

# TP32

Integrated  
Tool  
Management  
System



# THE ORIGINS OF TP32

The first tool management system was created in 1993 and ever since has been asserting itself in the Italian market. **TP32** is the result of experience gained over 20 years in the industry, taking on the problem of tool management in workshops everywhere.

**TP32** continues to evolve thanks to contribution and requests from our partners which differentiates itself from other products on the market for **SIMPLICITY, COMPLETENESS** and **FLEXIBILITY**.

## Some information on the application

### WHO IS IT FOR?

Any mechanical company

### SIZE

Small, medium and large

### FACILITY

Single or multi-plant facilities

### SECTOR

Aerospace, automotive, oil & gas, etc.

### ON THE MARKET

Over 25 years

## OBJECTIVE: SOLVE PROBLEMS

The focus of **TP32** is to solve and analyze problems in the context in which they arise.

The real strength is the collaboration with our clients who in turn become partners: this positive flexibility in the approach to business issues makes the relationship between user and supplier open and non-restricting.

Our satisfaction is to help companies improve using an intuitive and complete tool.

Are you looking to realise savings and optimisation without interfering with every day running of your organisation? **TP32** will meet your needs.

*"There's such a feeling of satisfaction when something you imagined turns into something real" Prabal Gurung*





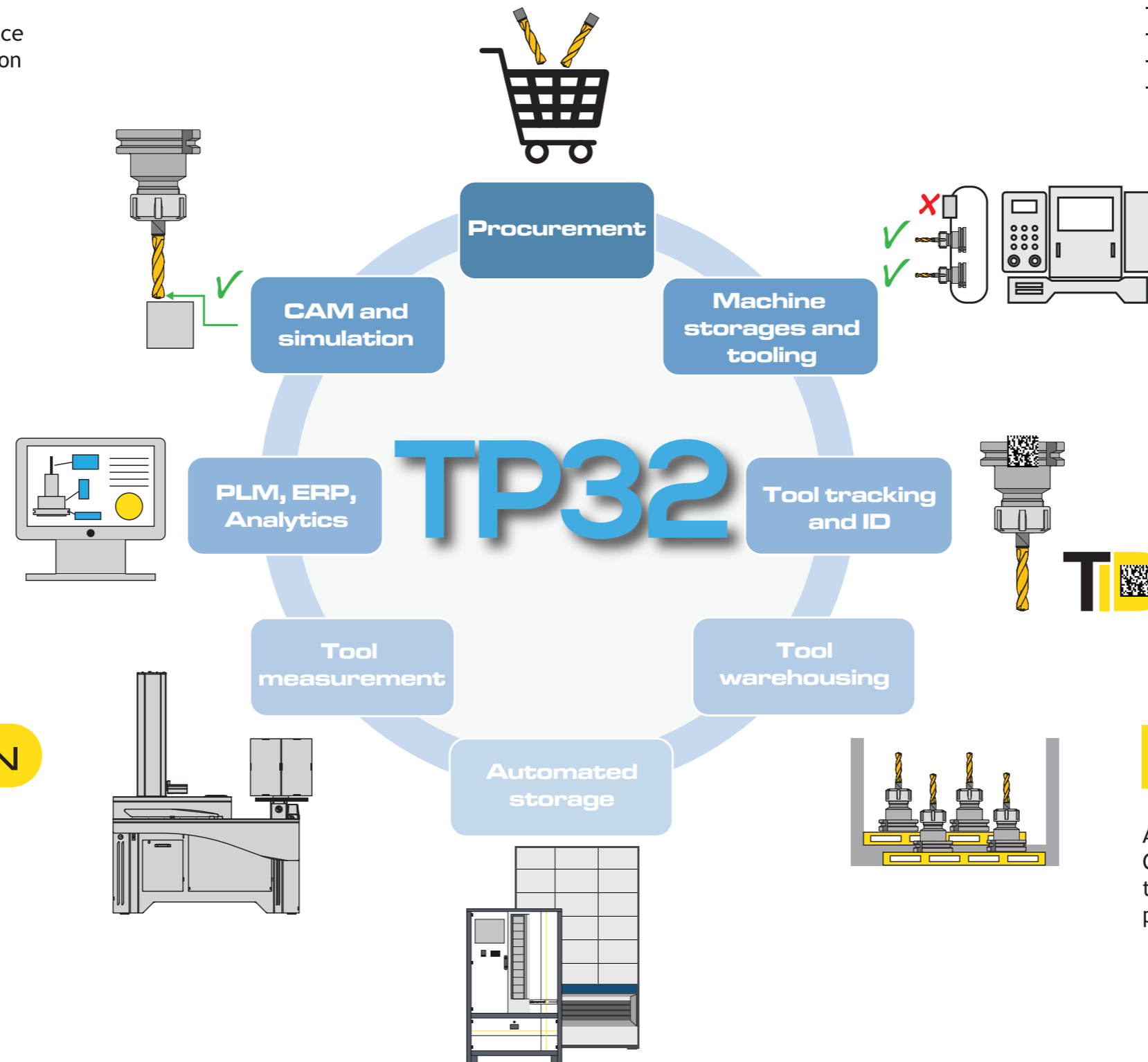
## SIMPLE

Tool management is no longer a problem with TP32.  
In today's world, it is necessary to utilise simple tools which minimise room for error.  
TP32 has an intuitive graphical user interface which easily guides the user during operation

## MODULAR

The modularity of the system allows you to integrate with:

- Any CNC
- Any Presetter
- Any Automatic Warehouse
- Any Management (ERP)
- Any CAM and Simulator



## MULTI-WORKSTATION

Structured to work with more than one workstation without additional costs

## ISO 13399

Automatic creation of 3D tool libraries for CAM and/or Simulator systems using ISO 13399 templates with real measures derived from presetting

*"Real progress only happens when the advantages of a new technology become available to everybody" Henry Ford*

# COMPLETENESS, EASY TO USE, FLEXIBILITY: THIS IS TP32

TP32 is an integrated tool management system. It manages the data of cutting tools throughout the entire production process, within any related system in an INDUSTRY 4.0 approach.

## The importance of tool warehouse management

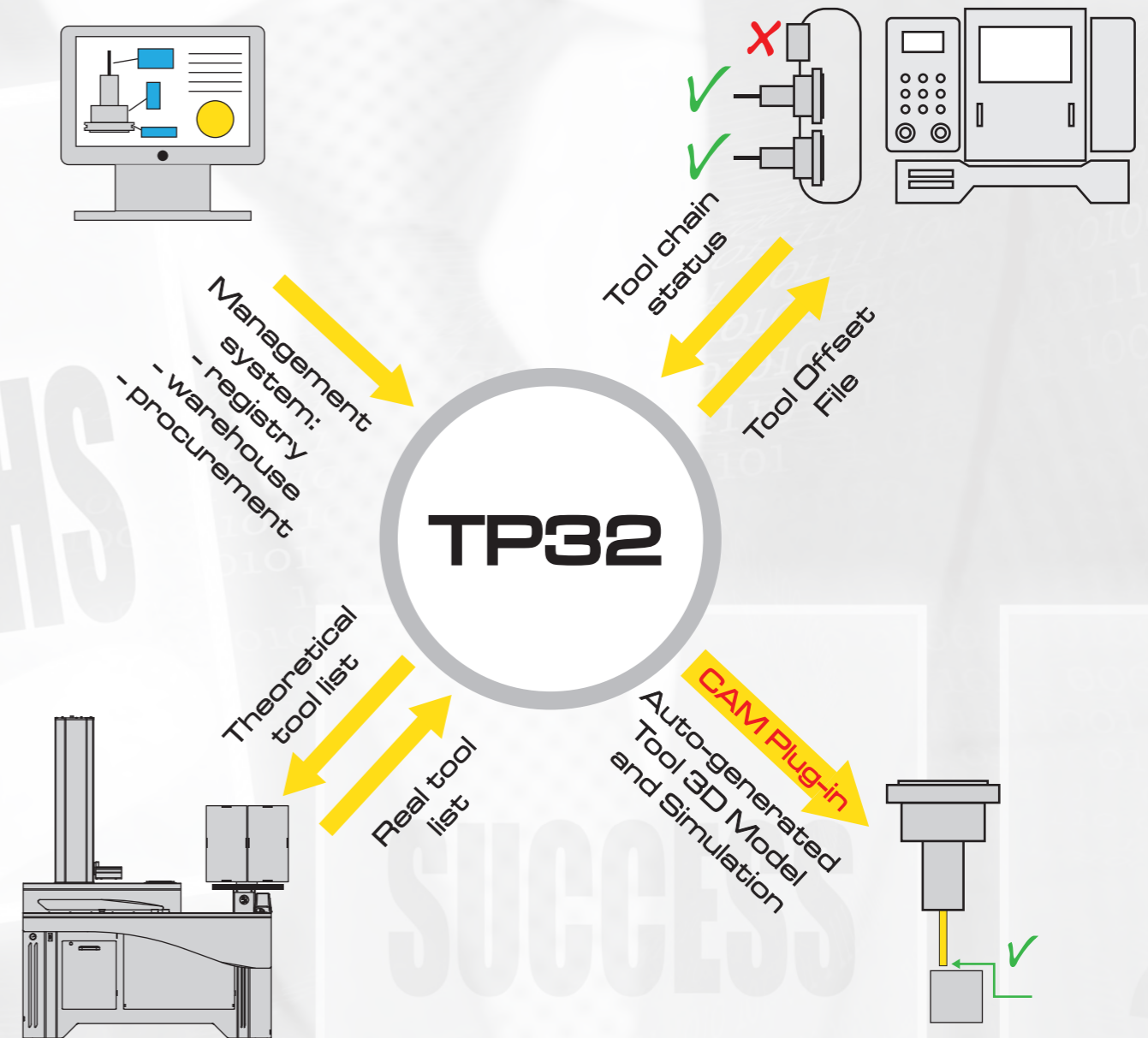
How important is tool warehouse management?

A mechanical company usually manages tools, spare parts, inserts, etc. in greater quantities than they actually need: this all happens due to the lack of a centralized control system.

An accurate check of the warehouse leads to many advantages, including: reduction in production costs, optimisation of the supply system, avoiding unnecessary wast, real-time control of available resources, and organisation of the production cycle.

Efficiency is fundamental and that's why introducing a management system can obtain remarkable results both economically and organisationally.

## What are its strengths?



## Data exchange. A new way to communicate in the workshop

Effective and efficient communication plays a key role, especially when different systems are present in a single environment.

Omitting or not constantly updating databases consequently leads to losing track of data and information - something which has happened to us all.

TP32 helps in all of these sensitive and important aspects by providing an interface between all of the existing systems in a mechanical workshop: machine tools, management systems, CAD/CAM, presetting machines, etc.

Everything in one piece of software. Easy. Flexible. Complete.

*"The five C's of good communication: clarity, completeness, conciseness, concreteness, correctness" Anonymus*



# WAREHOUSE MANAGEMENT IS THE KEY

TP32 allows you to manage in a simple and efficient way your warehouse, from single components necessary for tool assembly, up to all the accessories related to mechanical processing (equipment, materials, drawings, etc.).

Warehouse management is an area which plays an important role: good organization avoids excess waste and lack of use, it offers optimization of space and cost cutting for its management but it also provides satisfaction to the end user.

Discover the **advantages** of this module

- ✓ Check supplies and warehouse stocks
- ✓ Monitor the material handling, activities and use of components
- ✓ Know actual component availability and not only its existence in the workshop
- ✓ Minimize stock levels
- ✓ Generate component lists under minimum stock level for reordering
- ✓ Arrange the inventory with its valorization
- ✓ Keep track of components inside the workshop
- ✓ Have clear and useful print outs on warehouse status
- ✓ Generate purchase request by carrying out an analysis of material under stocked / depending on use and warehouse movement performed in a given period

**IMPORTANT**

INTEGRATION

The screenshot displays the TP32 software interface with three main sections:

- Tool data:** A detailed view of a tool component with fields for barcode, cost, discounts, and file information.
- Graphic representation of assembled tool:** A 3D CAD model of a tool holder assembly with dimensions (80, 60.9, 21) and a 'START EXPORT' button.
- Assembled tool BOM and 3D model:** A Bill of Materials (BOM) table listing components like 'CLASS ISO HOLDER', 'ISO\_DIMM', and 'L.CONNESSIONE [RUCON]' with their respective quantities and descriptions.

Tool data

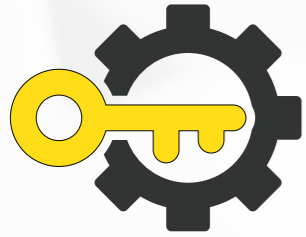
Graphic representation of assembled tool

Assembled tool BOM and 3D model



**AUTOMATED WAREHOUSES, PREPARATION AND TOOL ID**





### Main key points

- ✓ Reduction of operator workload in collection, assembly and creation of tool lists
- ✓ Reduction of human error

TP32 enables you to integrate tool information across multiple devices and equipment:

- hardware connection with automated warehouse and machine storage
- management of component location

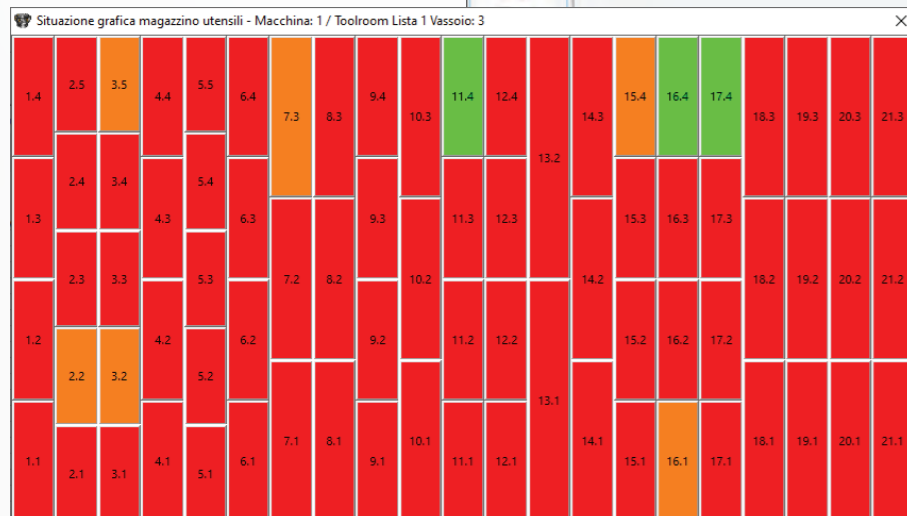
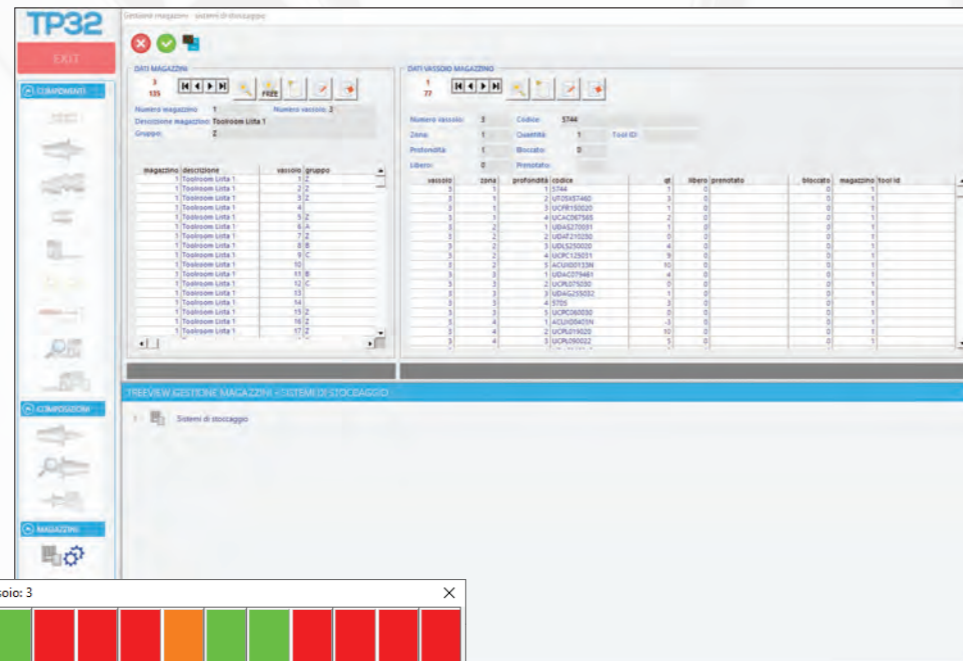
Moreover, TP32 generates tool, picking, assembly and measurement lists, taking into account:

- warehouse and tool machine chain status
- list of components for tool assembly

All of the tools in your workshop are tracked by an identification system: a unique Datamatrix code makes the system quick and error-free, which in turn increases the efficiency of the workshop and reduces workload.

Fast, efficient, error-free. Simply TP32.

### Automated warehouse commands



Tray status

# DISCOVER CAM INTEGRATION AND SIMULATION

How important is integrating CAM and simulation into a single tool?  
 TP32 is able to automatically create tool libraries in 3D for CAM and/or the simulator.

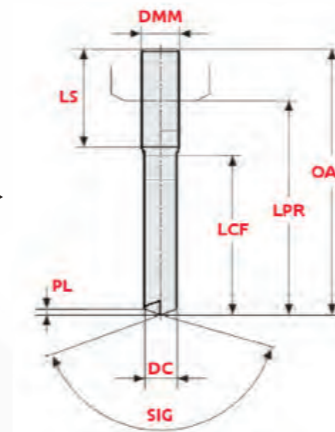
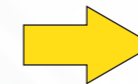
Which CAMs are compatible with TP32?

- CATIA
- CIMATRON-E
- EDGECAM
- ESPRIT
- EUREKA
- FEATURECAM
- HYPERMILL
- MASTERCAM
- NXCAM
- POWERMILL
- SOLIDCAM
- TEBIS
- TOPSOLID
- VERICUT
- VISI

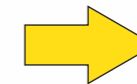
Many varieties of CAM are compatible meeting all your needs: the choice is yours, it's all in your hands



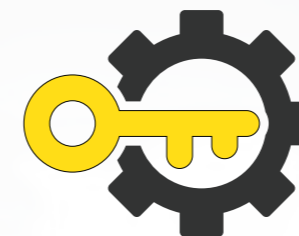
Real Tool



Tool template (+ technological parameters)



Tool digital twin



### Main key points

- ✓ Using tool template grounded on ISO 13399
- ✓ Create libraries in the native format of CAM/Simulator
- ✓ Stores customized cutting data for any customer
- ✓ Possibility to use both theoretical and actual measured data by the presetter
- ✓ 3D models of all tools in the workshop
- ✓ Shared knowledge on the cutting parameters

*"The process of scientific discovery is, in effect, a continual flight from wonder" Albert Einstein*



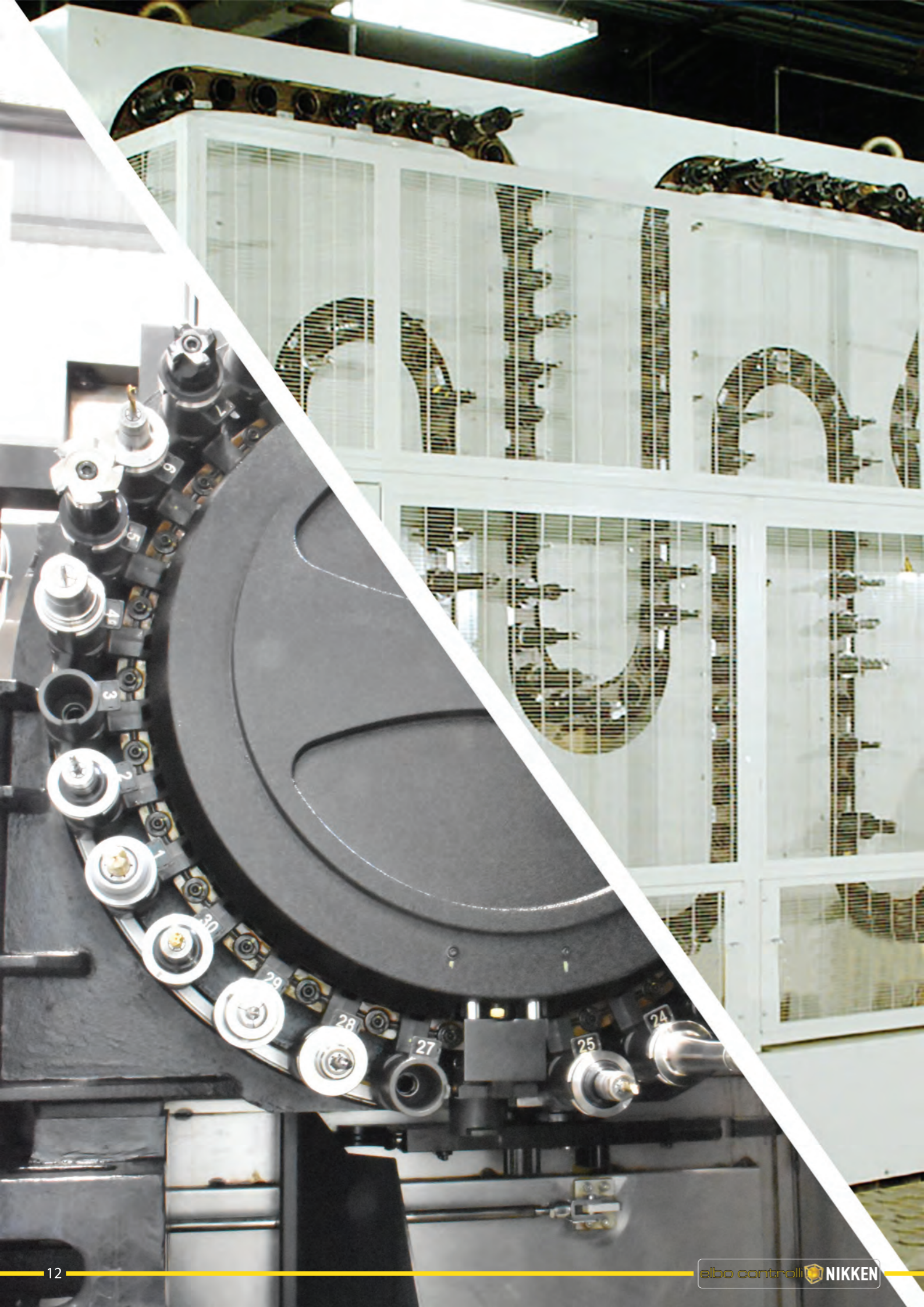
# MACHINERY MANAGEMENT AND TOOL LISTS PREPARATION

TP32 allows visualisation of the machine tool chain status and, consequently, organises each single tool change.

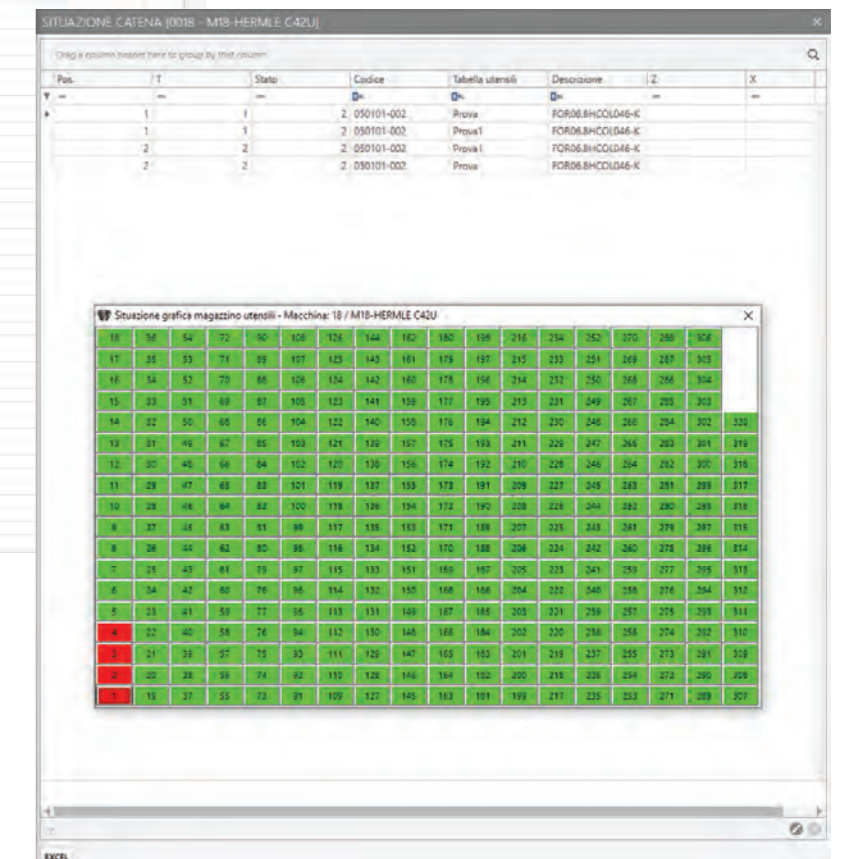
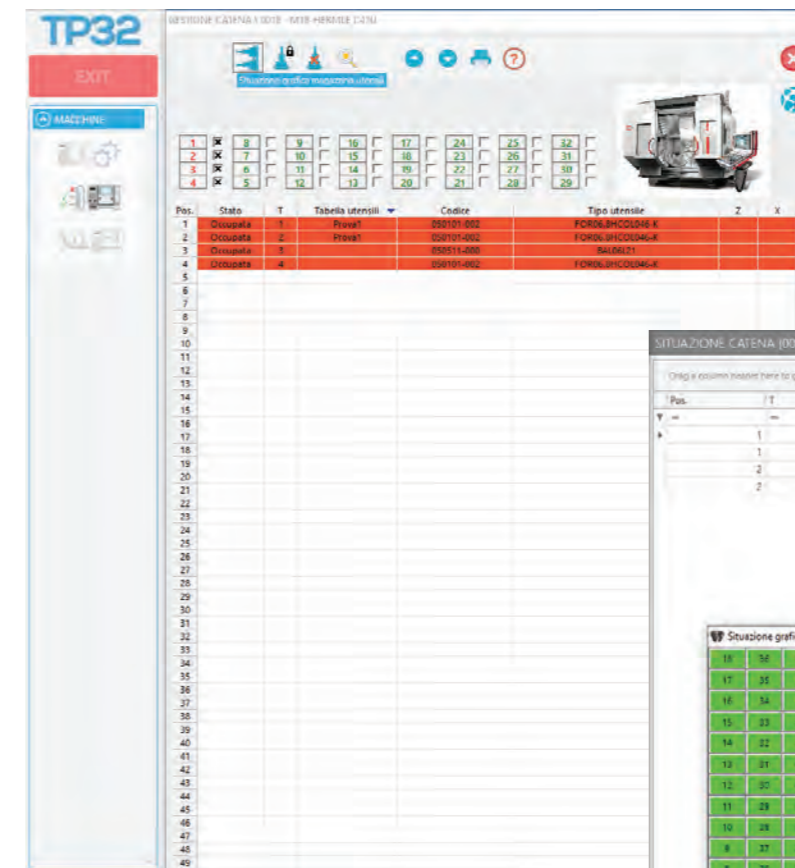
How important is optimizing the tool list preparation process?

It depends on how productive and dynamic you want to make your workshop: our solution will help you during this process, bringing considerable benefits in the management phase and reducing preparation times.

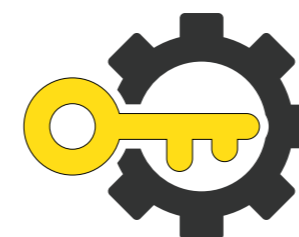
What are you waiting for? TP32 will change your life, see it for yourself.



*Tool chain management*



*Machine tool storage in real time*



## Main key points

- ✓ Create the tool table directly from the NC G-code program
- ✓ Prepare a list of assembled tools, paying particular attention to the chain tools available and to the Toolroom availability in various warehouses
- ✓ Set actual tool values using presets
- ✓ Send tool offsets directly to the machine





TP32 brings a range of benefits that will improve and optimise the whole production process of your company, making it more competitive in the market through a reduction in management costs.

Organising and managing tools in an easy and fast way, while limiting the possibility of error as much as possible are critical.

With over 25 years of experience in the tool management sector, and thanks to the experience gained with our valued customers, we can state that:

**-50%**

## Management time

The equipment managing system minimizes time effort for selecting tool data

**-25%**

## Tool costs

Tool variety is reduced and standardized. This lowers tool costs and increases the use of available tools

**+18%**

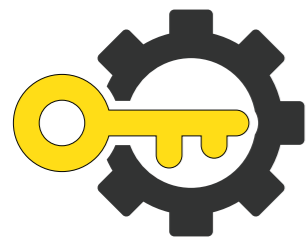
## Tool machine efficiency

Thanks to TP32 the efficiency of machine tool use is increased by about 20% = more productivity

**+23%**

## Cutting data

23% increase on cutting data, reducing the cost of each component



### Main key points

- ✓ E46 and E68L Elbo Controlli NIKKEN presetter machine series with double Full HD 22" vertical touch screen monitor with memory expansion for TP32 management
- ✓ Integration with TID system for tool data identification and management
- ✓ Automatic acquisition of the X and Z dimensions directly from the presetter
- ✓ Graphic or real display of the tool
- ✓ Tool list preparation



The use of Elbo Controlli NIKKEN presetter machine with TP32 will make the measurement acquisition operation easy, fast and error-free.

This is the perfect solution for your Toolroom, reducing production costs significantly and optimizing the material procurement system.

Every company has different needs: the real strength is to be able to adapt to all situations.

It's all about yours.

What are you waiting for?

Discover the world of the TP32 and remember that it's an open and customizable system: in addition to having additional modules, it's possible to request modifications tailored to your needs.

The customizations make the system more flexible, simple and ready to work.

Contact us to make an appointment with one of our consultants and to witness first-hand the potential of this fantastic solution created by Elbo Controlli NIKKEN.

*"The greatest achievements are those that benefit others" Denise Waitley*



**“**  
*rock solid measurement*  
**”**

\*The drawing and/or document and all the technical and commercial information and contents are exclusive ownership of Elbo Controlli s.r.l. and all rights are reserved. Such information constitutes and represents a trade secret having economic value owned by Elbo Controlli s.r.l. and therefore anyone who gains possession of such information must adopt any measure to ensure the absolute secrecy, making sure that also other subjects will take the same precautions. No reproduction (even partial), copy, modification, elaboration, execution, disclosure, communication, economic exploitation in any manner whatsoever is allowed without prior written consent by Elbo Controlli s.r.l.. Any breach or violation will be prosecuted by Elbo Controlli s.r.l. by any available means\*.

**elbo controllli**  **NIKKEN**



20821 MEDA (MB) - Italy - Via San Giorgio, 21  
**T.** +39 0362 342745 - **F.** +39 0362 342741  
[www.elbocontrolli.it](http://www.elbocontrolli.it) - [info@elbocontrolli.it](mailto:info@elbocontrolli.it)



*Distributed by*