

We support every customer through a technological innovation process by improving the efficiency and the production quality of every plant



### COMPANY PROFILE

**innovative Technology** ACADEMY

i-Tecl

NKFILLE

For more than 20 years I-Tech offered a wide range of technologies and useful solutions for glaze, ink, color or paint management, both in traditional and digital decoration.

Thanks to its innovative products and its constant attention to Research and Development activities, I-Tech can now improve decorative operations in many sectors such as ceramics, paints for industry, packaging, textile or leather finishing.

Today we are a solid and dynamic reality and we built our business on the concept of constant improvement through innovation and attention to every detail.

Today I-Tech's products are available in more than 40 countries in 5 different industrial sectors with specializations in dosing, grinding, filling, mixing, stirring and transfer of liquid products such as glazes, paints or inks.

The company has now also specialized in artificial vision systems applied to quality control processes after ceramic decoration.





#### DISTINCTIVENESS

I-Tech considers the distinctive features of its products as a determining factor in the competitive system and as an added value.

### OUR VALUES



#### INNOVATION

I-Tech has always been a precursor of technological innovation for industrial processes by investing up to 10% of its turnover in research and development every year.



### PROFESSIONALITY

We have always promoted a young and dynamic work environment in which experience and expertise can be combined in a highly qualified team, constantly updated thanks to continuous training plans.



### CUSTOMER ORIENTATION

The I-Tech assistance department provides quick answers in an optimized time frame, through a just-intime strategy in order to follow every customer's requests and to be able to offer customized solutions.



### EFFICIENCY

In an increasingly uncertain, volatile, complex and ambiguous context, the first characteristic of our company is the fast answers and the fast time of response, not only to the customer's needs, but also to the changing environment.



### QUALITY

I-Tech represents the excellence of Made in Italy as our high-level of products industrialization is given by the constant craftsmanship of detail.

### OUR TEAM

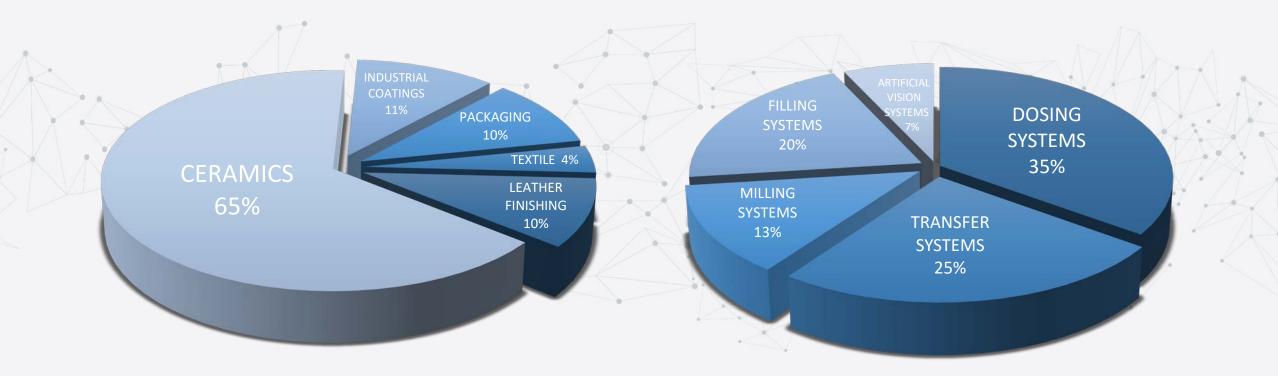




### FACTS AND FIGURES

### **I-TECH MAIN SECTORS**

**I-TECH MAIN APPLICATIONS** 





### PRODUSTS BUSINESS MODEL

SW, HW Development Engineering & Design	100% Make in	
Parts production	100% Make out	
Machineries assembling & testing	100% Make in	
Installation, start up, training and after sales	100% Served directly by our team	

Installation, start up, training and after sales





KEY ACCOUNT 20% DIRECT SALES 80%



## **OUR I.T. INFRASTRUCTURES**

Modern 3D CAD software

Modern Product data Management software/PDM

Supervisory software are internally developed by

Commercial information are shared in cloud computing

Rapid prototyping (3D printing)

Remote assistance

Creo Modelling (PTC)

PE2 (CDM)

MS Visual Studio

MS SharePoint- MS One drive

2 units SHAREBOT 42

Team Viewer





## PRODUCTS OVERVIEW

**COOPTINIX** Advanced Dosing Solutions

Colormix represents the historic brand of I-Tech Company and it's been present in the market since late 90's.

Colormix was in fact born in 1997 as a branch of another company specialized in design and construction of gravimetric dosing systems for many industrial sectors.

Over the years the brand Colormix achieved strong reputation and notoriety in many sectors where it could provide a full package of solutions including its own tintometric formulation systems and many dosage, mixing and colour management solutions.



To keep the brand identity achieved during these years we decided to maintain the Colormix brand in I-Tech as an integration of our products and solutions. So the Colormix brand represents now the dosing division of our Company and gained a worldwide quality assurance.

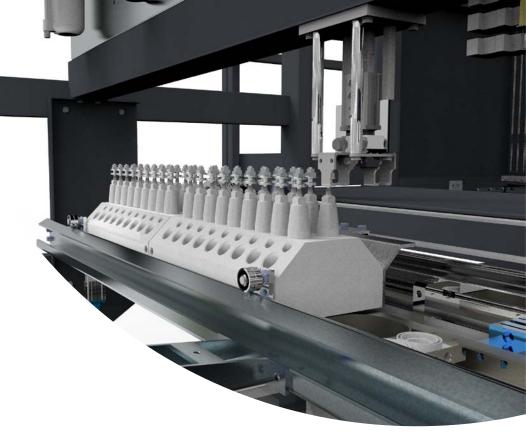


I-Tech offers a big range of innovative and high technology dosing systems to mix and combine liquid products such as inks, paints, glazes, coatings or additives.

All our systems have been developed to dispense products with a gravimetric principle, so that they can ensure total precision and repeatability in every lot.

They are able to adapt to every production quantity: from small quantities to the large-scale production.

These dosing systems can be configured both for water-based or solvent-based products and can be combined with different types of storage such as stainless-steel tanks, IBC tanks or drums basing on the production volumes. The dosed product can then be dispensed in flexible quantities within different types of containers.



### **DOSING SYSTEMS**







SUPREMA is the I-Tech dosing system for glazes and engobes, as well as inks, paints and varnishes that allows the creation of any type of coloured product with extreme precision and rapidity.

The system can manage up to 42 different circuits with the respective dosing valves and is therefore ideal for companies that need to dose large quantities of product in a short time

Valves	Up to 42 Triple opening: 40/8/1mm o 20/8/1mm Double opening: 16/2mm
Weighting System	Up to 3000 Kg. (multi range: 10 gr on the first 300kg and 100 gr from 300 to 3000 kg)
Final container	bin, drum or tank
Raw materials storage	Configurable by type and size according to specific needs



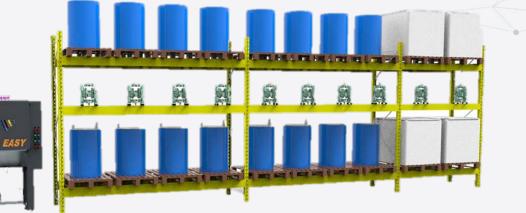


# EASY

EASY is the I-Tech dosing system for inks, paints or varnishes that allows the creation of any type of coloured product with extreme precision and rapidity.

The system can manage up to 34 different circuits with the respective dosing valves and is therefore ideal for companies that need to accurately produce a consistent number of production lots in a short time.





Valves	Up to 34
	triple opening: 20/8/1mm
	double opening: 16/2mm o 11/1mm
Weighting System	300 Kg. (2 gr)
	34 Kg. (0,1 or 1 gr)
Final container	bin, drum
Raw materials storage	Configurable by type and size according to
	specific needs





# MINITOWER

I-Tech dosing system with on board storage for cans or bins

The MINITOWER has a small size and a compact structure, and this allows to fulfil different activities in a simple and fast way. No need to top up because the can is completely replaced on storage.

Valves	Up to 24
	Double opening: 16/2mm
	Double opening: 11/1mm
Weighting System	Up to 34 Kg. (0,1 gr)
Final container	can, bin
Raw materials storage	Configurable by type and size according
	to specific needs





# MIPLANT

The MINIPLANT offers the possibility to prepare small lots with extreme precision and very high repeatability.

It is a mixing unit with a very small dosing head, which can however be connected to high-volume storage elements.

The final configuration in fact will be an industrial plant adaptable to the specific needs of the customer and, thanks to the size of its deposits, it ensures high storage times.



MINIPLANT is the I-Tech dosing system with separate storage for drums or tanks

<u>i-Tech</u> MINIPLAN1





BASIC is provided with a self-supporting structure, a linear dosing head (compact head, dosing valves, motorized valve actuator, balance, procolor software).

All production data (such as registers, statistics, consumption ...) can be exported to any ERP.

It is therefore ideal for quickly and easily dispensing high volumes of semi-finished and auxiliary products, such as additives, resins, glazes, and any type of chemical agents used in the industry.

Valves	Up to 12 Triple opening: 40/8/1mm or 20/8/1mm
Weighting System	Up to 3000 Kg. (multi range: 10 g on the first 300kg e 100 g from 300 to 3000 kg)
Final container	drum, tank
Raw materials storage	Configurable by type and size according to specific needs





## COLOR SKID

Colornia Advanced Dosing Solution

Ideal system for small plant operations.

It can handle both water-based and solvent-based products and its software, combined with a high-resolution scale, offers a clean and easy to use system.

Entirely developed within I-Tech in Microsoft Framework environment with Visual Basic .net language, PROCOLOR software offers an intuitive and easy to use multilingual interface for any interlocutor. The MS® SQL Server® search engine uses a latest generation relational database and can be installed either on the machine management PC or integrated as a client on the client's company server.



Colormix W\*

## FILLING SYSTEMS

I-Tech offers an innovative and highresolution filling system to dose and fill containers with all kind of liquid product. All our systems have been developed to dispense inks, paints, glazes or additives with a gravimetric principle, so that they can ensure total precision and repeatability in every lot. They are also able to adapt to every production quantity: from small quantities to the large-scale production.



## COLORFILLER

Every circuit is connected to the respective external storage tank thanks to a delivery and recirculation pipe.

The container that needs to be filled must be positioned onto one of the electronic balances and, sliding, it will be placed under the circuit of the product that needs to be dosed, where a special sensor will detect its presence.

Through our management software it will be possible to set the quantity of product that needs to be poured inside the container.

The ProINK software also allows you to save the data of each filling with your own product code, thus providing the historical profit for production management.



 Significant increase of the ink lifetime cycle thanks to a bottling on-site process

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• COLORFILLER

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- 2. Drastic decrease of problems related to the printing nozzles' clogging thanks to an efficient filtration cycle
- 3. Reduced bottling time or product waste thanks to a completely automatic filling procedure



## DISPERSION SYSTEMS

Tech offers innovative and high-efficiency dispersion systems for suspension's homogenization.

I-Tech dispersion systems can be provided with different types of impellers and motorizations depending on the utilization and can provide them with frequency variators and cooling sleeves.

They can be configured both for the use of waterbased and solvent-based products and can be provided with different types of storage such as tanks, IBC tanks or drums basing on the production volumes.







STIRMIX is an I-Tech dispersion tank useful for those products fed form the mill that need to be mixed at high speeds maintaining their constant temperature.

It might be provided with a cooling jacket on the bottom and an inverter to control the mixer speed.

Available in the sizes: 400 | - 600 | - 800 | - 1100 | Different construction materials: AISI 304 - 316



- Storage tank in AISI 304 stainless steel
- Deflector in AISI 304 stainless steel positioned at 180° inside the tank
- 2" discharging sphere valve
- Inclined bottom to facilitate the product discharge
- Forklift picking framework
- Lower base with four pivoting wheels
- Two semi lid, one fix and the other openable
- Recycling inlet
- Air suction inlet
- Mixer group composed by the follow:
  - Gear Motor group equipped with fixing flange
  - Shaft in stainless steel AISI 304
  - Special impeller
  - Electrical control panel, used to manage the mixer motor speed

	S	М	L	XL
Liters	400	600	800	1100
U.S. gal	105,67	158,50	211,34	290,59
Imp gal	87,99	131,98	175,98	241,97





## DISSOLVMIX

Automatic Compound Preparation for the grit ceramic compound realization.

It is the I-Tech automatic system for automatic dosage, mixing and homogenization, by dispersion in the tank. It can be configured according to the specific needs of the customer, managing up to a maximum of 4 solid products and 4 liquids that can be manually or automatically fed with weight detection.



- Self-supporting body
- Peristaltic pumps for liquid dosing and transfer
- Linear dosing head composed by the follow:
  - Compact head, opportunely designed to arrange the housing and fastening up to 8 dosing valves. The valves are placed in parallel rows
  - Dosing valves, each one with 3 different nozzles opening, + "drop to drop" settings.
  - Motorized valves actuator, to manage the
    - opening/closure of the dosing valves.
- Weighing scale, to be chosen among a wide range of solutions with different capacity and resolution
- High speed dispersion tank
- ProcolorACM software



#### **Optionals:**

- Mechanic protection and safety devices, to be installed in the handling area in order to avoid collisions among the dosing tank (moved by the fork lift) and the dosing head or the weighing scale.
- Modular support structure for IBC totes, equipped with pumping/feeding system
- IBC totes agitators



## VIBRABED

### I-Tech Innovative Technology

#### Adjustable height feeder unit:

- Frame with crotch device
- Height adjustable frame
- Vibrating channel with anti-dust cover and edging
- Elastic insulation through 4 elastic elements in suspension with antistatic elastomers
- Operation by two 380 V vibrators with a total absorbed power of 360 W
- Cash box electrical panel with specula installed on the machine and containing electronic and electromechanical devices suitable for regulating the electric parts installed by inverters and timers.

Raw material storage: Hopper with customizable

- capacity provided with a lid that can be opened in two sectors including:
- one emptying vibrating motor for total power 180 W
- Shutter with manual adjustment
- 4 elastic insulators
- One tubular frame and bent sheet metal





## MILLING SYSTEMS

I-Tech offers an innovative and highperformance Grinding System in order to process different categories of powder or grain products.

Our added value is the continuous research for innovative and alternative materials so that our products could ensure high resistance to abrasion, low environmental impact and reduced maintenance costs for spare parts.



# I-MILL 0,5

Grinding chamber working volume (I)	0,5	
Batch size (I)	1 - 6	
Drive (Kw)	4	
Rotation Speed (m/sec)	10:13 Controlled by	
Pump flow rate (l/h)	6 - 25	
Grinding Chamber	I-CERAM (Silicon Carbide)	
Inlet head	I-CERAM (Silicon Carbide) or Special Polymer	
Outlet head	I-CERAM (Silicon Carbide) or Special Polyme	
Milling Shaft	Provided with jacket in Sspecial PE	
Agitator disks	Special Polymer	
Dimensions	See drawing	
i-Mill 0.5	115 Kg	
Electric Panel	80 Kg	
Pc and Monitor	19 Kg	
Product Feeding Kit	26 Kg	





# I-MILL 40



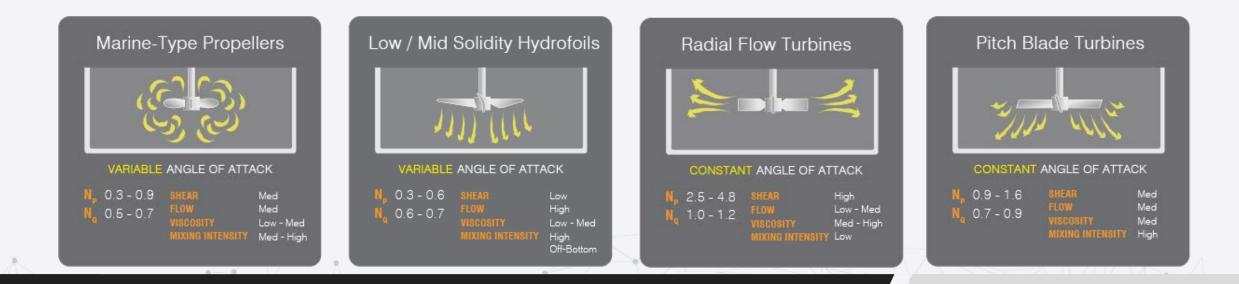
Grinding chamber working volume (I)	42	
Batch size (I)	> 2000	
Drive (Kw)	45	
Rotation Speed (m/sec)	8:15	
Pump flow rate (l/h)	200 - 600	
Grinding Chamber	I-CERAM (Silicon Carbide)	
Inlet head	Special Polymer	
Outlet head	Special Polymer	
Milling Shaft	Provided with jacket in special Polymer	
Agitator disks	Special Polymer	
Dimensions	See drawing	
Feed pump	On the machine stand (peristaltic)	
Weight (without packaging )	1550 Kg (peristaltic pump, Monitor and PC included	
Bead collection cart for	grinding media exchange	
Full scale up of the resu	Its achieved with lab mill	
Grinding chamber working volume (I)	) 42	



# I-MILL 80

Grinding chamber working volume (I)	84	
Batch size (l)	>3000	
Drive (Kw)	90	
Rotation Speed (m/sec)	8:15 Controlled by	
Pump flow rate (l/h)	200 – 700	inverter
Grinding Chamber	I-CERAM (Silicon Carbide)	
Inlet head	Composite Polymer	
Outlet head	Composite Polymer	
Milling Shaft	Provided with jacket in Special Polymer	
Agitator disks	Composite Polymer	
Dimensions	See drawing	
Feed pump	on the machine stand (peristaltic)	
Weight (without packaging )	2550 Kg (peristaltic pump, Monitor and PC included )	
Bead collection cart for grindi	ng media exchar	nge
Full scale up of the results ach	nieved with lab r	nill





The I-Tech Stirring Systems are designed for liquid products with low and medium viscosity both water based and solvent based.

We have a complete range of agitators of different power and speed, electric or pneumatic, and related accessories for IBC tanks and drums, or for specific container according to production volumes.

## STIRRING SYSTEMS



# MONOMIX

Removable electrical or pneumatic mixer for IBC storage tanks

#### Composed by:

- Motor gear group ۲
- Stirrer shaft •

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- Leak recovering cup
- Customizable with any kind of impeller
- Supporting framework

#### ACCESSORIES

- Electrical control panel that can manage up to 6 mixer • with start/stop control
- Hooks to stick on the IBCs .
- Two filling input .
- Maximum level sensor .
- Variable height cover •



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# DRUMMX

Removable electric or pneumatic mixer for 200l drums

The Drummix agitator can be mounted directly to the lid and is composed by:

- 1,1kW Motor group and gear motor
- Balanced Shaft 30mm (in AISI 304)
- Double blade in AISI 304
- Limit switch for the safety of the agitator group
- Customizable with any kind of impeller





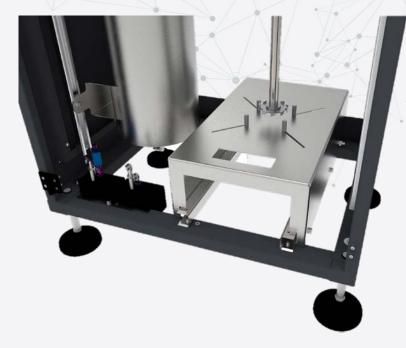


## MIXMATIC

MIX MATIC is the automatic and rapid immersion mixer, perfect for high viscosity products.

Simple and compact, the MIX MATIC is the self-cleaning I-Tech mixer with adjustable speed, equipped with a stainless-steel stirrer shaft, a Caoles impeller and a special plate for the bins positioning.

Usually equipped with a pneumatic control panel and a software able to completely regulate time and agitation speed according to the specific needs.







## TRANSFER SYSTEMS

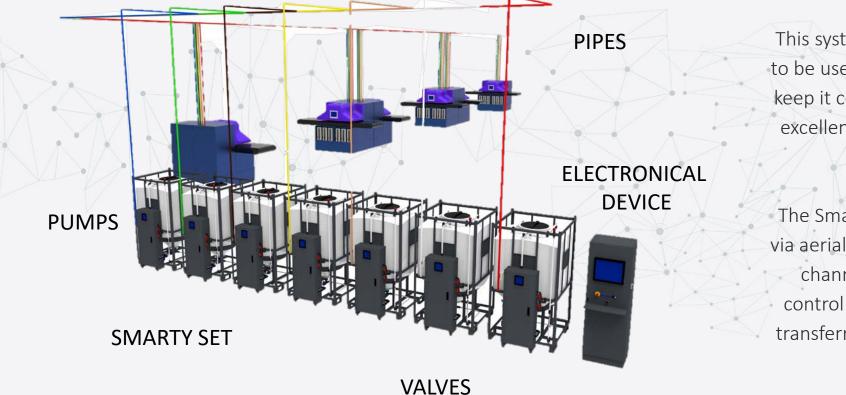
The knowledge gained in over 20 years of activity in many industrial sectors allows I-Tech to create completely automatic liquid transfer systems suitable to all types of innovative production, plant dimension or product management.

Analysing every set-up throughout the entire project and ensuring maximum professionalism and high-quality standards we can transfer your product from one place to another without the need of operators.









This system allows to stock the product that needs to be used in smart devices, the Smartys, which will keep it constantly filtered and shaken, thanks to an excellent technology for materials recirculation in order to prevents sedimentation.

The Smarty tanks are connected to digital printers via aerial transfer systems like pipes or containment channels and, thanks to the innovative filling control device, the product is then automatically transferred from the tanks to the digital machines.





Automatic recirculation pump

Automatic refill for inkjet

Sensor for level control

Automatic filtration

# i-Tech

# G.O.D. Glaze On Demand

G.O.D. is the innovative I-Tech automatic transfer system suitable for handling glazes, engobes and neutral and/or coloured bases, from the preparation area to the utilization area, avoiding the classic transfer into tanks or the use of mobile carts.

The GOD solution is composed by an aerial piping system and it is connected to a pumping station, all managed by a supervision system that can measure the quantity of product transferred in real time.







i-Tech

I-GLAZE is the I-Tech system for the correction and the additivation of glazes and engobes that can be installed in feeding machines lines.

The graphic interface of I-Glaze, interconnected with I-Tech management software, is able to automatically recall the needed quantity of product, adding it and keeping it constant throughout the entire process. The C.I.P. (Cleaning In Place) will clean the entire system getting it ready in a few moments for the next production.

- Fixed correction/additive unit
- Agitated tank 400 l
- Electrical command and control panel
- Mobile unit for feeding airless pump
- Sieve of 400 mm in diameter
- Additive containers





I-Tech offers a wide range of liquid product storage systems for inks, paints, glazes, dyes or additives that can be configured both for the use of water-based and solvent-based products.

# STORAGE SYSTEMS





# SMARTY

I-Tech storage unit for filtration and automatic feeding of decorating machines such as digital printers, printing machines or painting systems.

It is composed by a container for the transport and storage of liquids and, on the upper part, it has a loading hatch with threaded lid with a vent. The entire tank is complete with its metal support structure, painted and acid-proof and with a ½" double diaphragm pump.

- Pressure gauge (0-10 bar) to control the pressure of the product-pump control air)
- Pressure switch/pressure gauge (0-10bar) to control the outlet filter pressure
- Delta P measurement with pressure switch and relative pump stop when filter clogging is detected
- Product loading/unloading and recirculation piping kit
- Servo-controlled valve kit
- Electric control and command panel equipped with PLC terminal with 3.5" colour Touch Screen graphic panel





500l

# FILTRATION SKID

Ideal to transfer and filter inks, paints, solvents and glazes, the Filtration Skid is composed by a mobile support frame made entirely of painted iron provided with 4 pivoting wheels and a pump sized on the customer's needs.

- Filter group including:
  - 1 Filter Box (Housing)
  - 1 Filter cartridge
- Transfer pump (for ink transfer from the mill supply tank to the storage tanks)
- Flexible connection pipes with quick connection.

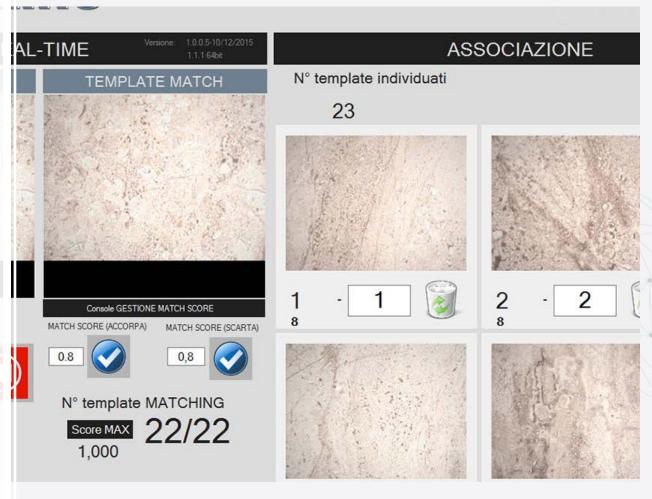
Available Models:

- Single circuit (1 pump & 1 filtration group 10 or 20" length)
- Double circuits (2 pumps & 2 filtration groups 10 or 20" length)

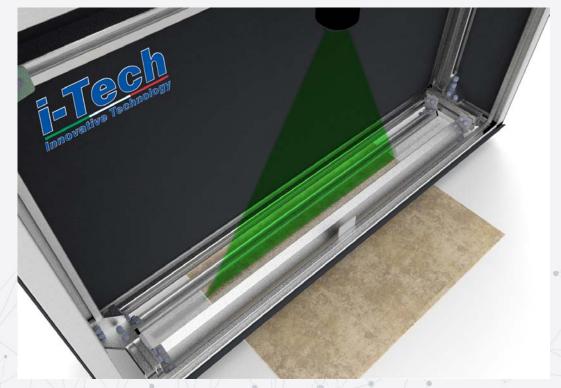


# ARTIFICIAL VISION

I-Tech Artificial Vision Systems that can be used both in quality control or graphic recognition processes. Our technology is based on artificial neural networks (ANNs) and can automatically recognize a high number of quality defects. They can in fact be used by process system manufacturers as an integral OEM part of their systems or as a support in the management of online processes by user companies.







IntellyTile is a system based on artificial neural networks that can control in-line products basing on a wide range of features related to geometry, shape, colour, graphics, even for very high production volumes.

The system can identify both mechanical defects such as broken edges, corner cracks, scratches or holes, and decoration defects like lines, drops, gangs or missing applications





# INTELLYTILE

Best solution to check printing defects in flat surfaces, such as coatings, wood or plastic laminates, packaging material, tiles, any packaged product, textiles, leather and others.



The intuitive interface shows photos with identified defects and their position so that you can eliminate recurring errors in a short time. The system is installed in line, immediately after the inkjet printer, and allows the identification of the origin of the defects, reducing production costs and the number of rejects, ensuring very high production quality standards.



### Technical Data:

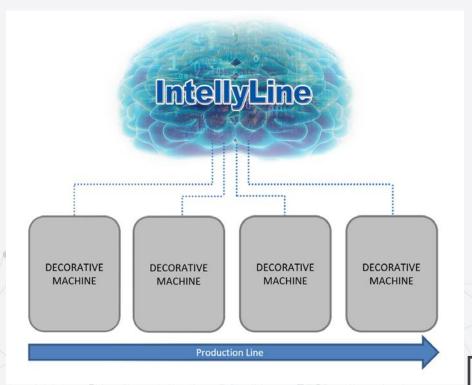
- Key Hardware Features
- Aluminium frame fitted with a protective case containing:
- Dedicated LED lighting system
- Line scan camera 4096 pixels
- Dedicated optics
- Touch-Screen monitors
- PC equipped with special hardware devices
- Electrical panel

### Optionals:

- Signal Towers

- Interfacing with ejector





# INTELLYLINE

IntellyLine is the I-Tech autonomous synchronization system that can recognize a model or an effect from a specific print and then matches its application.

It is therefore able to communicate which is the effect that needs to be applied, to coordinate the work of different digital printers and decorative machines and quickly learn new products without the need to be reprogrammed, but automatically modifying the set of control features every time.

IntellyLine is able to manage its work in reduced dimensions and at high speed, analysing any type of graphic project, even the most complex, and it is able to use both traditional decorative machines and digital printers in connection with each other.

### Advantages:

- Real time classification
- Identification of models or effects in the tile
- Identification of the tile with a consequent reduction in production costs and numbers of rejects.
- Completely autonomous learning software based on artificial neural networks



# **OUR SOFTWARES**

## PPM SOFTWARE (Production Management)

# Customized solutions for manufacturing plants or machines' supervisory

All supervisory softwares and relative suites are internally developped by our engineers and are completely customizable

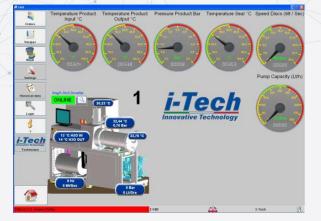
### INTELLYTILE SOFTWARE



### **PROCOLOR SOFTWARE**



### I-MILL SOFTWARE



### And many more...







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