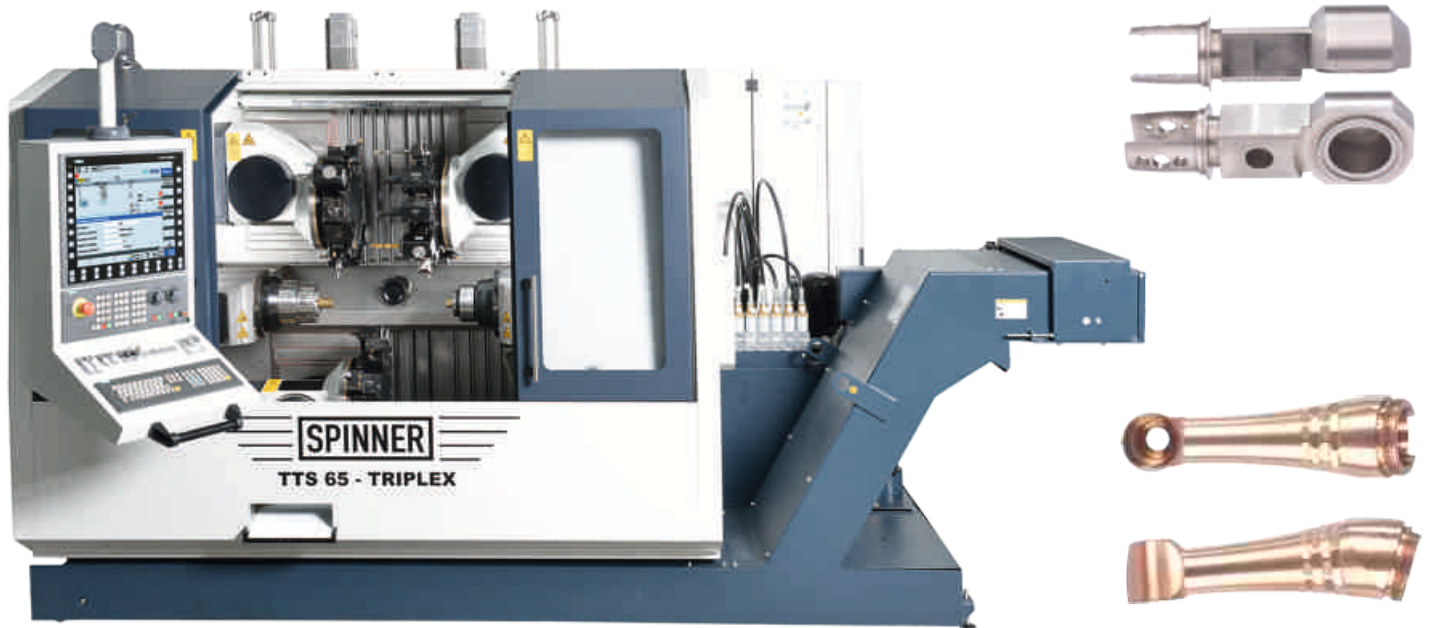
### Model sizes

	Bar material up to	Chucks	Max. Turning length
TC300	52/65 mm	160/210 mm	350 mm
TC400	52 mm	160/210 mm	500 mm
TC600	65/85 mm	250 mm	650 mm
TC800	85/110/175 mm	250/315/400/500 mm	900-1500 mm

# TTS

Powerful  
Highly dynamic  
Highly productive

Simultaneous machining from bar material or with automation



- THE productive turning solution for bar machining or with automation
- Reduction of cycle time by simultaneous operations with up to 3 turrets
- TRIPLEX-Version (3 turrets) with 2 Y axes
- Each turret can work either on the main spindle or on the sub spindle
- Increased cutting performance by integrated passive vibration damping
- Perfect covers for guideways
- Integrated motor spindles with water cooling

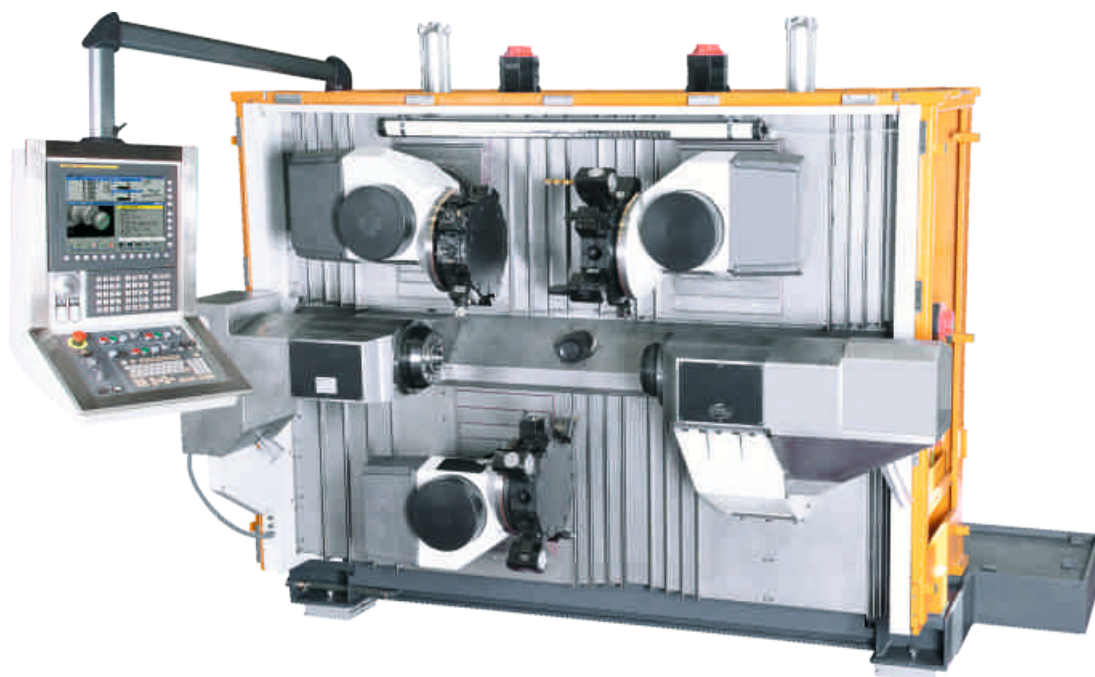
Rigid turret made by SPINNER  
with high-precision toolholders  
BMT45 or with toolholders  
VDI25





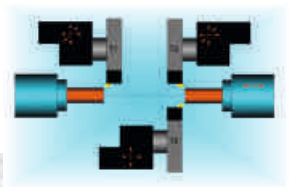
Passive structure damping  
 Increased cutting performance  
 Made in Germany

For complex turning AND milling parts

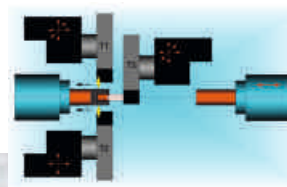
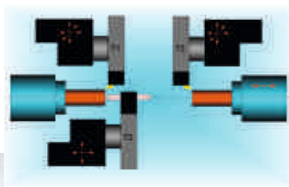


- Perfect working area guarding
- Perfect free chip fall

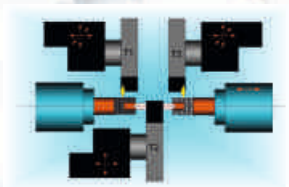
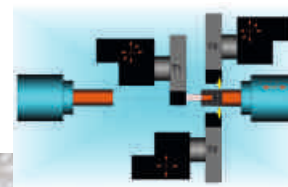
As all turrets can work either on the main spindle or on the sub spindle there are lots of machining possibilities for optimised turret utilisation.



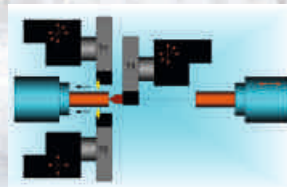
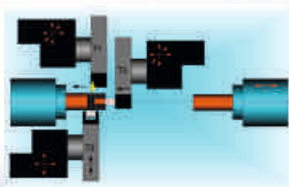
Turret 1 on left spindle, turret 3 on right spindle, turret 2 on left or right spindle



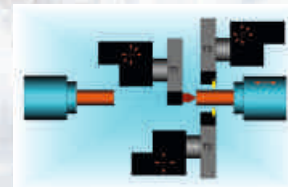
All turrets are working simultaneously on one spindle



Turret 2 is drilling on both sides or turret 2 is used as steady rest



Turret 1 or 3 is used as tailstock



# Bar feeder

SERVO-LOAD 80 1200

Compact  
Fast  
Affordable

## Short bar feeders



■ CNC-servo axis for smooth move of the bar

■ For material up to 1200 / 1500 mm

■ Max. bar diameter 80 / 110 mm



	Servo 80-1200	Servo 80-1500	Servo 110-1500
Max. bar length	1200 mm	1500 mm	1500 mm
Bar diameter	6-80 mm	6-80 mm	8-110 mm

# Bar feeder

SPINNER BARLOAD 42

Simple programming  
Smooth running  
Machine + feeder from one source



## 3mtr Bar Feed Magazine



- Up to 3200 mm bar length
- Oil filled
- Automatic bar change



	Servo 32	Servo 42	Servo 51
Max. bar length		3200 mm	
Bar diameter	4-32 mm	4-42 mm	8-51 mm

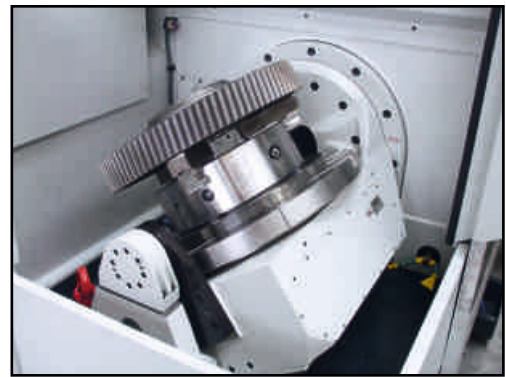
# U-Compact

Universal  
Compact  
Affordable

## Universal Machining Center



U620 Available in 3 configurations  
U3-620: 3-axes-version with fixed table  
U4-620: 4-axes-version with large rotary table  
U5-620: 5-axes-version with integrated rotary/tilting table



■ Both side bearing for tilting-axis

- Large X stroke with 620 mm or 1520 mm
- U3 with fixed table and stationary workpiece in the travelling-column machine
- U4 with large rotary table and with swivel table for 3-face machining
- U5 - THE entry-level machine for 5-axes machining with up to 4 simultaneously interpolating axes



Swivel table U4

# U-Compact

Dynamic  
Optimal access  
Flexible use

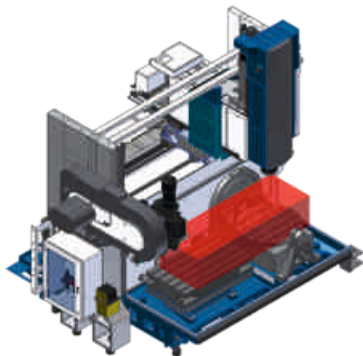
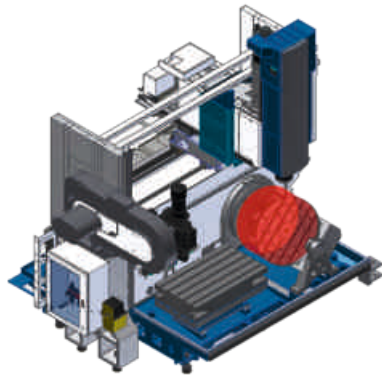
## The entry-level machine for 5-axes machining

U1520 Available in 3 configurations

U3-1520: 3-axes-version with large fixed table

U4-1520: 4-axes-version with large rotary table and fixed table on left side in the working area

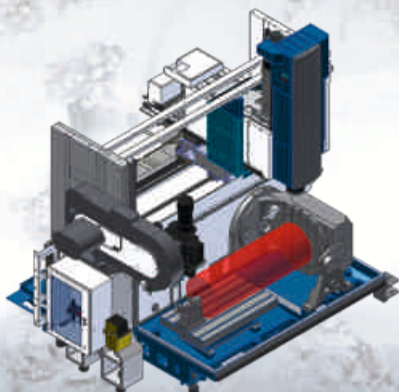
U5-1520: 5-axes-version with integrated rotary/tilting table and fixed table on left side in the working area



### Strokes

	X axis	Y axis	Z axis	B axis
U620	620 mm	520 mm	460 mm	+110°/-90° <sup>1</sup>
U1520	1520 mm	520 mm	460 mm	+110°/-90°

<sup>1</sup> U4 360°



# U-Advanced

Professional 5-axes machining  
Highly dynamic  
Compact and sealed

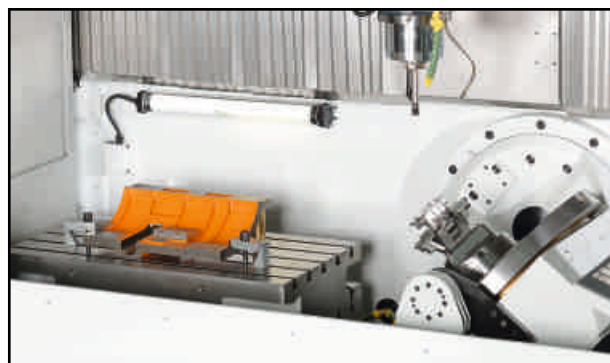
## Travelling-Column Machining Center

U1530 Available in 3 configurations

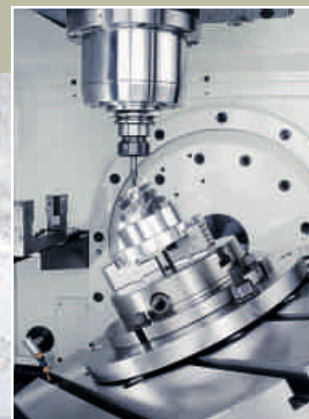
U3-1530: 3-axes-version with large fixed table

U4-1530: 4-axes-version with large rotary table and fixed table on left side in the working area

U5-1530: 5-axes-version with integrated rotary/tilting table and fixed table on left side in the working area



- With high-precision rotary/tilting tables available with weight compensation
- Extendable up to 122 tools
- Available with pallet changer
- Most modern control systems: Siemens 840D-SL or Heidenhain TNC620/TNC640
- With most modern digital drives
- Spindle speeds up to 20.000 rpm



Machining example U4 und U5

# U-Advanced

Optimal accuracy

For tool making and mass producer

Optimal ergonomics

## For High-End applications

U630 Available in 3 configurations

U3-630: 3-axes-version with fixed table

U4-630: 4-axes-version with large rotary table

U5-630: 5-axes-version with integrated rotary/tilting table



### Strokes

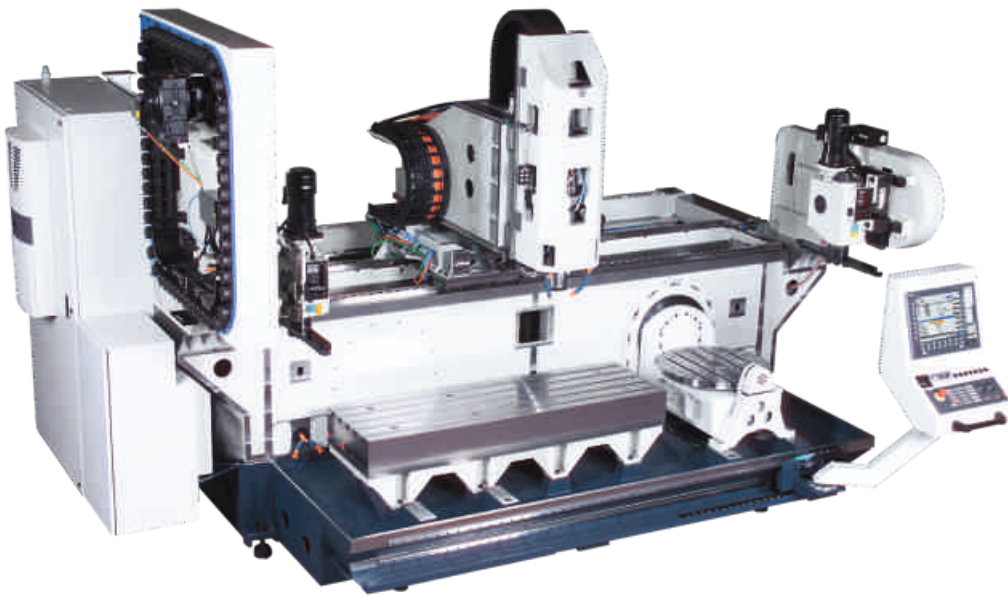
	X axis	Y axis	Z axis	B axis
U630	630 mm	530 mm	465 mm	+110°/-90° <sup>1</sup>
U1530	1530 mm	530 mm	465 mm	+110°/-90°

<sup>1</sup> U4 360°

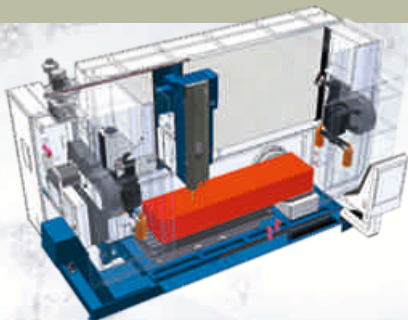
# U-Production

High rigidity  
High spindle speeds  
High feed rates

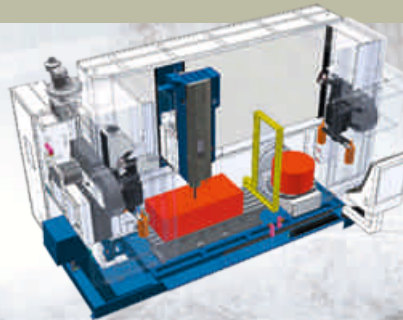
## Long-table version



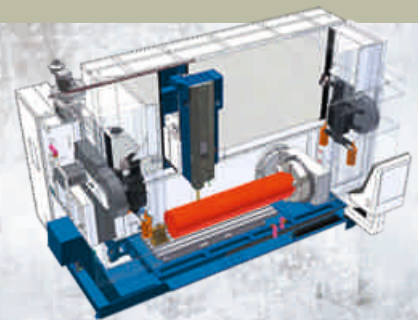
- Universal for long or short workpieces
- Highly productive in pendulum mode by linear motor in the X axis
- Up to 109 tools
- Fully sealed working area with splash guard to the guideway zone
- Two separated magazines for the left and right working area
- Quickly mounted dividing wall for pendulum mode
- High dynamic and rigidity for heavy duty cutting but also HSC-machining
- Moveable operating panel



Machining long workpieces up to 2.500 mm in one long working area



Pendulum mode with a divided working area with fixed table in the left and rotary/tilting table the right working area



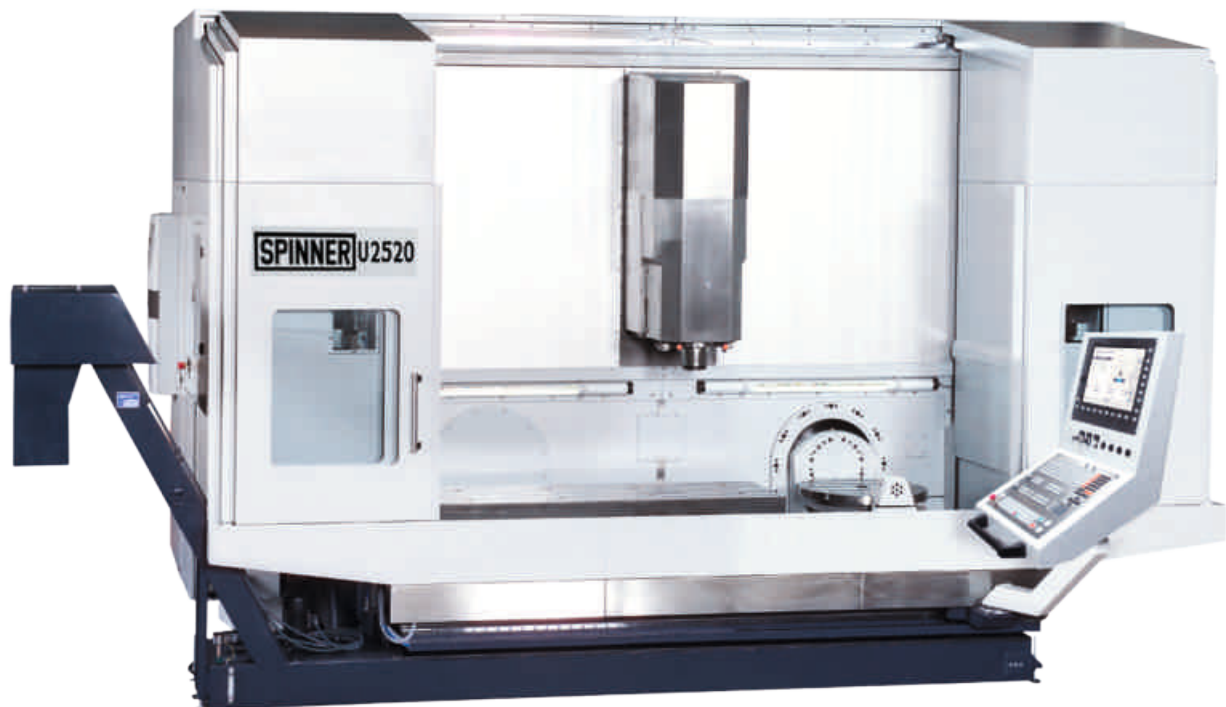
Machining the surface of long shafts in a flexible universal machine



# U-Production

Highly productive  
Rigid casting machine bed  
Highly dynamic

Also available with pendulum mode



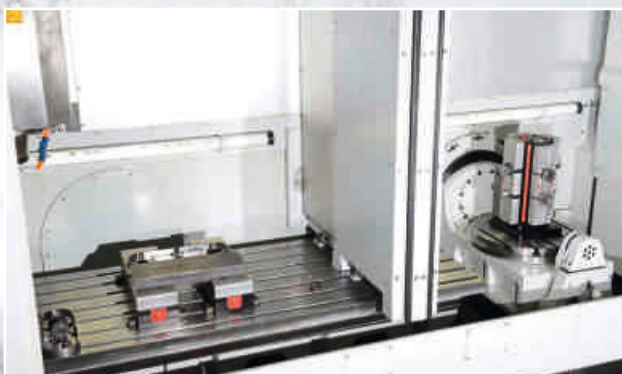
Available in 3 configurations

U3-2520: 3-axes version with large fixed table

U5-2520: 5-axes-version with integrated rotary/tilting table and fixed table on left side in the working area

U7-2520: 7-axes version with 2 rotary/tilting tables in the working area

■ All versions available with single or divided working area with dividing wall for pendulum mode



Machining with pendulum mode

## Strokes

	X axis	Y axis	Z axis	B axis
U2520	2660 mm	520 mm	460 mm	+110°/-90

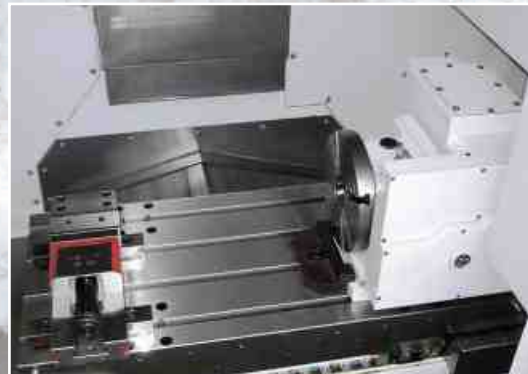
# VC/VC-5A

Compact  
Highly dynamic  
Extendable up to 5 axes

## High-Performance Machining Center



- Full cast design with fixed column
- Mass optimised slides for high rapid traverse
- Large sized linear guides and high dynamics
- Extendable up to 4 or 5 axes
- Spindle speeds between 5.000 and 24.000 rpm, according to the application



# VC/VC-5A

High spindle speeds  
Rigid casting machine bed  
Powerful

For tool and mould making and HSC machining

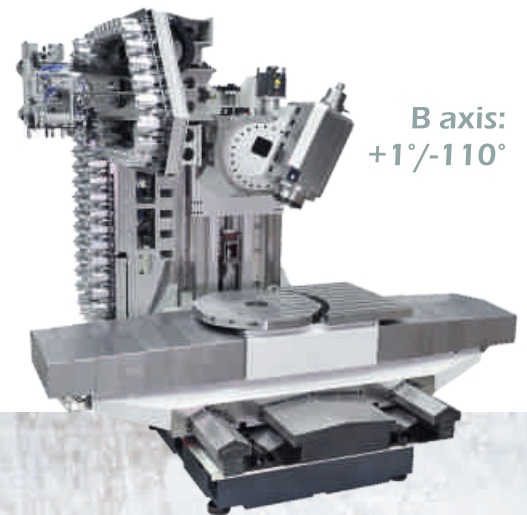


VC1650-5A



- Innovative guideway cover concept
- Small distance to the working table
- Adjustable control panel
- FEM optimised cast structure

5-axes machining of large workpieces



B axis:  
+1°/-110°



## Strokes

	X axis	Y axis	Z axis
VC450	450 mm	400 mm	400 mm
VC750/VC750XL	760/950 mm	460 mm	460 mm
VC1150	1150 mm	620 mm	600 mm
VC1650/VC1650-5A	1650 mm	820 mm	820 mm

Universal and compact  
Optimal access  
Robust and powerful

## Universal toolroom milling machines with open working area

### CM300-F

Automatic CONTINUOUS feed in all 3 axes X/Y/Z. Operation of the axes by joystick on the control panel, including digital readout.



### CM400

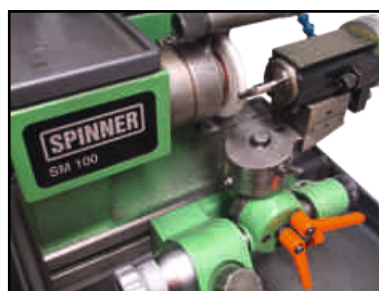
CNC-controlled toolroom milling machine of modern design with unique concept for handwheels to machine conventionally or run under full CNC mode. With latest control Heidenhain TNC128.



Compact  
Universal  
Precise

## Universal Toolgrinder

- For turning and milling tools
- For regrinding or producing new tools
- Special geometry quickly available
- Indispensable for every metal cutting workshop
- With quick changer for grinding wheels
- Always the correct grinding wheel in use



Dividing head



Toolholding plate



Swivel holder



Quick-change-device

# Automation

Turn-key projects  
Individual or standard  
Interlinked machines

Fully automated production solutions for large-scale production



Your advantages at one glance

- Increase in productivity
- Cost reduction
- Optimal processes for your machining requirements
- All with certification according to CE



# Automation

Bulk material supply  
Integrated or external  
Palletising

FROM ONE SINGLE SOURCE, SPINNER and SPINNER-Automation



- Most modern digital drive systems
- Convenient dialogue programming
- With special clamping devices and tools

Ask us for your solution!



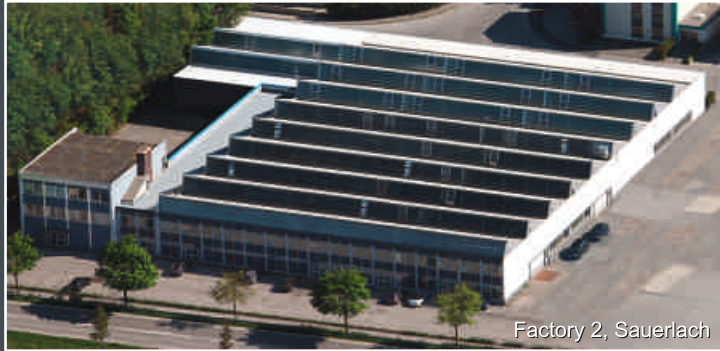


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Spinner Türkei

For further questions please contact your regional sales organisation

Regional Dealer

Technical changes of specifications and pictures are subject to change without notice - Pictures can include options, accessories

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