

THE OPTIMUM SOLUTION WITH THE TOOL MASTER PREMIUM MODULAR SYSTEM

EVOSET Offers the most efficient solution for setting, measuring, testing and managing your tools.

TOOL MASTER SERIES

PRESETTING

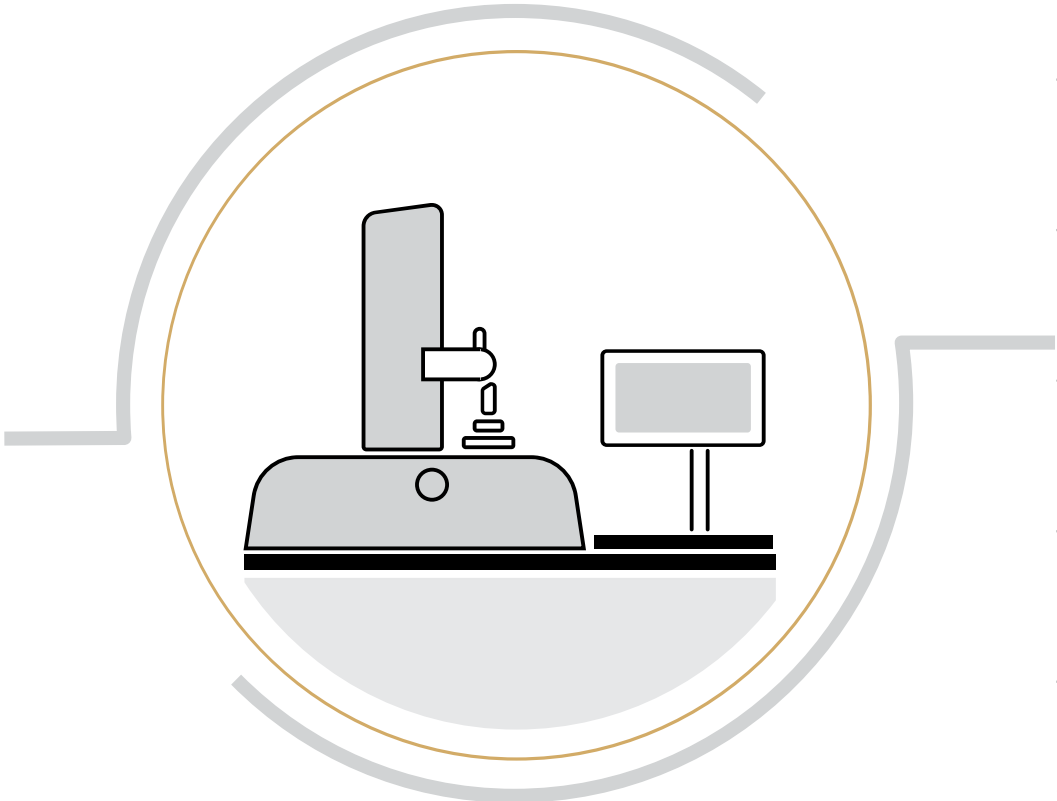
MEASURING

TOOL INSPECTION

EYERAY®SOFTWARE

SMART FACTORY

DIGITALIZATION



CNC

QUADRA

2CAMERA

BASIC

WOOD

SPECIAL SOLUTIONS

PWB PRODUCT SERIES

TOOL MASTER CNC

The TOOL MASTER CNC is available customized with the desired configuration for any CNC and fully automated manufacturing system.

Absolute precision with easy operation.

Brand components and our image processing guarantee maximum process reliability and quality.



ADVANTAGES

- CNC control in X | Z and C
- High-precision spindle with power or vacuum clamping
- PWB EyeRay® CNC software
- CMOS digital camera with tele centric lens
- All in One PC 20.0" | Windows 10 64-Bit with touchscreen technology
- Motorized continuous fine adjustment in X and Y axes
- Tool management
- Tool inspection
- Label printer
- Device table
- Tray for toolholders
- Link to all machine controls and manufacturing processes
- Highest safety standards
- High concentricity
- Maximum measuring repeating accuracy

Also available with semi-automatic handling – autofocus with motorized C-axis.

TECHNICAL DATA

TYPE	<p>PRECISION POWER-SPINDLE with clamping adapters SK, HSK, Capto automatic clamping</p> <p>PRECISION VACUUM-SPINDLE SK50 vacuum clamping useable for all standard reductions optional- reduction with mechanical clamping</p>
MEASURING RANGE	<p>∅ mm 400 / L mm 40 400</p> <p>∅ mm 400 / L mm 40 600</p> <p>∅ mm 400 / L mm 40 700</p> <p>∅ mm 600 / L mm 40 400</p> <p>∅ mm 600 / L mm 40 600</p>
AXIS FIXATION	Pneumatic
FINE ADJUSTMENT	Motorized
MEASURING PROCEDURE	Image processing with EyeRay® CNC

TOOL MASTER QUADRA

Manual presetting with fast, easy and highly precise measuring methods – the right solution for all users.

Equipped with the most important standard measuring functions and for transferring tool data to the processing machines.



TECHNICAL DATA

TYPE	Pneumatic clamping, practical design and ease of use
MEASURING RANGE	<p>∅ mm 400 / L mm 40 400</p> <p>∅ mm 400 / L mm 40 600</p> <p>∅ mm 400 / L mm 40 700</p> <p>∅ mm 600 / L mm 40 400</p> <p>∅ mm 600 / L mm 40 600</p>
AXIS FIXATION	Pneumatic
FINE ADJUSTMENT	Handwheel per axis
TOOL MOUNTING	Needle bearings or KV spindle with rotation clamp and vacuum feeder
MEASURING PROCEDURE	Image processing with EyeRay® Hawk or Buzzard

ADVANTAGES

- Manual control in X | Z and C
- EyeRay® Software HAWK or BUZZARD
- All in One PC 20.0" with touchscreen technology
- Glasscale
- CMOS digital camera with tele centric lens
- EyeRay® autofocus: automatic and fast focusing of cutter
- Infinite fine adjustment in X- and Z-axes
- Measuring field offset in the X- and Z-axes
- With integral ISO50 or ISO40 spindles
- Spindle clamping
- Adapter and tool management
- Label printer
- Device table
- Tray for toolholders
- Link to all machine controls and manufacturing processes
- Highest safety standards
- High concentricity
- Maximum measuring repeating accuracy

TOOL MASTER BASIC

The cost-effective and efficient ENTRY-LEVEL SOLUTION with all standard measuring functions meets all necessary customer requirements in the area of tool and material measurements. Suitable for measuring tasks directly in production.



TECHNICAL DATA

TYPE	Pneumatic clamping, practical design and ease of use
MEASURING RANGE	∅ mm 400 / L mm 40 400 ∅ mm 400 / L mm 40 600
AXIS FIXATION	Pneumatic
FINE ADJUSTMENT	Handwheel per axis
TOOL MOUNTING	Needle bearings or KV spindle with rotation lock and vacuum pull in
MEASURING PROCEDURE	Image processing with EyeRay® Hawk

ADVANTAGES

- Image processing with EyeRay® Software Hawk
- PWB PC solution with 20" screen
- Infinite fine adjustment in X- and Z-axis
- Quick focusing of the tool cutting edge
- CMOS digital camera with tele centric lens
- High concentricity due to needle bearing
- High measuring repeatability
- With integral ISO50 or ISO40 spindles
- Sturdy cast iron base

TOOL MASTER WOOD

The new and worldwide unique presetting device especially for the wood industry.

- Easy management of units with the respective parameters
- Communication with the machine controller
- Writing to and reading from data media on the tool holders
- Modular software



TECHNICAL DATA

TYPE	Pneumatic clamping
MEASURING RANGE	∅ mm 400 / L mm 40 400 ∅ mm 400 / L mm 40 600
AXIS FIXATION	Pneumatic
FINE ADJUSTMENT	Handwheel per axis
TOOL MOUNTING	Needle bearings
MEASURING PROCEDURE	Image processing with EyeRay® WOOD

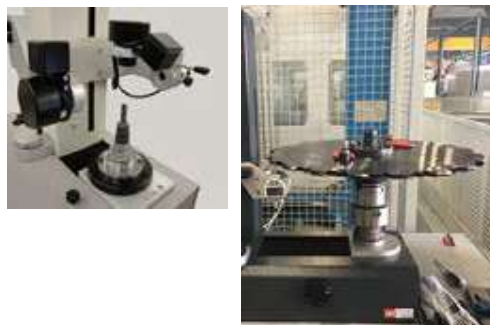
ADVANTAGES

- Image processing with EyeRay® software
- Wood with aggregate management
- All-in-one PC with 20.0" touchscreen monitor for easy and quick operation
- Infinite fine adjustment in X- and Z-axis
- Quick focusing of the tool cutting edge
- CMOS digital camera with tele centric lens
- Label printer
- High concentricity due to needle bearing
- High measuring repeatability
- Smooth recirculating needle bearing guides
- Sturdy cast iron base
- Device table

TOOL MASTER SPECIAL SOLUTIONS

We have the know-how to meet your requirements. EVOSET offers a wide range of standard solutions to meet your requirements. Specific circumstances, however, often require a customized solution. EVOSET is the right partner for you here as well.

For many years, we have been working together with you to develop products and systems which are adapted to a variety of different applications. Close cooperation between customers and our development engineers ensures optimum solutions.



- Adapter HSK-63 Wood for aggregates as well for tools with the shape HSK-B/D/F 63

OFFSET VALUE (Z)

INTERNAL SHAPE	External shape
	SK50 / ISO50
HSK- BDF 40	15 mm
HSK- BDF 50	15 mm
HSK- BDF 63	15 mm
HSK- BDF 80	15 mm
HSK- BDF 100	52 mm
INTERNAL SHAPE	External shape
	SK50 / ISO50
HSK- BDF 63	52 mm

TOOL BOY

The broadly equipped and secure mounting device for tools with various adapters.

Rely on the original and best-selling mounting aid worldwide.

ADVANTAGES

- Safer and faster change of toolholding systems
- Accident-free and ergonomic working
- 8 x 45° indexable, assembly of tools without reclamping
- Suitable for all tool systems
- Best tool protection through DELRIN inserts
- No effort due to optimum ergonomics



DIN 69871/DIN 2080
JIS B 6339 (MAS-BT)
ANSI CATV-Flange
Nr.
ISO 30 400520
ISO 35 400524
ISO 40 400521
ISO 45 400525
ISO 50 400522



KENNAMETAL
Widia / Tizit
Nr.
KM 32 400553
KM 40 400550
KM 50 400551
KM 63 400552



DIN 69893
HSK- (Form A- F)
Nr.
HSK-A32 400544
HSK-A40 400545
HSK-A50 400540
HSK-A63 400541
HSK-A80 400542



SANDVIK
Capto
Nr.
Capto C3 400135
Capto C4 400136
Capto C5 400137
Capto C6 400138
Capto C8 400139



DIN 69880
VDI 3425
Nr.
VDI 20 400580
VDI 25 400585
VDI 30 400581
VDI 40 400582
VDI 50 400583



OPTIONS & ACCESSORIES

CHC / Center Height Camera

Height measuring of turning tools.



LED ring light



Precision power-spindle



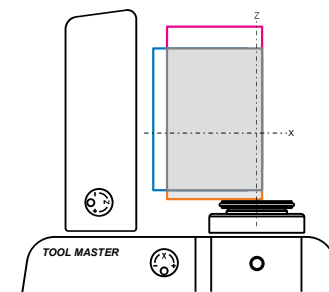
Indexing device for rotary tools



Label printer



Measuring field variations



YAC / Y-Axis Camera

Measuring of multi-edge tools with offset cutting.
Measuring range + 20 mm up to - 20 mm



Inspection light



Precision vacuum-spindle



Master mandril

- SK40 / SK50 - ø 30 x 330
- SK40 / SK50 - ø 30 x 90



Device table



VHC / Vertical -Horizontal Camera

Measuring in horizontal and vertical directions. The camera is horizontally and vertically adjustable with any intermediate angles- this allows measuring of cutting angles and radii.



Manual spindle brake



Tray for toolholders



X 1

X 2
Standard (Z500)

ZD 1
Standard (Z750)

ZH 1

CNC Adapters

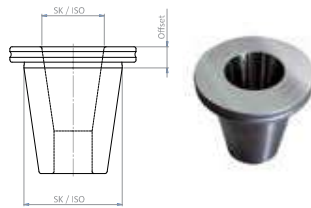
Special adapters on demand



SK	30 40 50
HSK	32 40 50 63 80 100
CAPTO	C3 C4 C5 C6 C8

SK

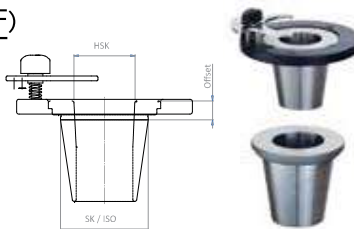
- Reduction SK/ISO to SK/ISO
In-house calibration ensures consistent quality
- Offset value is engraved on the reduction according to the following table



Internal shape	External shape	
	SK50 / ISO50	SK40 / ISO40
SK10	30 mm	30 mm
SK15	30 mm	30 mm
SK20	15 mm	15 mm
SK25	15 mm	15 mm
SK30	15 mm	15 mm
SK35	15 mm	15 mm
SK40	15 mm	-
SK45	15 mm	-

HSK (shapes A to F)

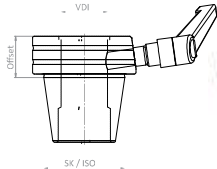
- Reduction SK/ISO to HSK, available with and without clamping attachment
- Offset value is engraved on the reduction according to the following table



Internal shape	External shape	
	SK50 / ISO50	SK40 / ISO40
HSK-A25	15 mm	15 mm
HSK-A32	15 mm	15 mm
HSK-A40	15 mm	15 mm
HSK-A50	15 mm	15 mm
HSK-A63	15 mm	60 mm
HSK-A80	52 mm	-
HSK-A100	70 mm	-

VDI with clamp lever

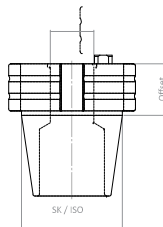
- Clamping of the VDI tool holder with clamping lever
- Clearance provided in the reduction for O-ring of the VDI shank



Internal shape	External shape	
	SK50 / ISO50	SK40 / ISO40
VDI16	50 mm	50 mm
VDI20	35 mm	35 mm
VDI25	35 mm	35 mm
VDI30	35 mm	35 mm
VDI40	35 mm	70 mm
VDI50	35 mm	90 mm
VDI60	100 mm	-

VDI with index

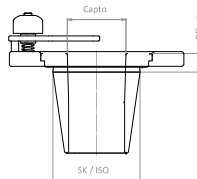
- 4x90° indexing on reduction. VDI tool holder is aligned in reduction by means of centring pins
- Clearance provided in reduction for O-ring of the VDI shank



Internal shape	External shape	
	SK50 / ISO50	SK40 / ISO40
VDI16	50 mm	50 mm
VDI20	35 mm	35 mm
VDI25	35 mm	35 mm
VDI30	35 mm	35 mm
VDI40	35 mm	80 mm
VDI50	35 mm	-
VDI60	100 mm	-
VDI80	140 mm	-

Capto ,Easy'

- Capto tool holder is centred using the 3 highest points of the polygon in the reduction, fixed with clamping claw



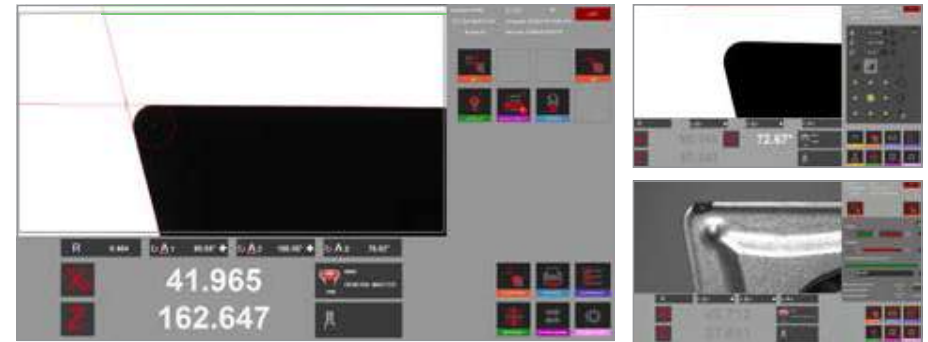
Internal shape	External shape	
	SK50 / ISO50	SK40 / ISO40
C3	15 mm	-
C4	15 mm	-
C5	15 mm	-
C6	15 mm	-
C8	52 mm	-
C10	80 mm	-



The world's leading and proven image processing software EyeRay® for pre-setting, measuring, testing and managing tools and integration into existing manufacturing processes.

Navigate through all functions quickly and with confidence thanks to the extensive software modules and self-explanatory measuring programs.

- Easy to operate with only six basic icons
- Self-explanatory function keys
- Expandable and modular for any special measuring functions and special requirements
- Fast measuring with favourites fields
- Fully automated operating options
- Interfaces to all possible machine controls and manufacturing processes
- Guaranteed process reliability
- Constant precise measuring results

The EyeRay® software solution puts you at the forefront – it meets all customer and production requirements for the SMART FACTORY. Take the step towards digitization and networking together with us.



CNC		CNC	Buzzard	Hawk	Wood
	Power spindle	X	O	O	-
	KV spindle	X	O	O	-
	Pilot	X	-	-	-
MEASURING METHODS					
	Preset	X	X	X	X
	Maximum	X	X	X	X
	Screen method	X	X	X	X
	Multi cutting method	X	X	X	X
	Front light method	X	X	X	X
	Front ring light	O	O	O	O
	Fixed axis	X	X	X	O
	Centre point method	X	X	X	X
	Theoretical angle and radius by default	X	X	X	X
	Point measuring	X	X	X	X
	Centre height measuring	O	O	O	O
	DXF	O	O	O	O
		X	X	O	O
MEASURING FUNCTIONS					
BASIC	Highest point in horizontal (X) und vertical (Z) direction (Point measuring)	X	X	X	X
	Measurement of the height of a contour with a specified diameter value/ also angle measuring	X	X	X	X
	Measuring by a single point in height and diameter (suitable for master mandrill)	X	X	X	X
	Measuring of the angle, radius and theoretical intersection point of the cutting edge	X	X	X	X
	Maximum point horizontal (X)	X	X	X	X
	Maximum point vertical (Z)	X	X	X	X
	Measuring of the angle, radius as well as the highest point vertical (Z) and horizontal (X)	X	X	X	X
	Measuring of the radius, also indication of the radius centre point	X	X	X	X
	To create tailor made measuring functions (MF can be modified)	X	X	X	X
	Additional measuring functions	X	X	-	X
Tailor made measuring functions	X	X	-	X	
Store tailor made function	X	X	-	X	
Open tailor made function	X	X	-	X	
Delete tailor made function	X	X	-	X	
Customized measuring function	O	O	O	O	
AGGREGATE MANAGEMENT					
	Graphics of the aggregates	-	-	-	X
	Geometric data	-	-	-	X
	Technology data	-	-	-	X
	Print aggregate list	-	-	-	X

BASIC SETTINGS		CNC	Buzzard	Hawk	Wood
	Illumination setting	X	X	X	X
	Camera parallelism	X	X	X	X
	Calibration of the camera pixel size	X	X	X	X
	Parallelism correction	X	X	X	X
	Absolute zero point	X	X	X	X
	Parameters	X	X	X	X
		X	X	X	X
PRINTING					
	Print label standard format	X	X	X	X
	Print customized label	O	O	-	O
	Print tool list	X	X	X	X
	Print measuring report	X	O	-	-
DATA BASE					
	Reference points data base	X	X	X	X
	Creation of reference points with offset values	X	X	X	X
	Creation of reference points with reference values	X	X	X	X
	Add images to the reference point	X	X	X	X
	Swap axes	X	X	X	X
	Change counting direction	X	X	X	X
	R/D mode for each axis definable	X	X	X	X
	Tool data base	X	X	-	-
	Toolmangement	X	O	-	O
	Management of multi cutters	X	X	-	O
	Nominal values per cutting edge	X	X	-	O
	Assignment of a measuring function per cutting edge	X	O	-	-
	Tools history	X	O	-	-
	Tool sheet	X	X	X	X
	Create a new tool	X	-	-	-
	Backup and restore	X	X	X	-
DATA TRANSFER					
	Print tool sheet	X	X	X	X
	Store tool sheet	X	X	X	X
	Open Tool sheet	X	X	-	X
	Data output as a file	O	O	O	O
	Data output on a data carrier	O	O	O	O
	Excel export	O	O	-	O
	Open PDF file	X	X	X	X

„X“ Standard „O“ Optional