



COMPLETE TOOL Presetter Guide



KOMA PRECISION

For over thirty-five years Koma Precision has been the foremost source for the finest the world has to offer in machine tool Productivity Innovation.

With over 30,000 rotary table installations, Koma is the largest distributor of Tsudakoma NC rotary tables and indexers in the world. With over 12,000 angle heads and live tools installed, Koma is the world's largest supplier for Alberti - the originator and the foremost innovator of productivity tooling.



VISION SYSTEM



Simple and intuitive, the CVS Smart software is easy to use. All functions are easy to find and shown using simple, graphical icons. It has never been easier or faster to set your tooling. Create tool lists and generate tool offsets in minutes with the CVS Smart software.

Easy to use software combined with a full HD monitor provides the operator with full control. Easily select any of the presetters measuring options with one click, while still viewing the edge of the cutting tool. The telecentric lenses on the HD cameras provide a full field of vision.







P368M Tool Height Gauge



VERSATILE MEASURING TOOL

Ideal for accurate presetting right next to the machine, the P368M is the first step towards tool presetting. This is a great add-on for those who already have a presetter in their tool room. Easily set tool height and diameter in the production environment with the P368M.

PRECISE DESIGN

The P368M is constructed with a solid base and provides smooth, accurate movement during the tool setting process. Designed to capture height and diameter quickly and accurately, the P368M is built with easy to read LCD displays for each axis. The P368M has the ability to store 4 different machine origins.

TOOL SLEEVES

Tool sleeves are created out of a solid block of hardened steel and are precision ground to the tightest tolerances. Easy to change tool sleeves allow the P368M to set any type of tooling quickly and accurately. Using precision ground tool sleeves, we can guarantee spindle runout ensuring the highest quality of measurements.

LINEAR GUIDES

The P368 uses oversized linear guides with preloaded recirculating bearings, giving smooth easy movement and precise measurements.









MODEL	P368.3	P368.4	P368. MEGA		
MAX. DIAMETER	250 mm	250 mm	600 mm		
Max. Height	300 mm 400 mm 600		600 mm		
RESOLUTION	0.01 mm	0.01 mm	0.01 mm		
PRECISION	0.02 mm	0.02 mm	0.02 mm		
REPEATABILITY	0.01 mm	n 0.01 mm 0.01 n			
MACHINE ORIGINS	4 ORIGINS CAN BE MEMORIZED				
X AXIS GUIDES	LINEAR GUIDES WITH PRELOADED RE-CIRCULATING BEARING SLIDES				
Z AXIS GUIDES	HIGH RIGIDITY DOUBLE LINEAR RAILS				
MEASUREMENT	HIGH PRECISION MAGNETIC STRIP				
TOOL SLEEVES	INTERCHANGABLE WITHOUT ADAPTERS (ISO, BT, HSK, VDI, SHAFT ETC.)				
POWER	BATTERIES				
DIMENSIONS	450x200x570 mm	450x200x690 mm	600x200x930 mm		
WEIGHT	27 kg 59.5 lb	28.5 kg 42 kg 62.8 lb 92.5 lb			

PRECISION WHERE YOU NEED IT MOST

The solid stable steel base and battery-operated display allows the P368M to be placed anywhere in the manufacturing environment. The P368M allows precise tool setting without the hassle of electrics and air.



FEATURES



PRIME Basic Measurement, Bench Model



FEATURES

PRIME CONSTRUCTION

Thermally stable steel structure
Interchangeable tool sleeve with reference notch
Dimensions= 870mm L x 516mm D x 880mm H
Weight= 90Kg (198lbs.)

AXIS MOVEMENT

X Axis (Diameter) = 320mm / 12.6in
Z Axis = 400mm (15.7 in.)
Resolution X & Z Axis - 1 μm
Mechanical axis lock
ISO 30/40/50 with additional spindles available

SPINDLE

Interchangeable tool sleeve
Manual tool sleeve rotation brake
Fine micrometric adjustments
Glass optical scales, SP class precision linear guides
Concentricity - 2 μm
Maximum tool weight 40kg / 88 lbs.

OPERATING SYSTEM

Vertical 19" Monitor
CVS Smart, user friendly software
Windows Operating System with data back-up system
Storage of up to 50 machine origins and 5,000 tools
3 port USB hub
1 Network LAN port

CAPABILITIES

ID Image for each machine origin
Fixed/Mobile Axis
Automatic Radius & Angle Computing Cycle
X&Z Axis Focusing Control Bar
Full Screen Auto Targeting
Real-view tool inspection
Measure radial and axial runout

VISION SYSTEM

HD Camera with Telecentric Lenses		0 - MASTER Z 0.000 dZ 0.000	•
40x Magnification	AUTO	× 49.999	
5 x 5 field of view			27
LED Lighting System for Tool Inspection			1

OPTIONS

Label printer







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USER-FRIENDLY INTERFACE

Entering the world of tool presetting is made easy with the Prime. Fully equipped and easy to use, the Prime offers a userfriendly intuitive interface, allowing for easy setting of tools and inspection. Easily check tool geometry using one of the automeasuring functions.

POWERFUL COMPUTING SYSTEM TOOL DATA MANAGEMENT

This powerful new operating system utilizing Windows, features state-of-the-art tool measuring, inspection and data management solutions. Koma presetters increase efficiency, reduce down time and are supported by extensive applications, technical support, and a global service network.

ERGONOMICALLY DESIGNED CONTROLS

With the operator in mind, the Prime presetter was designed with an ergonomic micrometric hand wheel allowing for easy fine adjustment of the presetter's optics. A "zero gravity" support column allows smooth, effortless movement of the camera optics in both X and Z. Easy to use interchangeable tool pots allows the presetter to be quickly switched to accommodate any type of tooling.

SOFTWARE

Simple and intuitive, the CVS Smart software is easy to use. All functions are easy to find and shown using simple, graphical icons. It has never been easier or faster to set your tooling. Create tool lists and generate tool offsets in minutes with the CVS Smart software.

VIEWING SYSTEM

Easy to use software combined with a full 19" HD monitor provides the operator with full control. Easily select any of the presetters measuring options with one click, while still viewing the edge of the cutting tool. The telecentric lenses on the HD cameras provide a full field of vision.

SLIDEWAYS / OPTICAL SCALES

The Prime is built with dual SP Precision guides and pre-loaded recirculating bearings mounted to a stabilized steel base ground to 2 microns of planarity. 1-micron glass optical scales are used to ensure the highest accuracy of tool measurements.



UNIKO LITE Measure & Inspect, Bench Model



UNIKO LITE CONSTRUCTION

Thermally stable steel structure
Tempered steel, high precision sleeve with reference notch
Dimensions= 44 : 1,080mm L x 626mm D x 950mm H
Weight= 44: 136Kg (299 lbs.)

AXIS MOVEMENT

X Axis (Diameter) = 400mm / 15.75in Z Axis = 44: 400mm (15.7 in.)

Resolution X & Z Axis - 1 µm

Mechanical axis lock

ISO 30/40/50 with additional spindles available

SPINDLE

Interchangeable tool sleeve Manual tool sleeve rotation brake

Fine micrometric adjustments

Glass optical scales, SP class precision linear guides

Concentricity - 2 μ m

Maximum tool weight 40kg / 88 lbs.

OPERATING SYSTEM

Vertical 19" Monitor CVS Smart, user friendly software (optional) Windows Operating System with data back-up system Storage of up to 200 machine origins and 40,000 tools 4 port USB hub

1 Network LAN port

CAPABILITIES

ID Image for each machine origin Fixed/Mobile Axis Automatic Radius & Angle Computing Cycle X&Z Axis Focusing Control Bar Full Screen Auto Targeting Real-view tool inspection Measure radial and axial run-out

VISION SYSTEM

HD Camera	
40x Magnification	
5 x 5 field of view	
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OPTIONS

Label printer

CVS Smart post processing software



FEATURES









USER-FRIENDLY INTERFACE

Entering the world of tool presetting is made easy with the Uniko Lite. Fully equipped and easy to use, the Uniko Lite offers a user-friendly intuitive interface, allowing for easy setting of tools and inspection. Easily check tool geometry using one of the auto- measuring functions.

POWERFUL COMPUTING SYSTEM TOOL DATA MANAGEMENT

This powerful new operating system utilizing Windows, features state-of-the-art tool measuring, inspection and data management solutions. Koma presetters increase efficiency, reduce down time and are supported by extensive applications, technical support, and a global service network.

ERGONOMICALLY DESIGNED CONTROLS

With the operator in mind, the Uniko Lite presetter was designed with an ergonomic micrometric hand wheel allowing for easy fine adjustment of the presetter's optics. A "zero gravity" support column allows smooth, effortless movement of the camera optics in both X and Z. Easy to use interchangeable tool pots allows the presetter to be quickly switched to accommodate any type of tooling.

SOFTWARE

Simple and intuitive, the CVS Smart software is easy to use. All functions are easy to find and shown using simple, graphical icons. It has never been easier or faster to set your tooling. Create tool lists and generate tool offsets in minutes with the CVS Smart software. (optional)

VIEWING SYSTEM

Easy to use software combined with a full 19" HD monitor provides the operator with full control. Easily select any of the presetters measuring options with one click, while still viewing the edge of the cutting tool. The telecentric lenses on the HD cameras provide a full field of vision.

SLIDEWAYS / OPTICAL SCALES

The Uniko Lite is built with dual SP Precision guides and preloaded recirculating bearings mounted to a stabilized steel base ground to 2 microns of planarity. 1-micron glass optical scales are used to ensure the highest accuracy of tool measurements.



UNIKO Measure & Inspect, Bench Model



UNIKO CONSTRUCTION

Thermally stable steel structure

Tempered steel, high precision sleeve with reference notch

Dimensions= 44 : 1,080mm L x 626mm D x 950mm H
45 : 1,080mm L x 626mm D x 1,050mm H

46: 1,080mm L x 626mm D x 1,150mm H

Weight= 44: 136Kg (299 lbs.) / 45: 142Kg (313 lbs.) / 46: 148Kg (326 lbs.)

AXIS MOVEMENT

X Axis (Diameter) = 400mm / 15.75in	
Z Axis = 44: 400mm (15.7 in.) / 45: 500mm (19.6 in.) / 46: 600mm (23.6 in.)	
Resolution X & Z Axis - 1 μm	
Mechanical axis lock	
ISO 30/40/50 with additional spindles available	
SPINDLE	
Interchangeable tool sleeve	
Manual tool sleeve rotation brake	
Fine micrometric adjustments	-
Glass optical scales, SP class precision linear guides	
Concentricity - 2 μm	
Maximum tool weight 40kg / 88 lbs.	
OPERATING SYSTEM	
Vertical 19" Monitor	
CVS Smart, user friendly software	

Storage of up to 200 machine origins and 40,000 tools

4 port USB hub

1 Network LAN port

Pot Processor w/40 Posts

CAPABILITIES

- ID Image for each machine origin
- Fixed/Mobile Axis
- Automatic Radius & Angle Computing Cycle
- X&Z Axis Focusing Control Bar
- Full Screen Auto Targeting
- Real-view tool inspection
- Geometric measurement functions
- Measure radial and axial runout
- CVS Software includes 40 post-processing templates

Windows Operating System with data back-up system

VISION SYSTEM

- HD Camera
- 40x Magnification
- 5 x 5 field of view

OPTIONS

Cool li	ight LED	ring	illuminator

Label printer

Presetter support table C231

FEATURES







Tool data post-processor		
d: [DATA]	•	*
D: CNC photo Conti Conti Copia di Conti DXF	• •	011314 Ni G90 Ni G90 L 1092R138.358 Ni G10 L 1092R138.358 Ni G10 L 1292R26.529 Ni G10 L 1094R66.962 Ni G10 L 1094R66.962 Ni G10 L 1294R25.465 Ni G10 L 1294R25.465
Nome file post-processor	-	N9 () N10 M2 X





USER-FRIENDLY INTERFACE

Entering the world of tool presetting is made easy with the Uniko. Fully equipped and easy to use, the Uniko offers a userfriendly intuitive interface, allowing for easy setting of tools and inspection. Easily check tool geometry using one of the automeasuring functions, and quickly send tool offsets direct to CNC controls using the post-processor.

POWERFUL COMPUTING SYSTEM TOOL DATA MANAGEMENT

This powerful new operating system utilizing Windows, features state-of-the-art tool measuring, inspection and data management solutions. Koma presetters increase efficiency, reduce down time and are supported by extensive applications, technical support, and a global service network.

ERGONOMICALLY DESIGNED CONTROLS

With the operator in mind, the Uniko presetter was designed with an ergonomic micrometric hand wheel allowing for easy fine adjustment of the presetter's optics. A "zero gravity" support column allows smooth, effortless movement of the camera optics in both X and Z. Easy to use interchangeable tool pots allows the presetter to be quickly switched to accommodate any type of tooling.

SOFTWARE

Simple and intuitive, the CVS Smart software is easy to use. All functions are easy to find and shown using simple, graphical icons. It has never been easier or faster to set your tooling. Create tool lists and generate tool offsets in minutes with the CVS Smart software.

VIEWING SYSTEM

Easy to use software combined with a full 19" HD monitor provides the operator with full control. Easily select any of the presetters measuring options with one click, while still viewing the edge of the cutting tool. The telecentric lenses on the HD cameras provide a full field of vision.

SLIDEWAYS / OPTICAL SCALES

The Uniko is built with dual SP Precision guides and preloaded recirculating bearings mounted to a stabilized steel base ground to 2 microns of planarity. 1-micron glass optical scales are used to ensure the highest accuracy of tool measurements.



LEADER plus Measure & Inspect, Bench Model



LEADER plus CONSTRUCTION

Thermally stable steel structure

Tempered steel, high precision sleeve with calibration spheres

- Dimensions= **44**: 1,080mm L x 626mm D x 950mm H
 - **45**: 1,080mm L x 626mm D x 1,050mm H
 - **46:** 1,080mm L x 626mm D x 1,150mm H

Weight= 44: 136Kg (299 lbs.) / 45: 142Kg (313 lbs.) / 46: 148Kg (326 lbs.)

AXIS MOVEMENT

X Axis (Diameter) = 400mm / 15.75in

Z Axis = 44: 400mm (15.7 in.) / 45: 500mm (19.6 in.) / 46: 600mm (23.6 in.)

Resolution X & Z Axis - 1 μm

Pneumatic axis lock

ISO 30/40/50 for pneumatic with additional spindles available

SPINDLE

Interchangeable tool sleeve
Tool sleeve rotation brake
Fine micrometric adjustments
Glass optical scales, SP class precision linear guides
Concentricity - 2 μm

Maximum Tool Weight 40kg / 88 lbs.

OPERATING SYSTEM

Vertical Full HD 22" Monitor CVS, user friendly software Windows Operating System with data back-up system Storage of up to 200 machine origins and 40,000 tools 7 port USB hub 1 Network LAN port

Pot Processing with 40 template files

CAPABILITIES

ID Image for each machine origin
Fixed/Mobile Axis
Automatic Radius & Angle Computing Cycle
X&Z Axis Focusing Control Bar
Full Screen Auto Targeting
Real-view tool inspection
Geometric measurement functions
Measure radial and axial runout

CVS Software includes 40 post-processing templates

VISION SYSTEM

HD Camera
40x Magnification
7 x 7 field of view
Cool light LED ring illuminator

OPTIONS

Label Printer

Other connection systems such as Balluff®

FEATURES













HIGH PERFORMANCE

Powerful and easy to use, the Leader Plus Presetter is a sophisticated machine for tool analysis. With many advanced features and the ability to manage your tooling library, the Leader Plus presetter is the ultimate in tool presetting.

ERGONOMICALLY DESIGNED CONTROLS

With the operator in mind, the Leader Plus presetter was designed with an ergonomic micrometric hand wheel allowing for easy fine adjustment of the presetter's optics. A "zero gravity" support column allows smooth, effortless movement of the camera optics in both X and Z. Easy to use interchangeable tool sleeves allows the presetter to be quickly switched to accommodate any type of tooling.

POWERFUL COMPUTING SYSTEM TOOL DATA MANAGEMENT

This powerful new operating system utilizing Windows, features state-of-the-art tool measuring, inspection and data management solutions. Koma presetters increase efficiency, reduce down time and are supported by extensive applications, technical support, and a global service network.

SOFTWARE

Simple and intuitive, the CVS software is easy to use. All functions are easy to find and shown using simple, graphical icons. It's never been easier or faster to set your tooling; create tool lists tool offset files in minutes. The Leader Plus allows up to 200 machine origins and tool lists up to 200 tools. The optional DXF function allows the operator to quickly compare tool profiles or create and export a tool profile. The easy to use post-processing system allows the presetter to communicate with over 40 CNC control types.

VIEWING SYSTEM

Easy to use software combined with a full 22" HD monitor provides the operator with full control. Easily select any of the presetters measuring options with one click, while still viewing the edge of the cutting tool. The telecentric lenses on the HD cameras provide a full field of vision.

SLIDEWAYS / OPTICAL SCALES

The Leader Plus is built with dual SP Precision guides and preloaded recirculating bearings mounted to a stabilized steel base ground to 2 microns of planarity. 1-micron glass optical scales are used to ensure the highest accuracy of tool measurements.



PERFORMANCE Advanced Measure & Inspect, Floor Model





USER FRIENDLY INTERFACE

Simple and intuitive, the CVS software is easy to use. All functions are easy to find and shown using simple, graphical icons. It's never been easier or faster to set your tooling; create tool lists and tool offset files in minutes.



VIEWING SYSTEM

Easy to use software combined with a full 24" HD monitor provides the operator with full control. Easily select any of the presetters measuring options with one click, while still viewing the edge of the cutting tool. The telecentric lenses on the HD cameras provide a full field of vision.



POWERFUL COMPUTING SYSTEM TOOL DATA MANAGEMENT

This powerful new operating system utilizing Windows, features state-of-the-art tool measuring, inspection and data management solutions. Koma presetters increase efficiency, reduce down time and are supported by extensive applications, technical support, and a global service network.

PERFORMANCE CONSTRUCTION

Thermally stabilized steel structure

Tempered steel, high precision sleeve with calibration spheres	
Integrated support bench	

Tempered steel interchangeable tool holders with a 2μ maximum run-out.

AXIS MOVEMENT

X Axis (Diameter) = 400mm / 15.75in			
Z Axis = 44: 400mm (15.7 in.) / 45: 500mm (19.6 in.) / 46: 600mm (23.6 in.)			
Pneumatic axis locking			
Air - Max 8 bar			

SPINDLE

Interchangeable ISO30, 40, or 50 for different tapers
Tool sleeve rotation brake
Fine micrometric adjustments
Glass optical scales, SP-class precision linear guides
Mechanical Pull Stud Clamping, automatic pull stud recognition

OPERATING SYSTEM

Vertical Full HD 24" Monitor

CVS, user friendly software

Windows Operating System with data back-up system

Storage of up to 200 machine origins and 40,000 tools

7 port USB hub

1 Network LAN port

Keyboard, mouse and label printer included with adjustable support tray

CVS Software includes 40 post-processing templates



CAPABILITIES

VISION SYSTEM

HD C-Mos sensor camera with telecentric lenses 40x Magnification 7 x 7 field of view Cool light LED ring illuminator with light intensity regulation

DIMENSIONS

Model		44	45	46	65	66	68	
Max ø	mm	400	400	400	600	600	600	
Height	mm	400	500	600	500	600	800	1
Dimensions (w,	d,h) mm	1167x600x1757	1167x600x1857	1167x600x1957	1267x600x1857	1267x600x1957	1267x600x1957	1
Net Weight	kg(lb.)	260 (573)	265 (584)	270 (595)	295 (650)	300 (661)	310 (683)	1





HIGH PERFORMANCE

Powerful and easy to use, the Performance presetter is a sophisticated measuring machine for tool analysis. With many advanced features and the ability to manage your tooling library, the Performance presetter is the ultimate in tool presetting.

CONSTANT GEOMETRY TECHNOLOGY

Material choice is at the heart of constant geometry technology. Using only like materials with identical thermal expansion coefficients, we can guarantee constant presetter geometry in all working conditions.

ERGONOMICALLY DESIGNED CONTROLS

With the operator in mind, the Performance presetter was designed with an ergonomic micrometric hand wheel allowing for easy fine adjustment of the presetter's optics. A "zero gravity" support column allows smooth, effortless movement of the camera optics in both X and Z. Easy to use interchangeable tool pots allow the presetter to be quickly switched to accommodate any type of tooling. The full keyboard and mouse rest on an adjustable tray allowing any operator to quickly adjust for height.

SOFTWARE

Simple and intuitive, the CVS software is easy to use. All functions are easy to find and shown using simple, graphical icons. It's never been easier or faster to set your tooling; create tool lists and tool offset files in minutes. The Performance allows up to 200 machine origins and tool lists up to 200 tools. The new DXF function allows the operator to quickly compare tool profiles or create and export a tool profile. The easy to use post processing system allows the presetter to communicate with over 40 CNC control types.

VIEWING SYSTEM

Easy to use software combined with a full 24" HD monitor provides the operator with full control. Easily select any of the presetters measuring options with one click, while still viewing the edge of the cutting tool. The telecentric lenses on the HD cameras provide a full field of vision.

SLIDEWAYS / OPTICAL SCALES

The Performance is built with dual SP Precision guides and preloaded recirculating bearings mounted to a stabilized steel base, ground to 2 microns of planarity. 1-micron glass optical scales are used to ensure the highest accuracy of tool measurements.

SPINDLES

High precision, interchangeable spindle pots allow a guaranteed maximum of ± 2 microns of run-out. A built-in calibration sphere eliminates the need for an extra calibration gauge, and allows for fast and precise setup.









Tel: 1.800.249.5662 Fax: 860.623.4132 info@komaprecision.com www.komaprecision.com 20 Thompson Road East Windsor, CT 06088