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Automatic stock control (optional)

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With TP32 you can manage the tools inventory communicating directly with the automatic warehousing systems. The management is carried out by directly piloting the movement of the warehouse boxes to perform the operation of loading and unloading of the components. They have already been integrated with automated warehouses ICAM, SYSTEM LOGISTICS, LISTA MEGAMAT, DEPOSYTA, and SUPPLYPOINT.

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Customization

Magazzino 9

PROTOTIPI

TP32 is an open and customizable system, besides having several additional modules and the possibility to be modified "ad hoc" for your needs. Our consultants are ready to meet your requests to integrate them into TP32.



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TP32 open Business license for network operation; Integration with CAM system; Integration with automated stock; Integration with existing management system; Data exportation in a different format from that already supported; External data importation (eg. Tool catalogues, pre-existing archives); Data base Mysql, sqi server or other as requested; Work cycles management and revisions.



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Tool management Identification system



360° Solution





History

Developed by Gamma Progettazioni Informatiche range and derived for the next evolution of the Tmm 2.10 NT, that in 1993 was one of the first programs for measuring tools in a Windows environment and subsequently since 1996 affirmed ToolPlus as the lead product in the Italian market. TP32 began in 2003 and is the result of over twenty years experience in the sector, it fully integrates different business realities of facing the problem of measuring tools in 360 degrees. With continuing demands our clients have contributed to the creation of the TP 32 in that it differs from the other products on the market by its : simplicity, completeness and potential.



The scope of skills in the mechanical engineering industry with regard to automation and the control of the production process, the NC machines and the problems related to the management tools, give Gamma Progettazioni Informatiche features ideal to be the most appropriate partner for companies who want to see their ideas realized through the best tools available and in a way that doesn't restrict the company organization.





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Stato

Occupata

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Tabella utensili

AVORAZIONE 1

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Post-Processor CNC

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Anteprima [Maz640ut.pp]

D:\TP32\postpro\9997.EIA

GESTIONE CORRETTORI UTENSILI - LAVORAZIONE 1 - 0001 - MAZAK E41

Tipo utensile

Alesatore Cilindrico

FRESA A SPIANARE 45°

FRESA X SPALLAMENTI

PUNTA AD INSERTI

ESTINA MICROREG, REGOL

MASCHIO M5

Codice

AF1U00800080185

FF1S10000142160

FF2A04000070090

P\$1\$02500092232

BF1S062H7215288

MC1A00500050300



Strategy

The computer design strategy that Gamma follows is that of optimizing the existent appropriate programs without information fuse having a traumatic impact or a difficulty to accept.

Only the clients requirements and his experience enable the development of functional designs, information technology is only a way to manage them efficiently and to resolve them and it is in this context that Gamma computer designs intends to support its customers.

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The Objectives

The objective of Gamma Progettazioni Informatiche is to resolve and analyze the problems in the context in which they arise. Unfortunately, often the resolution of a problem is dealt with as a separate operation, without paying heed of the correlation that it may have with other areas thus creating an automation difficult to integrate and evolve. In synergy with the clients we prefer to deal with the problems in a wider perspective, identifying the correct collocations and correlation with other contexts. This extreme flexibility in the approach to industrial computing makes collaboration with Gamma computer designs an open relationship and never binding, targeted exclusively to the satisfaction of the customer and not to the forcing of solution choices preferred by the service seller.

Managing machine loading and unloading

Performing the loading operation in addition to the downloading of machine tools from the inventory it is possible to generate an informed file ASCII for interfacing the tool chart with the numerical control unit (CNC) TP32 has an extremely simple programming language that allows editing and creation of post-processor (the post-processor and the program that translates the tool offset data in the format appropriate to the CNC). Thanks to the TP32 it is possible to customize any processor to suit the right numerical control without any added costs. There are more than sixty post-processors already developed and ready to incorporate, continuous updates are available through the internet.

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Machine set-up control

In creating a new tool chart it is possible to inspect the situation of the tools loaded in the machine. Moreover, it is possible at any moment to ask the system to check the situation of the loaded machine.

TIONE CATENA	- LAVORAZIONE 1 -	0001 - MAZAK E410			
CODICE 06000659220	↑ ↓ <u>@</u>	2 💌			
16 15 14 13	17 24 18 23 19 22 20 21	25 [32] [26 31 [27 30 [28 29 [
Tabella utensili 🕤	Codice	Tipo utensile	Z	Х	-
LAVORAZIONE 1	AF1U00600065220	Alesatore Cilindrico	147,981	24,066	
LAVORAZIONE 1	AF1U00800080185	Alesatore Cilindrico	180	4	
LAVORAZIONE 1	FF1S10000142160	FRESA A SPIANARE 45°	160	50	
LAVORAZIONE 1	FF2A04000070090	FRESA X SPALLAMENTI	90	20	
LAVORAZIONE 1	P\$1\$02500092232	PUNTA AD INSERTI	232	12,5	
LAVORAZIONE 1	BF1 S062H7215288	TESTINA MICROREG. REGOL.	288	31	
LAVORAZIONE 1	MC1A00500050300	MASCHIO M5	277,5	2,5	
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Machine configurations

With TP32 it is possible to configure the system in a way to also have the data from all the company machines centralized.





Tooling table management

TP32 can be configured to manage the tool data required for processing and integrates mechanical system identification tools BIS C Bailuf manager for prepared work centres (eg. MCM, Mandelli, Makino, Sigma, Starrag, Mazak, Jobs, WFL).

	mCm	
Posizione		*
T Logico	FR100D10	
Vita	5000	
Soglia critica	200	
Lunghezza L1	100,15	
Lunghezza L2	0	
LM	1	
Raggio R1	10,12	
Feed	500	
Speed	8000	
Dimensione	1	
Power Monitor	350	
MC Reserved	3	
Numero serie	1	
Stato	0	
Break code	0	
RPM Max		
Anticollisione	0	
Pressione		
Raggio R2		-
	BIS C WRITE	

Tool Identification (optional)

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MCM

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TP32 integrates the software BIS C Balluff for the management of the system of tool identification for predisposed work centres. (eg. MCM, Mandelli, Makino, Sigma, Starrag).



Tool list importation A tool list can be generated automatically interpreting the machining program.

File Modifica Formato Vir

(T22 MASCHIO MS ALL)

G54G0 T4M6(T4 PUNTA 015 MD3E)

G99 M98P6 M6(T15 PUNTA 07 MD3E)

G1002P1J1X-512900Y-340100Z-501400(G54)

N4G54G0G43H4X35.Y16.25Z3.S2100F400M3T15 G83Z-41.R3.Q15.L0

(T15 PUNTA 07 MD3E) (T30 FRESA 0100 INS)

G40G80G49G52

X35.Y16.25 X35.Y53.75Z-22.

G28X0Y0Z0 698 G92X0Y0.20 698

691

M7 MSØ

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M8 M7

GR03129.120 - Blocco note

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Presetter machine interface

TP32 incorporates functions that allow the interfacing with the tool pre-registration machine (presetter). Therefore it is possible to import directly into the tool chart the detected measurement.

Why manage the tool stock

A mechanics company manages tools, spare parts, inserts, etc. in quantities exceeding the effective requirements, this is due to the lack of a centralized control system.

- The necessity to manage these resources, is born of the need to: reduce production costs;
 - optimize the supply system of material avoiding unnecessary waste; understanding at every moment the actual situation of the resources available; properly organize the productive cycle.

From research carried out, it is accepted that by introducing a management system after the first months, used for data entry, you get significant benefits both economically and organizationally.



STOCK AREA Stock components management Tools assembly management Intergration with the management system Barcode management



Consultation for stock selection tool





















Tool stock management

TP32 is a program dedicated to the management of the tool repository woven in as a fundamental component of the productive cycle and as such inserted in a system in which information must be accessible to people and presented in the simplest manner. Through TP32 it is possible to have the situation of the repository/stock under control both as a management of the composition of the individual components. In this way you will have all the necessary information for the production (component availability, assembly verifications, etc.) that for the administration (stock values, replenishments of suppliers, etc.).

Stock

TP32 manages the storage area divided by type of component:

- Pull stud
- Tapers
- Collets
- Adaptors
- Tools: drills, drill inserts, mills, mill inserts,
- boring bars, boring bar inserts, tapping,
- turning inserts
- Accessories and spare parts
- Equipment (optional)

Management of the repository of individual components to optimize stock and to have always.

	Dati aggiuntivi - [MU.UT.01	5]
NOTE 1		
NOTE 2		
NOTE 3		
NOTE 4		
NOTE 5		

Import data from electronic catalogues

To facilitate the task of the operator in the introduction of data it is possible to arrange the electronic catalogues of tool manufacturers to those available and it's possible to directly access the necessary data by consulting the internet browser.



	IVI/		NOTE:			
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57	CODICE 6-3001014	CEN 6 HSS	FORMA		Ns.Dis.	
22224	CODICE INTERNO/EX CEN 6 HSS	T1009	ANGOLO ELICA [A]		130
13 0	CODICE COSTRUTTORE Ns.Dis.		D. UTENSILE [D]			6
	DITTA COSTRUTTRICE PROJET SERVI	CE	L. FUORI ATTACO	CO [LFA]		0
BR	FORNITORE PRINCIPALE PROJET SERVI	CE	LUNGHEZZA [L]			0
	VAS/POS/PRO/IDMAG D	000	ATTACCO [A]		D	iL.
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	QUANTITĂ ASSEMBLATI	1	TIPO 💽		Punta da Centro	
E	QUANTITĂ SCARTI	0	APPLICAZIONE	D	Foratura	
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. B. 64	LOTTO RIORDINO	1	MATERIALE	Ð	HSS	
	QUANTITĂ IN ORDINE	0				
	DATA CONSEGNA					
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Additional data

In each family of components it is possible to customize and configure additional data to manage input, editing and research. With this peculiarity the system is open and flexible to fit any particular customer need.

			Catalogo			
CODICE COST	RUTTORE					Y 🛪
			CATA	ALOGO		
# E	Sandvik	🔿 Walter	O Epb	O DAndrea	🔘 Kennar	metal
	OTitex	🔿 Silmax	O Iscar	O UOP		
	O Ghuring	🔿 Seco	O Fette	O Prototyp		
	-					
	Codice	Materi	iale	Materiale	Peso [Kg]	Applicazione
	L260.31-500)-10 Insert	i	40	51	Fresatura
	L260.8-0800	222-12H Insert	i	40	1,5	Fresatura
	L260.8-0800	222-12H Insert	i	40	1,5	Fresatura
	L260.8-1000	Q32-12H Insert	i	40	2	Fresatura
	L260.8-1000	Q32-12H Insert	i	40	3,18	Fresatura
	L260.8-1250	Q40-12H Insert	i	40	3	Fresatura
	L260.8-1250	Q40-12H Insert	i	40	3	Fresatura
	L260.8-1600	Q40-12H Insert	i	40	5	Fresatura
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Access control tools

In each operating area it is possible to define user tasks that can be carried out and each transaction is recorded in a control file.



produced by a CAD system or with a Digital Camera.



Data management resharpening (optional)

For each tool it is possible to associate the necessary data for resharpening including the cost to be able to manage the required material with the management instructions module.

Codice affilatura Image: ARSED06 Affilatore K. Hertel Materiale: METALLO DURO INTEGRALE SCD Descrizione: SE-SEHP-UNIVERSAL RIVESTITE Dimensioni: 0 Diametro: 6 Prezzo: 16,8		Dati affilatu	ra [MU.UT.01!	5]	
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Tool profile It's possible to create a tool profile, exporting the revolution in 3D format, STL, STEP or other forms so that it may be used later by CAM systems for the simulation of machining.

Tool assembly stock



Management barcodes

TP32 allows printing and reading of barcodes to facilitate the research of the components inside the tool stock.