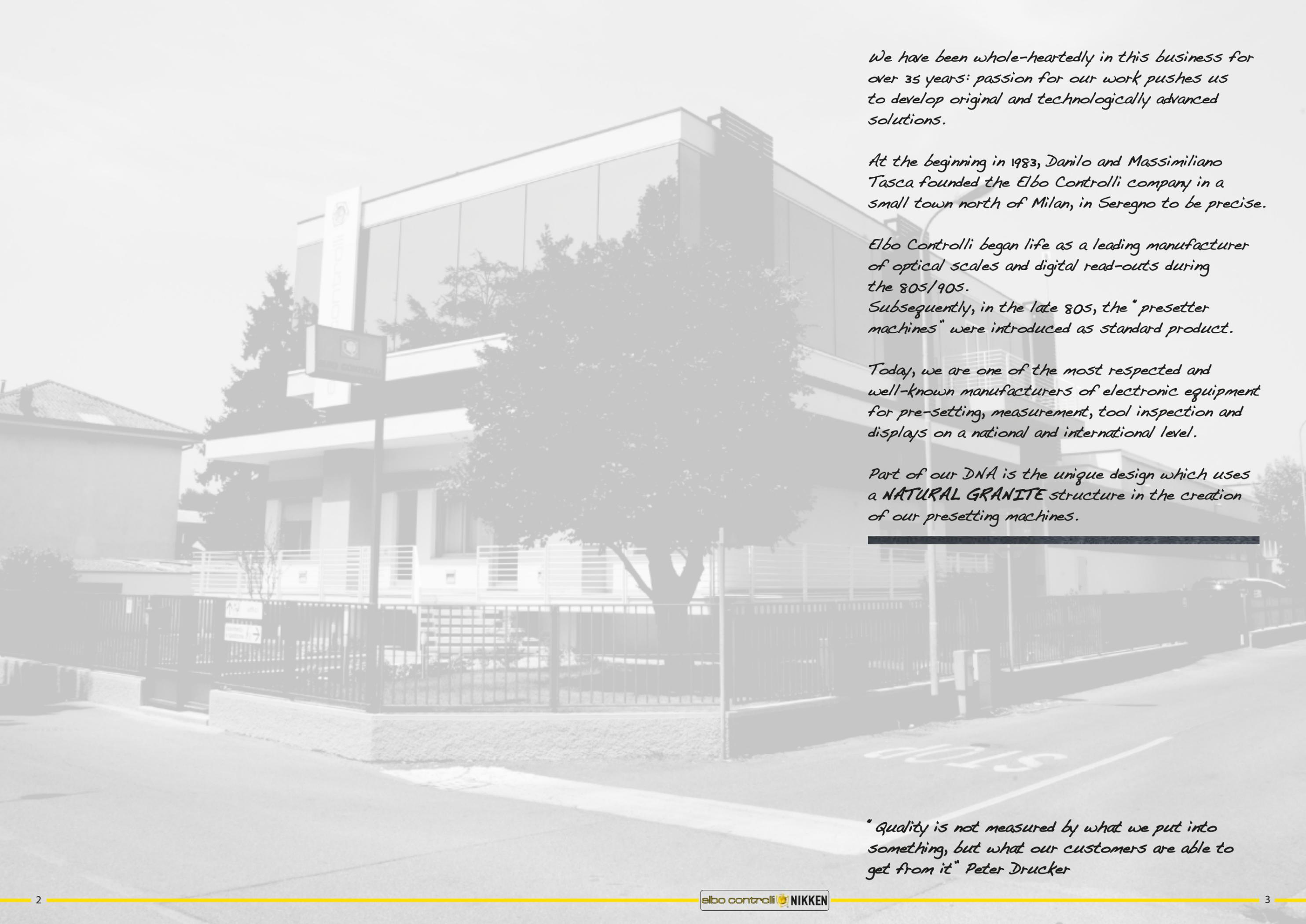


GENERAL CATALOGUE

elbo controlli  **NIKKEN**

TOOL PRESETTER





We have been whole-heartedly in this business for over 35 years: passion for our work pushes us to develop original and technologically advanced solutions.

At the beginning in 1983, Danilo and Massimiliano Tasca founded the Elbo Controlli company in a small town north of Milan, in Seregno to be precise.

Elbo Controlli began life as a leading manufacturer of optical scales and digital read-outs during the 80s/90s.

Subsequently, in the late 80s, the "presetter machines" were introduced as standard product.

Today, we are one of the most respected and well-known manufacturers of electronic equipment for pre-setting, measurement, tool inspection and displays on a national and international level.

*Part of our DNA is the unique design which uses a **NATURAL GRANITE** structure in the creation of our presetting machines.*

"Quality is not measured by what we put into something, but what our customers are able to get from it" Peter Drucker



NOTHING IS LEFT TO CHANCE

How important is it to have an efficient production site that meets your expectations?

For us at Elbo Controlli NIKKEN is essential.

Thanks to the large spaces (1900 square meters on 2 floors) and to a better organization, we estimate an increase in production efficiency of at least 20%.



“QUALITY HAS TO BE CAUSED, NOT CONTROLLED”
PHIL CROSBY

Elbo Controlli NIKKEN dedicates about 30% of assembly time to quality control of critical components of each presetter machine (all identified with a serial number for total traceability). This ensures that once at the final testing phase of the instrument, it complies with the product specifications and falls within the assigned tolerances.

In order to guarantee our customers a high standard of quality and reliability our testing and control of critical components is systematic (100%), not statistical. Elbo Controlli NIKKEN is the only preset manufacturer to internally build and certify by laser interferometer all the optical glass scales mounted on the presetter machines - at no additional cost.



THE IMPORTANCE OF FINAL AND INSPECTIONS TESTS

After assembly, each machine for tool setting undergoes 5 tests carried out by our specialized operators: 3 geometric tests to "square" the machine and 2 tests for measurement comparison with sample tools.

Before packing, a series of further checks are also carried out on the general state of the presetter (FQC).

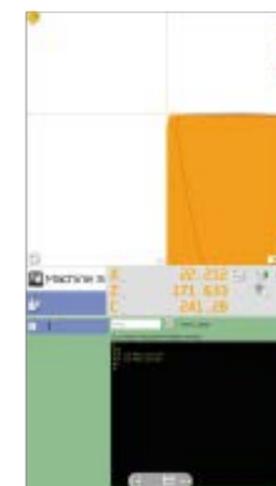
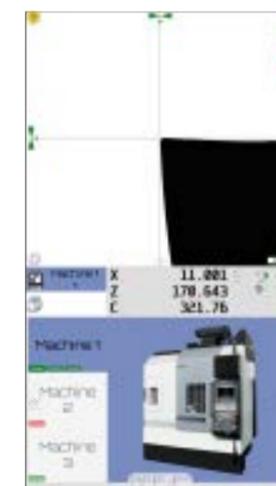
E346B

Our latest E346B series presetters are of course the ideal solution to use in the toolroom: solid, precise and above all easy to use. In addition the E346B series is a perfect fit for direct use within a workshop to *improve productivity and increase efficiency* whilst also reducing costs.

The use of **NATURAL GRANITE** as a key construction element allows our tool presetters to have a high degree of dimensional stability, guaranteeing accuracy and repeatability of measurements. When granite makes the difference!

INTERCHANGEABLE ROTATING SPINDLE-HOLDER

Interchangeability is a trademark. All spindle holders are interchangeable (ISO/BT/HSK/polygonal taper...etc): by negating the use of adapters, the coupling error is drastically reduced, making measurement more accurate.



INTUITIVE DESIGN, IMPROVED FUNCTIONALITY

The new user interface was designed with a clear objective: to make the operator experience as simple and intuitive as possible. Simplicity and user-friendliness are at the heart of the new software, offering a modern and practical solution for the daily needs of any operator.

Implementing a tool presetter with tool data management systems means integrating tool data within a centralised system to optimise the management and use of your tools.

Managing the toolroom has never been easier!

EFFICIENT. TECHNOLOGICAL. INTEGRATED.

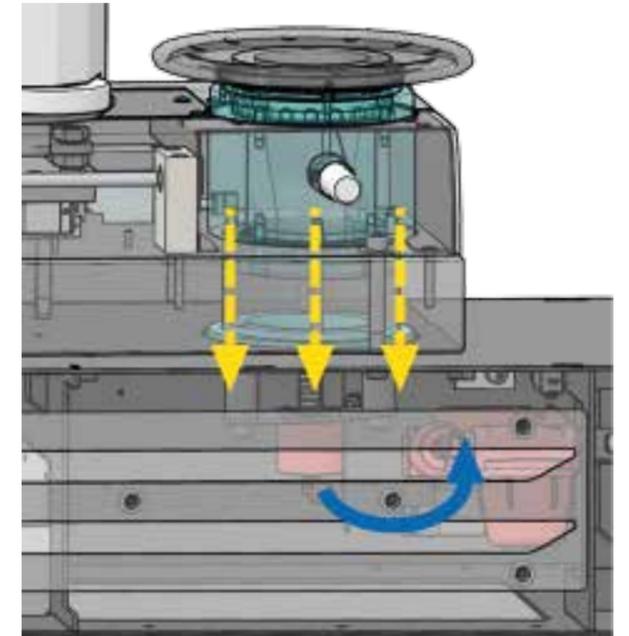
E346BV

SIMPLE AND FLEXIBLE CLAMPING SYSTEM

VACUUM-based tool-holder clamping system allows greater measurement reliability.

The 'V' version is equipped with the vacuum clamping system (VACUUM): the vacuum generated inside the interchangeable rotating spindle holder allows total adaptability to cater for various types of pull stud, i.e. without the use of adapters.

Why not have the best?



All E346BV presetters are equipped with our new optical scales model AS371 provide high performance and accuracy. The development of this essential component is based on forty years of experience in the field of mechanical measurement.

Attention to detail is paramount, especially in the tool presetting sector: state-of-the-art electronics and optics have enabled us to significantly increase the precision and performance of our presetters.

What are you waiting for? Optimise your production process!

NEW 15,6" MONITOR

The E346BV is equipped with a vertically positioned 15.6" capacitive touch screen monitor for better display of both data and measurement functions.

Discover excellence in data visualisation with our 15.6" Touch Screen Monitor.

Our monitor combines robustness and precision, offering optimal visuals.



POWERFUL. USER-FRIENDLY. ACCURATE.

E346BA

AUTOFOCUS FUNCTION: A TOUCH OF SIMPLICITY

The AUTOFOCUS function allows tools to be automatically measured with no manual operator intervention.

The software automatically recognizes the number of cutting edges and, based on the size of the tool, precisely controls the rotation speed of the spindle increasing and then decreasing it as the measuring point for each edge is reached for highly accurate measurement acquisition.

E346BA acquires the X and Z dimensions, highlighting any values that are out of tolerance.



SINGLE EDGE



MULTI-EDGE



SINGLE AND MULTI-EDGE MEASUREMENT ACQUISITION CYCLE

E346BA allows you to carry out the multi-cutting acquisition cycle, or rather the automatic recognition and measurement of each single cutting edge detected during the complete rotation of the spindle.

Measure your tool in automatic mode. Quick and simple!

There are two main reasons for choosing a pre-registration and measurement system of tools which adopts both a motorized C axis and software capable of automatically recognizing and measuring the cutting edges. The need for a solution that minimizes human error and also one that provides the measurement of tools which feature multiple cutting edges that would be very complex if done manually.

E346A allows users to reduce the possibility that the presetter operator suffers error in the measurement of the tools. Let yourself be conquered.

AUTOMATIC. SIMPLE. RELIABLE.



E356B



AUTOMATIC TOOL RECOGNITION: SEARCH, FIND AND ACTIVATE

Often, the search for a tool within your presetter machine database can be a laborious and long operation, wasting time unnecessarily.

How do we solve this problem? Easy! Thanks to our new automatic tool recognition system available on the E356B presetter machine!

A UNIQUE SOLUTION, MANY ADVANTAGES

What happens if the tool is present in multiple tables and in multiple machine origins? Don't worry! The presetter machine will show you all of the tool tables and in which machines your tool has been used.

The operator will simply read the tool code through the scanner and the machine will automatically open the page with the data for that tool, preparing the presetter for measurement operations.

All automatic, within everyone's reach.

Tool management on the shop floor and optimisation of production processes are interconnected aspects that are fundamental to the success of a manufacturing business, especially today where companies are very competitive.

Efficient tool management not only improves organisation, but also helps optimise the entire production process.



COMPLETE. STABLE. OBJECTIVE.

E46B

THE IMPORTANCE OF OBJECTIVITY IN MEASUREMENT

The new E46B presetter series allow you to optimize the machine tools setup, reducing downtime in your workshop.

Thanks to continuous research and development of new technical solutions, we are able to offer a unique and cutting-edge product: mechanics, electronics, optics and software are completely developed by our team of technicians, to make the presetting experience simple and intuitive.

The objectivity of the measurement is essential when working in a shared environment, where the presetting operation is carried out by multiple people.

THE BEATING HEART IS MECHANICS

The E46B presetter series have been designed and built with superior quality components, dedicated to this specific application: presetting, measuring and inspecting a tool.

Trust the industry expert!



All our spindle holders are interchangeable, avoiding the use of adapters so as not to introduce coupling errors.

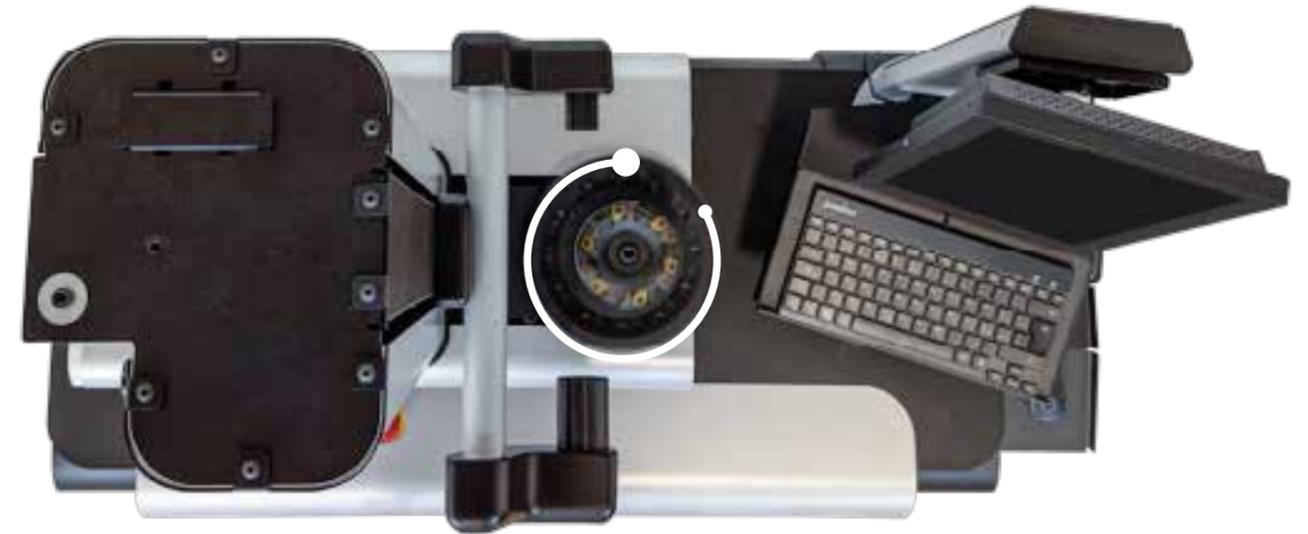
The new AS371 optical scales model allow for high and precise performance. The development of this essential component is given by forty years of experience in the field of measurement in the mechanical sector.

INNOVATIVE. SIMPLE. RELIABLE.

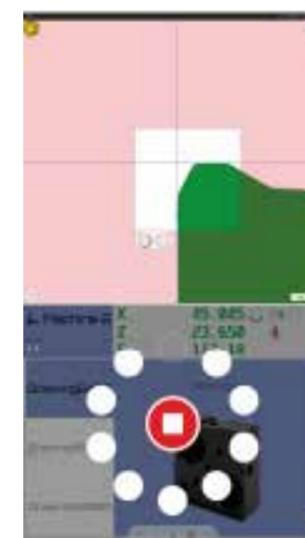


E46BA

AUTOFOCUS FUNCTION: NO MEASUREMENT ERRORS



In an industry where automation becomes a constant request a presetter with that provided an autofocus capability becomes a necessity. The AUTOFOCUS function allows tools to be measured automatically, without the operator intervening manually. This mode is recommended for those who need to carry out measurements on multi-edged tools which would be very long if carried out manually and, above all, which reduces the risk of human error to a minimum.



EASE OF USE IS THE WINNING WEAPON

Thanks to the experience gained over the years, we have identified what the characteristics must be to make a software easy and intuitive.

Design is user-centered: by this we mean the inclusion of the future user in the entire development process. We at Elbo Controlli NIKKEN believe in ease of use!

Why complicate your life with complex software? The new user interface derives from smartphone technology, making the software more “familiar”. *Seeing is believing.*

AUTOMATIC. FLEXIBLE. EFFICIENT.



E46BP

AXES AND CAMERA AUTOMATIC POSITIONING

E46BP was born from the need to have a tool presetter capable of semi-autonomously carrying out the positioning and measurement operations of the cutting edges, in order to further reduce the risk of errors and automate the presetting operation.

The solutions that we design and create are aimed at companies that want to allow their operators to work better, with quality and reducing downtime. For us at Elbo Controlli NIKKEN, attention to every detail is a priority to offer solutions that drastically reduce the possibility of the operator making mistakes.



A NEW PRODUCT WITH HUGE POTENTIAL

How does the new automatic axis positioning system work?

The operation is very simple and intuitive, so that anyone can use it without any problem.

Once the tool has been identified, the theoretical diameter and height values and the tolerances have been entered, the presetter is able to position itself and automatically carry out the measurement operation of the maximum values of X and Z, with a 360° rotation of the spindle.

The measurement can be repeated as many times as desired by simply "recalling" the tool to be measured.

POSITIONED. INTUITIVE. UNIQUE.

E46C

NEW E46C SERIES: THE EVOLUTION OF THE SPECIES

The new E46C presetter series bring multiple advantages, significantly improving the production process.

The base and column are made of natural granite with a maximum diameter of 400 mm (radius 200 mm) and a maximum height of 600 mm.

The thermal expansion coefficient of natural granite means the machine can operate in the workshop.

But that's not all: with E46C it is possible to analyze all aspects of the tools that are not identifiable with in-machine tool presetting systems.

In addition to X and Z values, the presetter can detect angles, radii and much more.



21,5" VERTICAL MONITOR



How important is it to have a high-performance monitor?

The tool presetting, measurement and inspection operation requires the use of high-performance and high-tech components. For this reason, we have chosen a monitor that is perfect for this type of application.

21.5" Full HD touch-screen: tailor-made for you!

All our spindle holders are interchangeable and are built to have a high level of repeatability. Furthermore, the E46C presetter series is equipped with the spindle holder identification system (SP-ID). The system allows the presetting machine to identify the spindle holder and suggests the correct machine origins, every time the spindle holder is changed.



EVOLVED. TECHNOLOGICAL. USER FRIENDLY.

E46CA

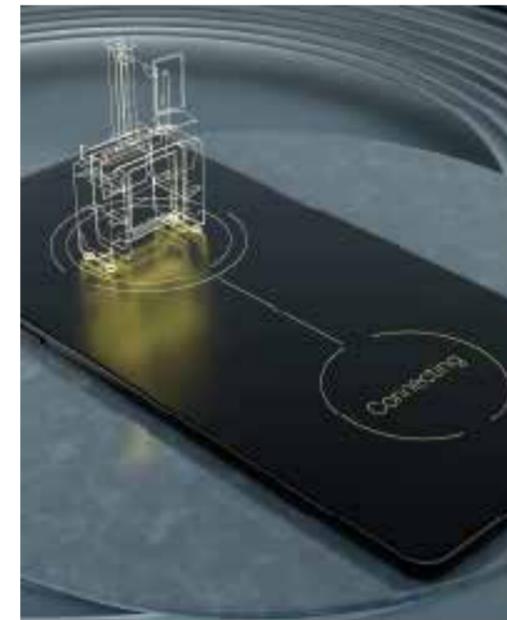
WHEN SOFTWARE BECOMES THE HEART OF INNOVATION

Today, companies are looking for technological solutions that adapt to their specific needs to remain competitive in the market.

Our new software makes the presetting experience simple and enjoyable, fully developed with smartphone usability.

Why complicate your life with complex software?

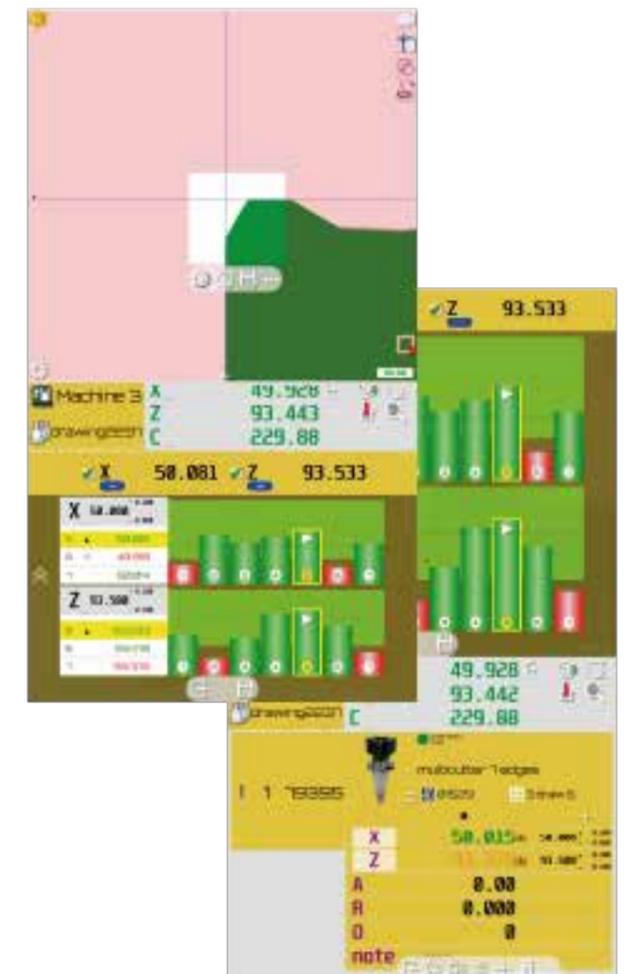
Choose ease of use. Choose E46CA.



AUTOFOCUS FUNCTION: UNIQUE AND INNOVATIVE SYSTEM

It is very important for us to patent the innovative technological solutions that we study and develop for our products. Through patents we are able to enhance our products which reflect Elbo Controlli NIKKEN's cutting-edge level of technology and proposed solutions.

Once the tool has been blocked, the operator will simply have to choose what type of measurement he wants to carry out (single cutting edge or multi-cutting edge) and what to measure (X, Z or both axes) and start the measurement cycle. Without having to enter the number of cutting edges to measure or any theoretical value, the software will automatically start the cycle and end it once the 360° rotation has been carried out.



AUTOMATIC. INNOVATIVE. RELIABLE.

E46CX

AUTOMATION INCREASE PRODUCTIVITY

All sectors that involve repetitive activities can make use of automation, however it is more widespread in the industrial and manufacturing sectors.

The E46CX presetter allows you to improve production processes, the quality of workmanship and consequently of the product.



Why choose the new E46CX presetter? Today we find ourselves competing with innovative companies and offering products and services more and more quickly. Automating is essential to manage, change and adapt the processes through which the company operates. Here comes a machine that helps your company move in this direction.

Prepare your measurement program with our new, simple and intelligent interface that allows you to set all measurement points, number of cutting edges, theoretical values and tolerances.

You find everything you need in one screen: decide how you want to measure your tools and where you want to export the measurement results (post-processor, TID, RFID chip or simply save and print the report).

No complications. The software helps you at every stage.



FULL CNC. ACCURATE. REVOLUTIONARY.

E68B

The E68 series represents excellence in the field of tool presetting. In an increasingly competitive market, every detail counts. The E68 presetter series are the ideal solution for those who want to optimise production times, improve machining accuracy and reduce waste.

The integration of a tool presetter such as **the E68 series is a strategic investment for any machine shop** that wishes to increase its competitiveness, guaranteeing high quality machining and efficient production times.

Built to withstand the harshest conditions, the E68 series is perfect for use in industrial environments characterised by constant vibration, which could compromise measurement accuracy.

INTERCHANGEABLE SPINDLE

Why settle for an adapter when you can aim for excellence in interchangeability? In fact, the E68 series is equipped with interchangeable spindle holders, eliminating coupling errors and guaranteeing unprecedented precision.

The design of the spindle body, featuring a double ball cage, guarantees a flawless coupling.

NATURAL GRANITE: STABILITY AND PRECISION

All E68 presetters are equipped with GS371 optical scales on both X and Z axes. **GS371 is the first and only optical scale in the world to use granite:** thanks to this innovative solution, the E68 series guarantees uncompromising accuracy and unprecedented repeatability.



PRECISE. EFFICIENT. STABLE.





E68BP

MAXIMUM PRECISION, ZERO ERRORS

At Elbo Controlli NIKKEN, attention to every detail is a top priority.

Our aim is to offer state-of-the-art solutions that drastically reduce the operator's margin for error, constantly guiding him in his work thanks to the intelligent automatism of our systems. Choose the technology that simplifies your production process.



AUTOMATIC AXIS AND CAMERA POSITIONING

The E68BP's new automatic axis positioning system takes tool presetting to the next level, ensuring a fast, intuitive and error-free measuring operation. The machine performs semi-automatic positioning and measurement of cutting edges, optimising the workflow and reducing the risk of inaccuracies.

How does the new automatic axis positioning system work?

After identifying the tool, simply enter the theoretical diameter and height values, along with the desired tolerances. At this point, the E68BP automatically positions itself and measures the maximum X and Z values, completing a 360° rotation cycle of the spindle. Thanks to this technology, the measurement can be repeated as many times as necessary with a simple recall of the tool, leaving the operator only to wait for the process to be completed.

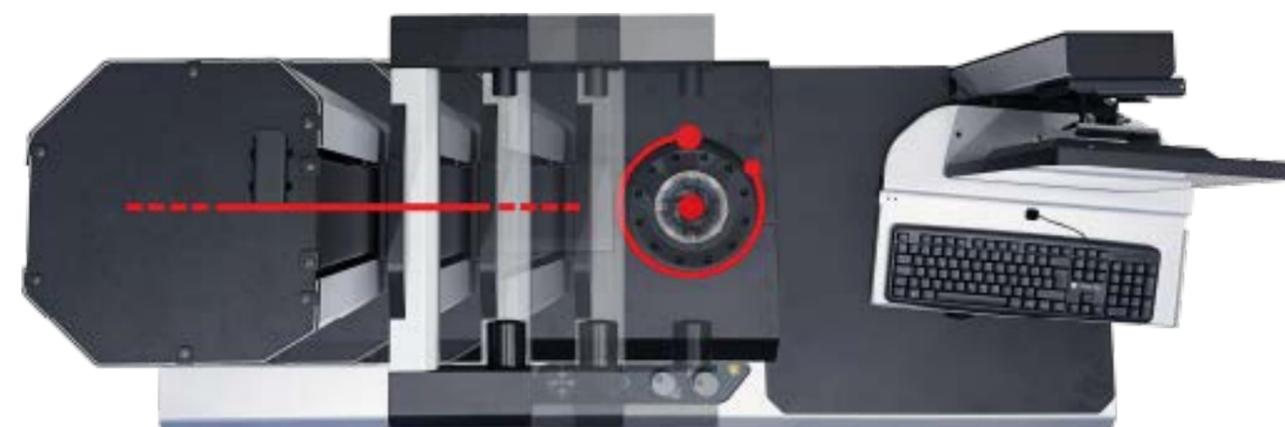
ABSOLUTE ACCURACY

In the industrial sector, the quality and reliability of components are essential to ensure precision and productivity. The adoption of 15.6" vertical touch screen monitors ensures an intuitive user experience and superior visual quality.



POSITIONED. TECHNOLOGICAL. SUPERIOR.

E68CX



AUTOMATION INCREASES PRODUCTIVITY

Elbo Controlli NIKKEN has always developed state-of-the-art solutions for automatic tool measurement, inspection and analysis, following a fundamental principle: to make operators' work as easy as possible, while minimising human error.

With our new intelligent interface, programming tool measurement becomes a smooth and intuitive experience. Set all measurement points, define the number of cutting edges, theoretical values and tolerances, all in one screen. You decide how to measure your tools and where to export the results: post-processor, TID, RFID chip or a simple printable report.

With the E68CX presetter, your production process takes a quantum leap. In today's market, competitiveness is linked to the ability to innovate and respond quickly to customer needs.

Automating means evolving, optimising and staying one step ahead.



BREAKTHROUGH TECHNOLOGY, ABSOLUTE SIMPLICITY

Il presetting utensili E68CX offre funzionalità evolute per garantire rapidità e precisione in ogni fase. Nessuna complicazione, solo efficienza. Il software ti guida passo dopo passo, garantendoti un'esperienza di misura senza stress.

AUTOMATIC. COMPETITIVE. INNOVATIVE.

MULTICAMERA

NEW MULTI-CAMERA PRESETTERS: QUALITY WITHOUT COMPROMISE

In recent years, machine shops have invested in new machine tools, increasing production capacity, but not always efficiency.

Our passion for our work is what has enabled us to offer the market advanced yet easy-to-use solutions.



EXPRESSION OF TECHNOLOGY AT THE HIGHEST LEVEL

Elbo Controlli NIKKEN has been dedicating time and resources to innovation for years, bringing state-of-the-art products to the market. The new 'multi-camera' models have additional cameras that facilitate measurement and inspection of characteristic tool geometries.

Using state-of-the-art technology, these solutions offer a unique combination of versatility, reliability and performance, ensuring accurate measurements and optimised tool management.



Reliability and innovation at the service of your industry: Elbo Controlli NIKKEN, the right choice for the control of the future.

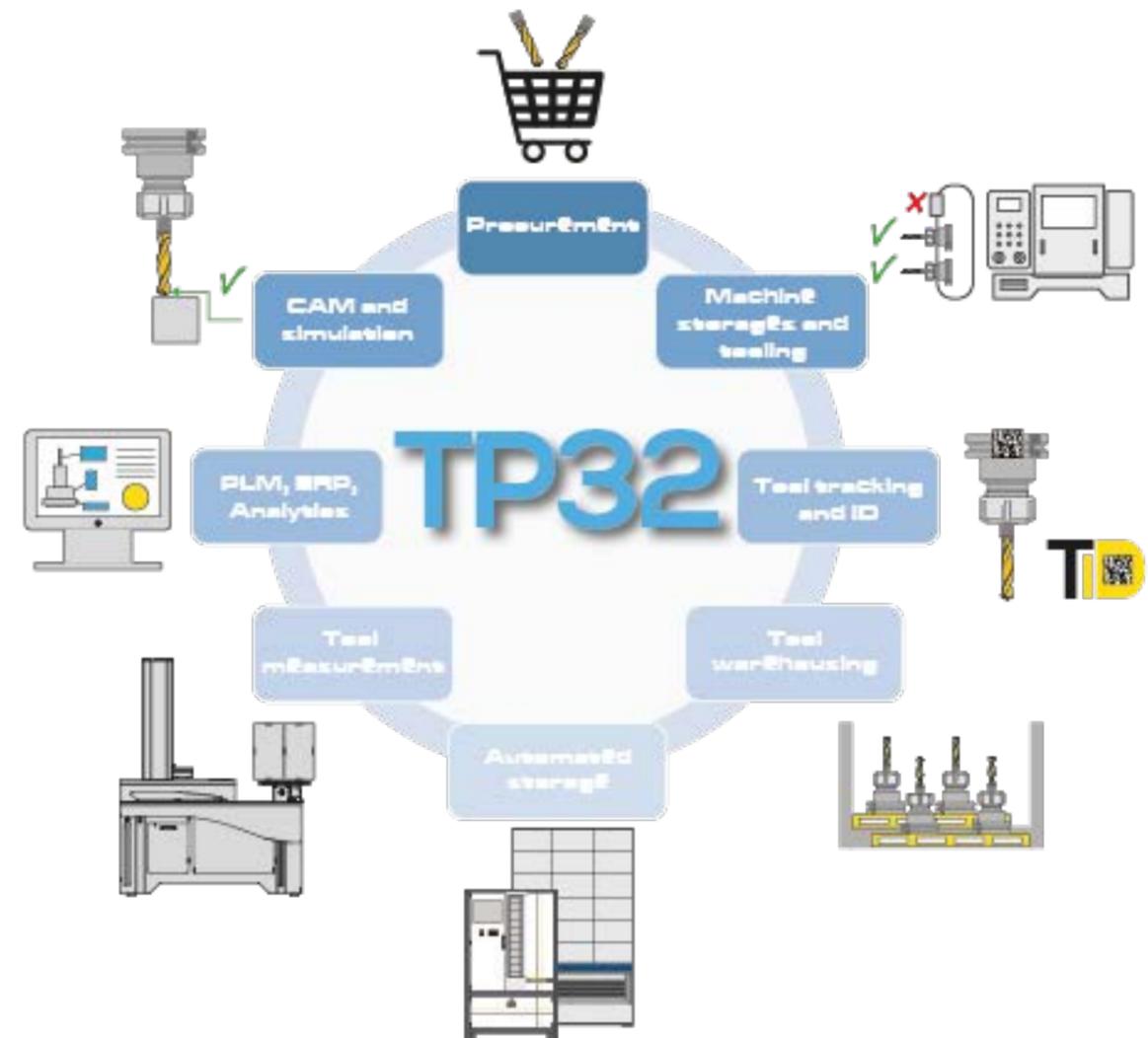
VERSATILE. SUPERIOR. ADVANCED.

INTEGRATED MANAGEMENT

The E46 and E46 presetter machine series can be equipped with TP32 (Integrated Tool Management System) and TTS (Tool Tracking System) which will allow complete management of the toolroom, significantly reducing production costs and optimizing the material supply system.

Manage your tool warehouse, check your vending machine with loading / unloading equipment, set up your machine tools and much more.

Everything you need in one solution.



The double 15,6" (B version software) and 21.5" (C version software) vertical touch screen monitor will amaze you:

- the main monitor (left) is dedicated to all presetting and tool measurement functions
- the secondary monitor (right) has been developed for TP32 tool management and TTS tool tracking.

The real strength is being able to adapt to every situations.

FUNCTIONAL. INTEGRATED. POWERFUL.





TID (AUTOMATIC TOOL IDENTIFICATION SYSTEM)

TID is a solution which allows Elbo Controlli NIKKEN presetter machines to quickly identify tools and send correction data directly to the numerical control without interrupting any operation in progress.

Elbo Controlli NIKKEN has created the **ideal appliance to manage tool identification data.**

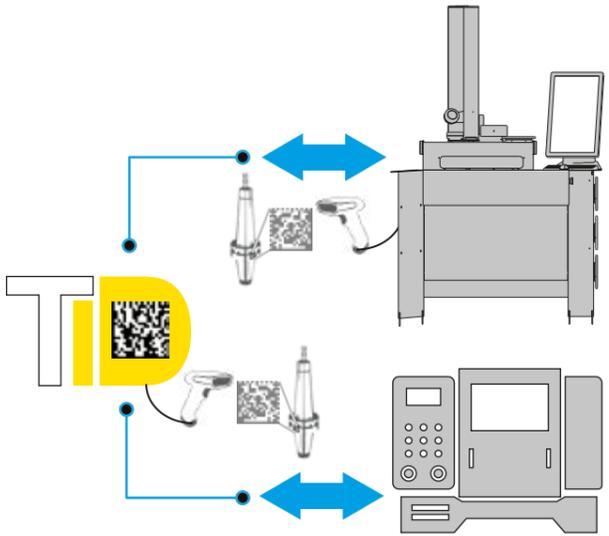
The power of TID will amaze you.



SECURITY AND RELIABILITY WITH TID

Tools which are simple to use and limit the possibility of operator errors are essential in the workplace. TID has an intuitive graphical interface which interacts and guides the operator during use, minimizing the possibility of errors.

TID identifies the tools through a unique code with which all the technological data of the tool are associated (radius correction, length correction, waist, etc.), the operator measures the tool and then can decide on which machine it will be loaded.



TID allows a two-way communication between presetter and CNC. Measurements taken from the presetter can be sent directly to the CNC without downtime.

Moreover, TID can acquire tool data from the CNC offset table.

Do you have special requirements? Is there a need for integration? **Tool ID manager can be customized according to YOUR needs.**

RELIABLE. SECURE. FLEXIBLE.

TTS (TOOL TRACKING SYSTEM)

WHEN TOOL TRACKING IS SIMPLE AND QUICK

How often, while presetting the tools for your next job, do you happen to not find exactly the tool you need? How often do you find out at the last minute that the tool you need is busy on another machine? Do you feel a lack of organization in your toolroom?

We at Elbo Controlli NIKKEN have a solution that's right for you!



WHAT'S TTS (TOOL TRACKING SYSTEM)?

TTS (tool tracking system) is a solution that allows ELBO CONTROLLI NIKKEN presetters to verify the exact position of all your tools in your mechanical workshop.

Once all the assembled tools have been identified with a unique Data Matrix code, the TTS software will be able to identify the precise location of your tool in real time, whether it is on a machine tool or inside your warehouse.

Once the tool has been identified, all the information (identification number, stock position, values and geometries) are visible in this screen.

Our software was developed to make daily work simple and intuitive: in fact, through a user friendly graphic interface, the operator is able to easily track all the tools available.

It's possible to trace the tool within the tables present on the presetter.

Optimise your machine set-up times!

ID	Tool Name	X	Z	A	R	Stock
1	Face mill					
1 2	End mill	X	55.127	0.000	0.000	
1 3	Shell mill	Z	114.786	0.000	0.000	
1 4	Boring bar	A	0.000			
1 5	Adjustable boring bar	R	0.000			
5	Thrust bearing					Machine 3
14	Chill bit					Machine 3
0	Spindle tool					Machine 4
3	Spindle tool					Machine 4
2	Spindle tool					Machine 4
23	Spindle tool					Machine 5
1	Honing Bar					Stock 1
1	Face mill					Stock 1

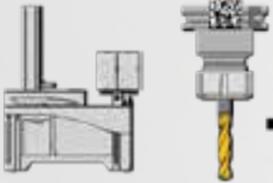
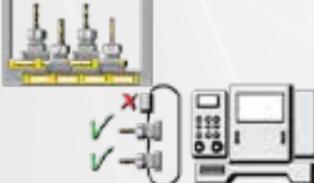
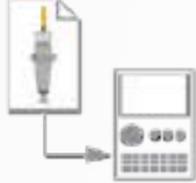
SIMPLE. EFFICIENT. USER FRIENDLY.

A.I.S. SOFTWARE COMPARISON *Advanced Integrated Solutions* by ECN

What is A.I.S.? Advanced integrated solutions is the new Elbo Controlli NIKKEN department dedicated to the development, study and implementation of tool presetting with the rest of the workshop.

The A.I.S. department was created with the aim of positioning our company at the top of technology and digitalisation for workshops. We seek to embrace the latest industry trends, improving productivity, operational efficiency and overall competitiveness.

Being at the forefront of technology will give you a competitive advantage in the market, allowing you to respond promptly to your customers' needs. With a team of highly qualified experts, A.I.S. will focus on key areas such as tool identification, tracking and data management. Discover the Elbo Controlli NIKKEN's world!

INTEGRATION	PRESETTER		CNC MACHINES			COMPANY		
	 TOOL IDENTIFICATION	 ASSAMBLED TOOL LOCATION	 TOOL USE REPORT AND STATISTICS	 OFFSET X,Z 2 WAYS TRANSMISSION (PRESET ↔ CNC)	 COMPONENTS, TOOL ASSAMBLY, BILLING OF MATERIAL MANAGING	 STOCK, PURCHASE, WAREHOUSE MANAGEMENT	 CAM, ERP INTEGRATION	
								
								
								
								

STANDARD PRODUCTS COMPARISON

Vertical presetter machines are commonly used to preset tools for vertical milling machines. They are the most popular presetters on the market with around 90% of sales.

By allowing you to prepare your tools for subsequent processing, vertical presetters optimize the time it takes to set the machine tool up and reduce machine downtime.

Guaranteed tool performance is just one of the many advantages of a tool presetting system. Using the inspection function you can accurately check the performance / wear of your cutting tool.

Following you can find the Elbo Controlli NIKKEN standard presetter machines comparison.

TECHNICAL FEATURES AND CONFIGURATION - STANDARD PRESETTER SERIES -

LEGEND: ● available ○ optional - not available

E346B E346BV E346BA E356B E46B E46BA E46BP E46C E46CA E46CX E68B E68BP E68CX

GENERAL FEATURES

Measuring range (diameter and height in mm)	360 x 460	360 x 460	360 x 460	360 x 560	400 x 600	600 x 800	600 x 800	600 x 800					
Natural granite base and column	●	●	●	●	●	●	●	●	●	●	●	●	●
Steel base (3+1 adjustable feet)	●	●	●	●	●	●	●	●	●	●	●	●	●
Linear guideways (2 X axis, 1 Z axis) with double recirculating ball bearings slides	●	●	●	●	●	●	●	●	●	●	●	●	●
Pneumatic axis movement unlock	-	-	-	-	●	●	●	●	●	●	-	-	-
Motorized axis movement	-	-	-	-	-	-	●	-	-	●	●	●	●
Manual gross movement	●	●	●	●	●	●	●	●	●	●	-	-	-
Manual fine adjustment	●	●	●	●	●	●	-	●	●	-	-	-	-
Motorized fine adjustment	-	-	-	-	-	-	●	-	-	●	●	●	●
ECN AS371 certified optical scales (resolution 1µm)	●	●	●	●	●	●	●	●	●	●	-	-	-
ECN GS371 certified optical scales (resolution 1µm)	-	-	-	-	-	-	-	-	-	-	●	●	●
Vertical Touch Screen Monitor	TFT 15,6"	TFT 15,6"	TFT 15,6"	TFT 15,6"	TFT 15,6" Full HD	TFT 15,6" Full HD	TFT 15,6" Full HD	TFT 21,5" Full HD	TFT 21,5" Full HD	TFT 21,5" Full HD	TFT 15,6" Full HD	TFT 15,6" Full HD	TFT 21,5" Full HD
Keyboard and mouse	○	○	○	○	○	○	●	●	●	●	●	●	●
Label printer	○	○	○	○	○	○	○	○	○	○	○	○	○
Label printer side support	-	-	-	-	○	○	○	●	●	●	-	-	-
Spindles side support (1 for 2 spindles)	-	-	-	-	○	○	○	●	●	●	●	●	●
Additional spindles side support	-	-	-	-	○	○	○	○	○	○	○	○	○
Overall dimensions (mm)	L958xH974xP441	L958xH974xP443	L958xH974xP458	L958xH1114xP441	L1136xH1935xP568			L1179xH1935xP568			L1748,5xH2217 (2417)xP717,1		
Weight (kg)	105			108	230						570		

SPINDLE FEATURES

Interchangeable spindle (ISO,BT,CAT, HSK, Polygonal taper, etc.)	○	○	○	○	○	○	○	○	○	○	○	○	○
Spindle identification system (SP-ID)	-	-	●	-	-	●	●	●	●	●	-	●	●
Spindle mechanical index (0°-90°-180°-270°)	-	-	-	-	●	-	-	●	-	-	●	-	-
C axis visualization	-	-	●	-	○	●	●	○	●	●	-	●	●
Automatic spindle rotation and electronic index	-	-	●	-	-	●	●	-	●	●	-	●	●
Manual spindle brake	●	●	-	●	-	-	-	-	-	-	-	-	-
Pneumatic spindle brake	-	-	●	-	●	●	●	●	●	●	●	●	●
Tool holders clamping with VACUUM system (DIN69872, ISO7388, MAS403)	-	●	-	-	-	-	-	-	-	-	-	-	-
Manual tool holders clamping (HSK, Polygonal taper)	●	●	●	●	-	-	-	-	-	-	-	-	-
Motorized mechanical tool holder clamping (standard pull stud DIN69872, ISO7388, MAS403)	-	-	-	-	●	●	●	●	●	●	●	●	●
Motorized mechanical tool holder clamping (HSK, Polygonal taper)	-	-	-	-	●	●	●	●	●	●	●	●	●

CAMERA SYSTEM FEATURES

Bi-telecentric optical lenses	●	●	●	●	●	●	●	●	●	●	●	●	●
Elbo Controlli NIKKEN camera system measuring range (mm)	7,6 x 7,2	7,6 x 7,2	7,6 x 7,2	7,6 x 7,2	10 x 10								
Monochromatic C-MOS sensor USB 2.0	●	●	●	●	-	-	-	-	-	-	-	-	-
Monochromatic C-MOS sensor USB 3.0 Super speed connection	-	-	-	-	●	●	●	●	●	●	●	●	●
Elbo Controlli NIKKEN camera system resolution	1 µm	1 µm	1 µm	1 µm	1 µm	1 µm	1 µm	1 µm	1 µm	1 µm	1 µm	1 µm	1 µm
Elbo Controlli NIKKEN camera system magnification	25 x	25 x	25 x	25 x	18 x	18 x	18 x	25 x	25 x	25 x	18 x	18 x	25 x
Analogic and digital camera view	●	●	●	●	●	●	●	●	●	●	●	●	●
Digital zoom (4x)	●	●	●	●	●	●	●	●	●	●	●	●	●
Tool inspection function	●	●	●	●	●	●	●	●	●	●	●	●	●
Resizable camera area	●	●	●	●	●	●	●	●	●	●	●	●	●

TECHNICAL FEATURES AND CONFIGURATION - STANDARD PRESETTER SERIES -

LEGEND: ● available ○ optional - not available

E346B E346BV E346BA E356B E46B E46BA E46BP E46C E46CA E46CX E68B E68BP E68CX

SOFTWARE AND MEASURING FUNCTIONS

Embedded Elbo Controlli NIKKEN operating system Linux based	●	●	●	●	●	●	●	●	●	●	●	●	●
Elbo Controlli NIKKEN machine software B version (blue screen)	●	●	●	●	●	●	●	-	-	-	●	●	-
Elbo Controlli NIKKEN machine software C version (yellow screen)	-	-	-	-	-	-	-	●	●	●	-	-	●
Number of machine origins / number of tool sets	∞ / ∞	∞ / ∞	∞ / ∞	∞ / ∞	∞ / ∞	∞ / ∞	∞ / ∞	∞ / ∞	∞ / ∞	∞ / ∞	∞ / ∞	∞ / ∞	∞ / ∞
Multi-origin function for multitasking machines	●	●	●	●	●	●	●	●	●	●	●	●	●
Manual measure function with fixed reticle	●	●	●	●	●	●	●	●	●	●	●	●	●
Autotargeting measure function	●	●	●	●	●	●	●	●	●	●	●	●	●
Autotargeting measure function with dimension freeze	●	●	●	●	●	●	●	●	●	●	●	●	●
Collimation indicators for fixed reticle measure	●	●	●	●	●	●	●	●	●	●	●	●	●
On-screen automatic measure of tool corner radius & theoretical centre point	●	●	●	●	●	●	●	●	●	●	●	●	●
On-screen automatic measure of tool corner angle & theoretical intersection	●	●	●	●	●	●	●	●	●	●	●	●	●
Chamfer measuring function	●	●	●	●	●	●	●	●	●	●	●	●	●
Adjustable Area of Interest (AOI)	●	●	●	●	●	●	●	●	●	●	●	●	●
Automatic spindle rotation and measurement of tool edges	-	-	●	-	-	●	●	-	●	●	-	●	●
Presetter automation software for tool presetting (1 step)	-	-	-	-	-	-	●	-	-	●	-	●	●
Presetter automation software for tool presetting (Unlimited step)	-	-	-	-	-	-	-	-	-	●	-	-	●
Software for manual tool presetting and geometry check	●	●	●	●	●	●	●	●	●	●	●	●	●
Presetter automation software for tool presetting and geometry check (full CN)	-	-	-	-	-	-	-	-	-	●	-	-	●

GRAPHIC FUNCTIONS

Adjustable reticles (axis and circles)	●	●	●	●	●	●	●	●	●	●	●	●	●
Profile image capture function	●	●	●	●	●	●	●	●	●	●	●	●	●
Automatic geometry (1 geometric entity)	●	●	●	●	●	●	●	-	-	-	●	●	-
Automatic geometry (multiple geometric entity)	-	-	-	-	-	-	-	●	●	●	-	-	●
Geometry by points	●	●	●	●	●	●	●	●	●	●	●	●	●
Camera image capture	●	●	●	●	●	●	●	●	●	●	●	●	●
DXF files import of the tool profile	●	●	●	●	●	●	●	●	●	●	●	●	●
Manual DXF acquisition of the revolution profile	-	-	-	-	-	-	-	●	●	●	-	-	●
Automatic DXF acquisition of the revolution profile	-	-	-	-	-	-	-	-	●	●	-	-	●

CONNECTION AND INTEGRATION FUNCTIONS

USB ports (4)	●	●	●	●	●	●	●	●	●	●	●	●	●
LAN connection	●	●	●	●	●	●	●	●	●	●	●	●	●
Wi-Fi connection	-	-	-	-	-	-	-	●	●	●	-	-	●
Standard post processor	●	●	●	●	●	●	●	●	●	●	●	●	●
Customized post processor	○	○	○	○	○	○	○	○	○	○	○	○	○
TID (Tool Identification system)	○	○	○	○	○	○	○	○	○	○	○	○	○
TTS (Tool Tracking System)	○	○	○	○	○	○	○	○	○	○	○	○	○
RF-ID tool identification	○	○	○	○	○	○	○	○	○	○	○	○	○
TP32 software ready (double monitor and dedicated PC)	-	-	-	-	○	○	○	○	○	○	○	○	○

“rock solid measurement”

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