



WWW.GAVOMECCANICA.COM

GA.VO. MECCANICA born in Larciano (Pistoia) in **1989** after the experience in mechanical field grew up from the 1980. During the first ten years GA.VO. designs and constructs prototype machines for several industrial fields, house cleaning in particular, well recognized industry on the territory of Larciano.

In 1999 is thought and realized the first **CORE SAVING AND CUTTING MACHINE.**

The next 5 years are dedicated to the analysis and development of the product until 2006 with the participation of the PLAST Milan Exhibition.

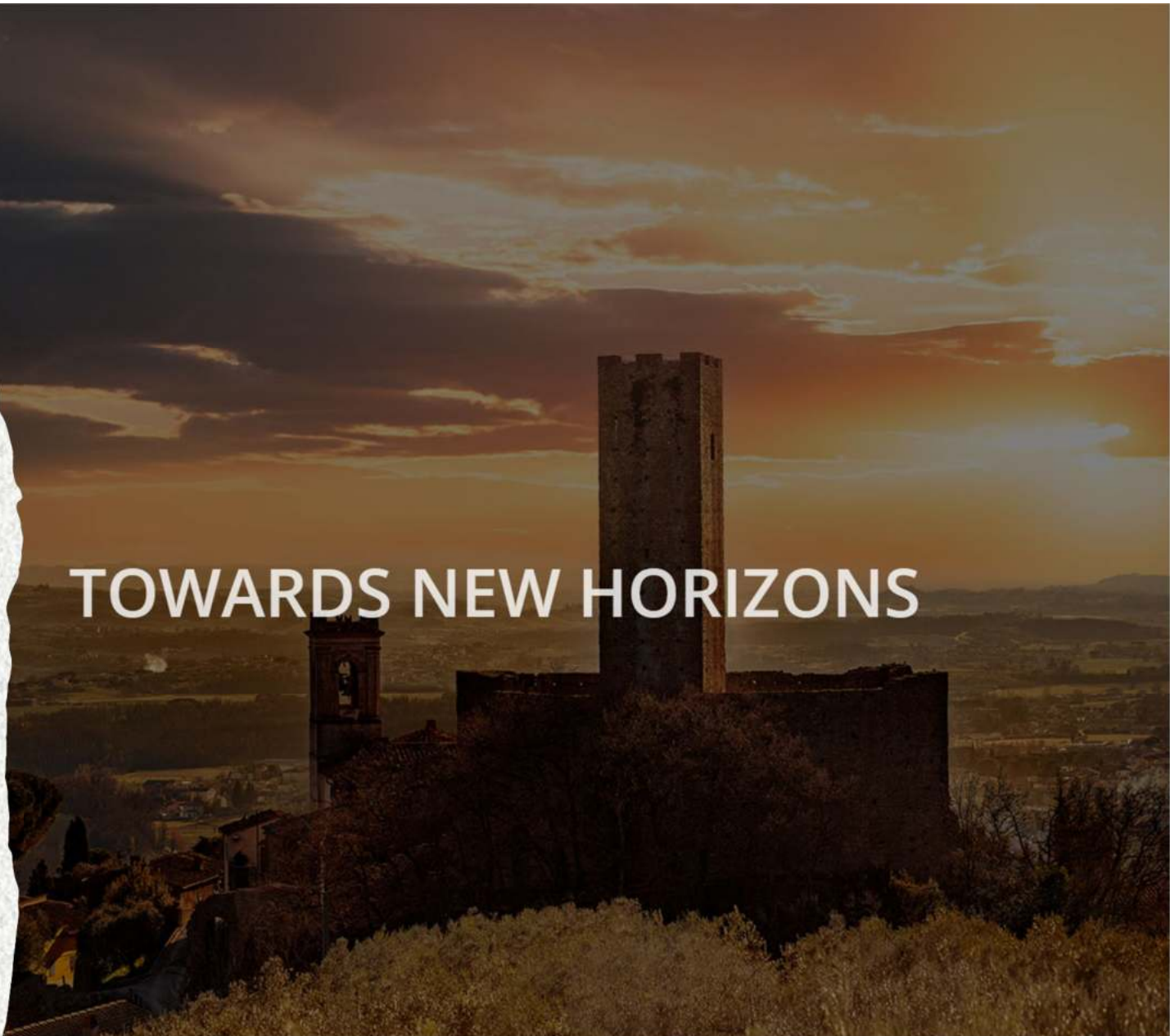
From this point what was born as a normal prototype began to be the core business of the company.

The next turning point comes in the beginning 2014.

The moving to the new production building. GA.VO. MECCANICA has a production capacity of 50 machineries per year in 2016.



TOWARDS NEW HORIZONS



GA.VO. MECCANICA has a production capacity of 50 machineries per year in 2016.

In 2018, just in two years, increases its productivity of 50%. 75 machines made in one year

For the first time in 2022, over 80 machines.





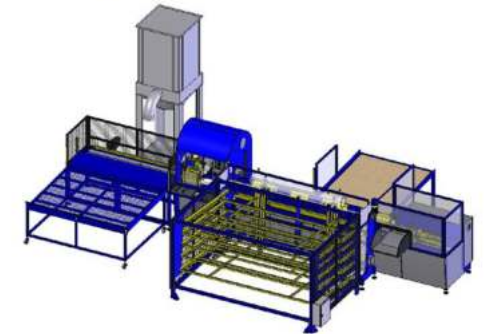
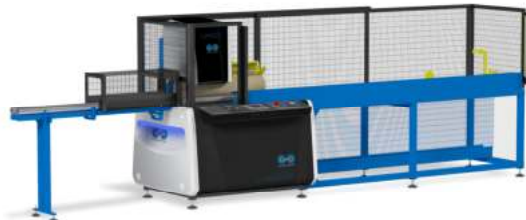
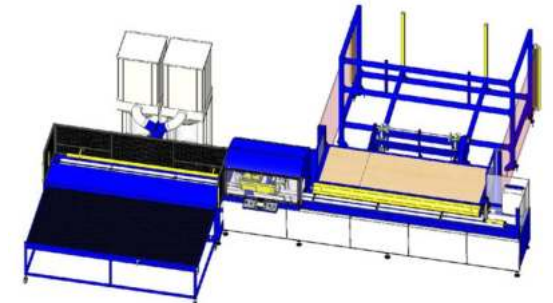
Some Numbers about our production / service and local support

2022/2023

- 8 Models Produced – from Manual to fully automatic
 - 900 Machines Installed
 - 60 Countries where GA.VO. Exports
 - 45 Local agents
 - 9 Service locations

(Italy - United States - South Africa – Benelux –Thailand - India, Pakistan –Russia – Chile – Colombia)

- 5 Spare Parts office (Italy – Germany – Poland – United States – Russia)



CORE SAVING AND CUTTING MACHINES

- ▶ No Waste thanks to the patented splicing system
- ▶ Possibility to cut Cardboard and plastic cores with the same blade without any mechanical adjustment required.
- ▶ Possibility to cut from 3" to 12".
- ▶ Automatic change diameter by touch screen. No mechanical adjustment. No adaptor required
- ▶ Perfect cutting and sharpening quality 90°
- ▶ Tolerance guaranteed from +/- 0.1 mm to +/- 0.3 mm.
- ▶ Fast return of the investment thanks to the splicing system
- ▶ No more pre-cut cores (improvement of the warehouse)



TCEG – MANUAL CORE SAVING AND CUTTING MACHINE

TCEG
International patent



TECHNICAL SHEET

Usable Materials:	Cardboard, Pvc
Max Core Length:	2000, 3000, 4000 mm STANDARD
Max Cut Length:	2000, 3000, 4000 mm STANDARD
Min. Cut Length:	80 mm
Max External Diameter:	175 mm
Min. External Diameter:	80 mm
Max Thickness Tubes:	25 mm
Min. Thickness Cardboard Tubes:	4 mm
Min. Thickness Plastic Tubes:	3/4 mm
Electronic equipment:	Siemens
Voltages:	400V 50Hz STANDARD
Compressed Air Pressure:	6 Bar

- + DIAMETERS FROM 3" TO 6"**
- + SAME BLADE FOR ALL THE MATERIALS**
- + NO MECHANICAL ADJUSTEMENTS**
- + INTEGRATED EXTRACTION SYSTEM**

LOADING SYSTEMS

MANUAL LOADING ON ROLLERS: in this case the core is loaded into the machine on a support roller conveyor. It is possible to use bars or pieces.

UNLOADING SYSTEMS

ROLLERS UNLOADING SYSTEM: simple unloading system which consists of the accumulation of cut pieces on of a pair of rollers resting on a steel frame.

Unloading rollers



Extraction carriage



Control station



UNICA – MANUAL CORE SAVING AND CUTTING MACHINE

UNICA
MADE IN ITALY



TECHNICAL SHEET

Usable Materials:	Cartone, Pvc, Pp, Pe
Max Core Length:	2000, 3000, 4000 mm STANDARD
Max Cut Length:	2000, 3000, 4000 mm STANDARD
Min. Cut Length:	< 5 mm
Max External Diameter:	190 mm
Min. External Diameter:	80 mm
Max Thickness Tubes:	25 mm
Min. Thickness Cardboard Tubes:	4 mm
Min. Thickness Plastic Tubes:	3/4 mm
Electronic equipment:	Siemens
Voltages:	400V 50Hz / 480V 60Hz STANDARD
Compressed Air Pressure:	6 Bar

- + DIAMETERS FROM 3" TO 6"
- + SAME BLADE FOR ALL THE MATERIALS
- + NO MECHANICAL ADJUSTEMENTS
- + TOUCH CONTROLS
- + INTEGRATED EXTRACTION SYSTEM

MAGIC BOX – CUTTING SYSTEM

Cutting system: the cutting system is concentrated in the head, the small dimensions allows to have a relatively light weight. That's allows a vertical movement without tiring the sliding parts and to control the pressure on the core precisely and to be able to work even very thin tubes without deforming them. The device is positioned in such a way as to quickly change the blade and have full access for maintenance.

Magic box



CONTROL POSITION

Control panel: the console with a modern design has been designed to be functional for the operator and the touch interface includes pages of work, maintenance, data saving and integration industry 4.0.

Control position



ACCESSORIES

Accessories: external deburring System, PP System, recipes Database, filter Cleaning, digital measurements control, Industry 4.0 pack, automatic pressure Control on the core.

UNICA 300 – MANUAL CORE SAVING AND CUTTING MACHINE FOR BIG CORES

UNICA 300

MADE IN ITALY



- +** DIAMETERS FROM 3" TO 12"
- +** SAME BLADE FOR ALL THE MATERIALS
- +** NO MECHANICAL ADJUSTEMENTS
- +** TOUCH CONTROLS
- +** INTEGRATED EXTRACTION SYSTEM

TECHNICAL SHEET

Usable Materials:	Cardboard, Pvc STANDARD
Max Core Length:	2000, 3000, 4000 mm STANDARD
Max Cut Length:	2000, 3000, 4000 mm STANDARD
Min. Cut Length:	30 mm
Max External Diameter:	330 mm
Min. External Diameter:	80 mm
Max Thickness Tubes:	25 mm
Min. Thickness Cardboard Tubes:	4 mm
Min. Thickness Plastic Tubes:	3/4 mm
Electronic equipment:	Siemens
Voltages:	400V 50Hz / 480V 60Hz STANDARD
Compressed Air Pressure:	6 Bar

LOADING SYSTEMS

MANUAL LOADING ON ROLLERS: in this case the core is loaded into the machine on a support roller conveyor. It is possible to use bars or pieces.

UNLOADING SYSTEMS

ROLLERS UNLOADING SYSTEM: simple unloading system which consists of the accumulation of cut pieces on a pair of rollers resting on a steel frame.

ACCESSORIES

EXTERNAL DEBURRING SYSTEM

PP SYSTEM

Unloading rollers



Extraction carriage

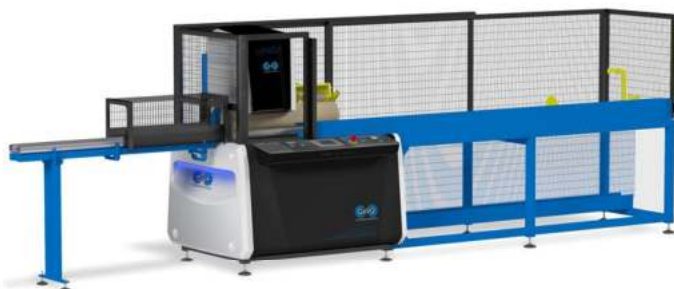


Dust collector



UNICA PLUS – SEMI-AUTOMATIC CORE SAVING AND CUTTING MACHINE

UNICA
MADE IN ITALY
PLUS



TECHNICAL SHEET

Usable Materials:	Cartone, Pvc, Pp, Pe
Max Core Length:	2000, 3000, 4000 mm STANDARD
Max Cut Length:	2000, 3000, 4000 mm STANDARD
Min. Cut Length:	< 5 mm
Max External Diameter:	190 mm
Min. External Diameter:	80 mm
Max Thickness Tubes:	25 mm
Min. Thickness Cardboard Tubes:	4 mm
Min. Thickness Plastic Tubes:	3/4 mm
Electronic equipment:	Siemens
Voltages:	400V 50Hz / 480V 60Hz STANDARD
Compressed Air Pressure:	6 Bar

- + DIAMETERS FROM 3" TO 6"**
- + SAME BLADE FOR ALL THE MATERIALS**
- + NO MECHANICAL ADJUSTEMENTS**
- + TOUCH CONTROLS**
- + INTEGRATED EXTRACTION SYSTEM**
- + AUTOMATIC CORE ADVANCEMENT SYSTEM**

MAGIC BOX – CUTTING SYSTEM

Cutting system: the cutting system is concentrated in the head, the small dimensions allows to have a relatively light weight. That's allows a vertical movement without tiring the sliding parts and to control the pressure on the core precisely and to be able to work even very thin tubes without deforming them. The device is positioned in such a way as to quickly change the blade and have full access for maintenance.

Magic box



CONTROL POSITION

Control panel: the consolle with a modern design has been designed to be functional for the operator and the touch interface includes pages of work, maintenance, data saving and integration industry 4.0.

Control position



ACCESSORIES

Accessories: external deburring System, PP System, recipes Database, filter Cleaning, Automatic joining system, Industry 4.0 pack, automatic pressure Control on the core.

TCRG– AUTOMATIC CORE SAVING AND CUTTING MACHINE



TCRG
International patent

- + SELECTABLE JOINING**
- + DIAMETERS FROM 3" TO 8"/12"**
- + SAME BLADE FOR ALL THE MATERIALS**
- + NO MECHANICAL ADJUSTEMENTS**
- + TOUCH CONTROLS**
- + INTEGRATED EXTRACTION SYSTEM**

TECHNICAL SHEET

Usable Materials:	Cardboard, Pvc STANDARD
Max Core Length:	2000, 3000, 4000 mm STANDARD
Max Cut Length:	2000, 3000, 4000 mm STANDARD
Min. Cut Length:	20 mm
Max External Diameter:	230/330 mm
Min. External Diameter:	80 mm
Max Thickness Tubes:	25 mm
Min. Thickness Cardboard Tubes:	4 mm
Min. Thickness Plastic Tubes:	3/4 mm
Accuracy:	+ - 0,3 mm
Productivity:	up to 5 cuts per minute
Electronic equipment:	Siemens
Voltages:	400V 50Hz / 480V 60Hz STANDARD
Compressed Air Pressure:	6 Bar

LOADING SYSTEMS

SEMIAUTOMATIC: the semiautomatic loading consists of an inclined plane anchored to the ground on which the cores are manually prepared. The standard version has a capacity of ten 3" cores, seven 6" cores, five 8" cores. It allows the loading of cores of different sizes at the same time while keeping the machine in automatic cycle.

MANUAL: the manual loading system is simply one free side of the machine protected by safety barriers. It allows the operator to load bars or pieces manually.

UNLOADING SYSTEMS

ROLLERS UNLOADING SYSTEM: simple unloading system which consists of the accumulation of cut pieces on of a pair of rollers resting on a steel frame.

SIMPLE: an automatic unloading system equipped with a pneumatic pusher to eject the cut pieces.

ACCESSORIES

EXTERNAL DEBURRING SYSTEM

IONISATION DEVICE

AUTOMATIC FILTER SLEEVE CLEANING SYSTEM

AUTOMATIC DUST SEPARATION DEVICE

REMOTE SUPPORT MODEM

Semiautomatic loading

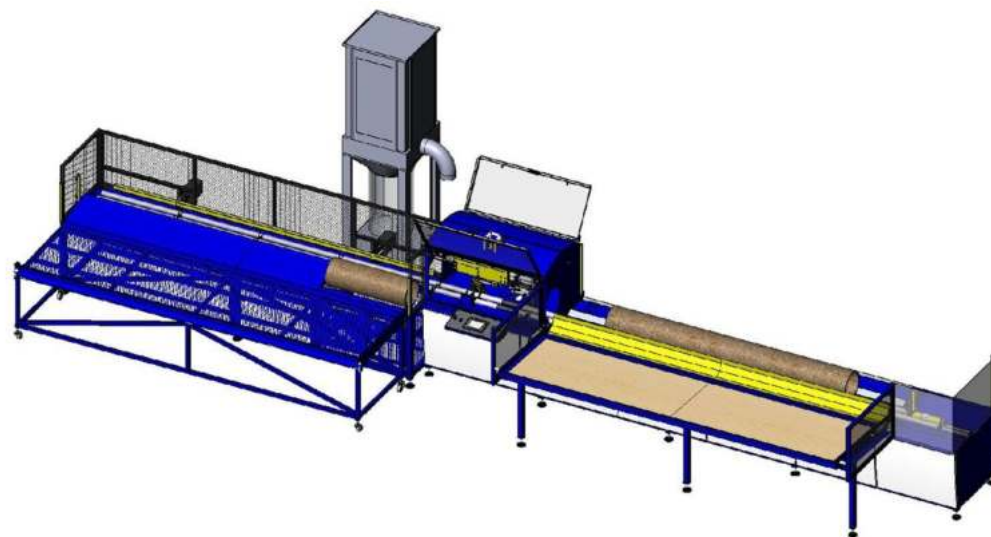
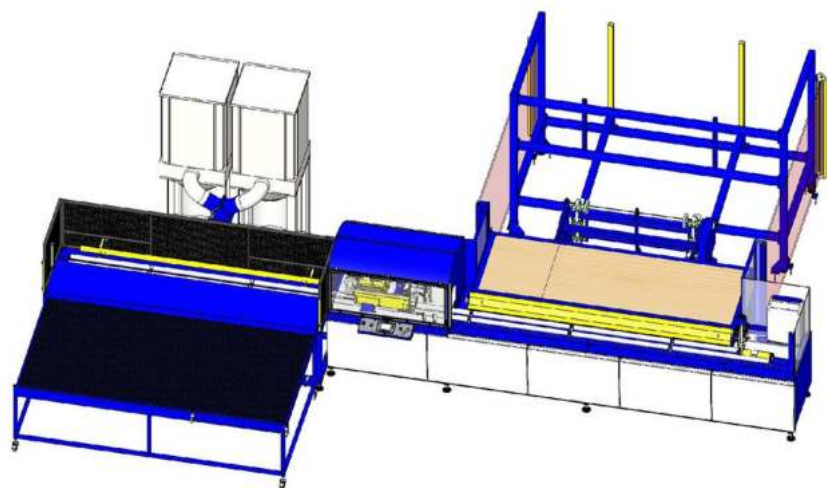


Unloading rollers



Dust collector





TCAG– AUTOMATIC CORE SAVING AND CUTTING MACHINE



TECHNICAL SHEET

Usable Materials:	Cardboard, Pvc, STANDARD
Max Core Length:	2000, 3000, 4000 mm STANDARD
Max Cut Length:	2000, 3000, 4000 mm STANDARD
Min. Cut Length:	15 mm
Max External Diameter:	190 mm
Min. External Diameter:	80 mm
Max Thickness Tubes:	25 mm
Min. Thickness Cardboard Tubes:	4 mm
Min. Thickness Plastic Tubes:	3/4 mm
Accuracy:	+ - 0,2 mm
Productivity:	up to 7 cuts per minute
Electronic equipment:	Panasonic, Siemens, Allen-Bradley
Voltages:	400V 50Hz / 480V 60Hz STANDARD
Compressed Air Pressure:	6 Bar

- + DIAMETERS FROM 3" TO 6"
- + SAME BLADE FOR ALL THE MATERIALS
- + NO MECHANICAL ADJUSTEMENTS
- + TOUCH CONTROLS
- + MULTIPLE PIECE LOADING
- + INTEGRATED EXTRACTION SYSTEM

LOADING SYSTEMS

AUTOMATIC: the automatic system allows loading of a pallet complete with cores. The pallet is fully introduced inside the magazine, protected by safety photocells, using a forklift truck. Once the tubes have been secured inside the steel frame the containing strappings are cut and the machine is fed automatically until total consumption of the cores.

AUTOMATIC CARRIAGES SYSTEM: the automatic carriages loading consists of a chain loading device anchored to the ground to which is anchored a cart preloaded with cores. It is very flexible as it enables the preparation and exchanging of tube carts very quickly ensuring very long autonomy.

AUTOMATIC DRAWERS LOADING: the automatic drawers loading consists in a steel frame in which slide several loading levels. This system was designed in order to load different diameters in the same store, in this way the machine is self-fed by choosing the core of which needs going to pick it up from the drawer that contains it.

SEMI-AUTOMATIC: the semiautomatic loading consists of an inclined plane anchored to the ground on which the cores are manually prepared. The standard version has a capacity of approximately twenty 3" cores, twelve 6" cores. It allows the loading of tubes of different sizes at the same time while keeping the machine in automatic cycle.

MANUAL: the manual loading system is simply one free side of the machine protected by safety barriers. It allows the operator to load bars or pieces manually.

ACCESSORIES

EXTERNAL DEBURRING SYSTEM

ADDITIONAL INTERNAL CORE CLEANING

IONISATION DEVICE

CORE PRINTING DEVICE

AUTOMATIC FILTER SLEEVE CLEANING SYSTEM

AUTOMATIC DUST SEPARATION DEVICE

REMOTE SUPPORT MODEM

PP SYSTEM

Automatic loading



Semiautomatic loading



Discharge table



TCSG– AUTOMATIC CORE SAVING AND CUTTING MACHINE – top level



TECHNICAL SHEET

Usable Materials:	Cardboard, Pvc, Pp, Pe, HDPe STANDARD
Max Core Length:	2000, 3000, 4000 mm STANDARD
Max Cut Length:	2000, 3000, 4000 mm STANDARD
Min. Cut Length:	10 mm
Max External Diameter:	230 mm
Min. External Diameter:	80 mm
Max Thickness Tubes:	25 mm
Min. Thickness Cardboard Tubes:	4 mm
Min. Thickness Plastic Tubes:	3/4 mm
Accuracy:	+/- 0,1 mm
Productivity:	up to 10 cuts per minute
Electronic equipment:	Siemens
Voltages:	400V 50Hz / 480V 60Hz STANDARD
Compressed Air Pressure:	6 Bar

- + SELECTABLE JOINING
- + DIAMETERS FROM 3" TO 8"
- + SAME BLADE FOR ALL THE MATERIALS
- + NO MECHANICAL ADJUSTEM
- + INTEGRATED EXTRACTION SYSTEM
- + TOUCH CONTROLS

ACCESSORIES

- EXTERNAL DEBURRING SYSTEM
- ADDITIONAL INTERNAL CORE CLEANING (ONLY ON STANDARD UNLOADING)
- IONISATION DEVICE
- CORE PRINTING DEVICE
- AUTOMATIC FILTER SLEEVE CLEANING SYSTEM



LOADING SYSTEMS

AUTOMATIC: the automatic system allows loading of a pallet complete with cores. The pallet is fully introduced inside the magazine, protected by safety photocells, using a forklift truck. Once the tubes have been secured inside the steel frame the containing strappings are cut and the machine is fed automatically until total consumption of the cores.

AUTOMATIC CARRIAGES SYSTEM: the automatic carriages loading consists of a chain loading device anchored to the ground to which is anchored a cart preloaded with cores. It is very flexible as it enables the preparation and exchanging of tube carts very quickly ensuring very long autonomy.

AUTOMATIC DRAWERS LOADING: The automatic drawers loading consists in a steel frame in which slide several loading levels. This system was designed in order to load different diameters in the same store, in this way the machine is self-fed by choosing the core of which needs going to pick it up from the drawer that contains it.

SEMI-AUTOMATIC: the semiautomatic loading consists of an inclined plane anchored to the ground on which the cores are manually prepared. The standard version has a capacity of approximately twenty 3" cores, twelve 6" cores, nine 8" cores. It allows the loading of tubes of different sizes at the same time while keeping the machine in automatic cycle.

MANUAL: the manual loading system is simply one free side of the machine protected by safety barriers. It allows the operator to load bars or pieces manually.

UNLOADING SYSTEMS

STANDARD: an automatic unloading system on which it is possible to install the additional internal cleaning system.

SIMPLE: an automatic unloading system equipped with a pneumatic pusher to eject the cut pieces.

CAROUSEL: an automatic unloading system with rotating containers to separate the different core lengths cut.

Automatic loading

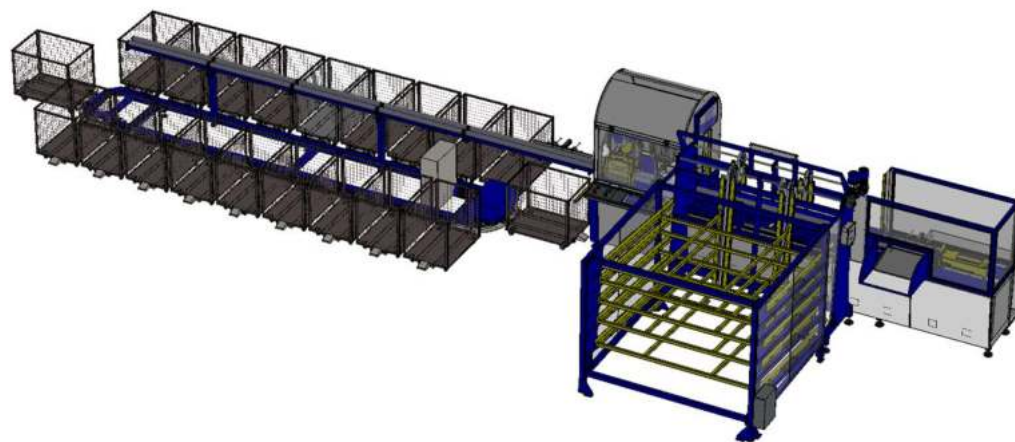
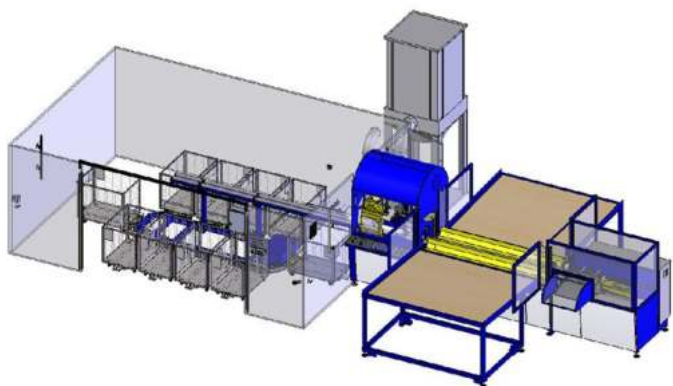
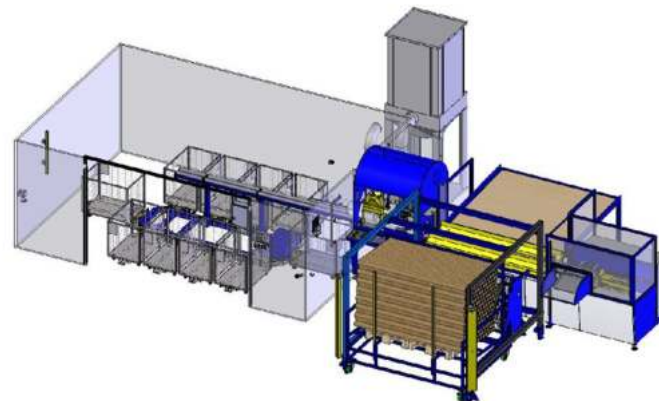
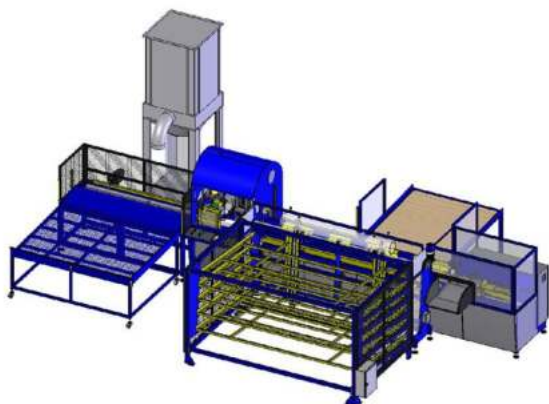


Carousel



Internal core cleaning





ADVANTAGES



- Cutting quality and accuracy
- No more pre cut cores
- No disposal cost and improve of space
- Reduction of manpower
- Low energy consumption
- Elimination of waste

THE FIRST GENERAL SERVICE

of the machine is carried out on average after 1.000.000 cuts

Waste per day X Cost in Euro per Kg	<u>Waste in</u> <u>€ per</u> <u>day</u>	<u>Workin</u> <u>g days</u>	<u>Tot Waste</u> <u>in 1 year</u>	<u>20% more costs for</u> <u>wastes disposal ,</u> <u>management time</u> <u>losses of manpower</u>	<u>Total saving</u> <u>cost in 1</u> <u>year</u>
30 kg x € 1	€ 30	320	€ 9.600,00	€ 9.600,00 + 20%	€ 11.520,00
50 kg x € 1	€ 50	320	€ 16.000,00	€ 16.000,00 + 20%	€ 19.200,00
100 kg x € 1	€ 100	320	€ 32.000,00	€ 32.000,00 + 20%	€ 38.400,00
150 kg x € 1	€ 150	320	€ 48.000,00	€ 48.000,00 + 20%	€ 57.600,00
250 kg x € 1	€ 250	320	€ 80.000,00	€ 80.000,00 + 20%	€ 96.000,00



OPTIONS LIST

	TCEG	UNICA	UNICA 300	UNICA PLUS	TCRG	TCAG	TCSG
Automatic loader	NO	NO	NO	NO	YES (customized version)	YES	YES
Semiautomatic loader	NO	NO	NO	NO	Included on body machine	YES	YES
Manual Loader	NO	NO	NO	NO	Included on body machine	YES	YES
Automatic Discharge Station	NO	NO	NO	NO	YES	YES	YES
Collecting Table for Discharge St.	NO	NO	NO	NO	YES	YES	YES
Removable Carriages for automatic loader	NO	NO	NO	NO	YES	YES	YES
Double Discharge Station	NO	NO	NO	NO	YES	NO	YES
Ewon Modem for remote assistance	NO	NO	NO	NO	YES	YES	YES
Ionizing system	NO	NO	NO	NO	YES	YES	YES
Blowing System	NO	NO	NO	NO	YES	YES	YES



OPTIONS LIST

	TCEG	UNICA	UNICA 300	UNICA PLUS	TCRG	TCAG	TCSG
Automatic Filter	NO	YES	YES	YES	YES	YES	YES
Double Filter for dust separation	NO	NO	NO	YES	YES	YES	YES
PP Cutting System	NO	YES	YES	YES	YES	YES	Included on body machine
Deburring System	NO	YES	YES	YES	YES	YES	YES
Recovery Pack for damaged cores	NO	NO	NO	NO	YES	NO	YES
Minimum joining software Pack	NO	NO	NO	NO	YES	NO	YES
Over Limit Software Pack	NO	NO	NO	NO	YES	NO	YES
Recipe Mode Software Pack	NO	NO	NO	NO	YES	NO	YES
4.0 Industry Software Pack	NO	NO	NO	NO	YES	YES	YES
4.0 Predisposition Pack	NO	YES	YES	YES	YES	YES	YES

- AUTOMATIC LOADER – Allows the loading of a full pallet of cores (only for mother cores)
- SEMIAUTOMATIC LOADER - Allows the loading of mother cores or shorter pieces
- AUTOMATIC DISCHARGE STATION - Ejection of cut cores will be managed automatically
- COLLECTING TABLE – Cut cores once ejected will be collected on this inclined table
- REMOVABLE CARRIAGES – Removable frames which can be pre-loaded with a pallet of cores and then moved on the machine loading area
- DOUBLE DISCHARGE STATION - Allow to have two unloading side in order to separate different length of cut cores
- EWON MODEM - For Remote assistance.
- IONIZING SYSTEM – For a better cleaning of external side of Plastic Cores
- BLOWING SYSTEM – For a better cleaning of internal side of Plastic Cores
- AUTOMATIC FILTER – Automatic shaking system for filter sleeves
- DOUBLE FILTER – For separation of Cardboard and plastic cores on two different collecting bags
- PP CUTTING SYSTEM – for PP cores
- DEBURRING SYSTEM – Deburring for PP cores only
- RECOVERY PACK FOR DAMAGED CORES - Automatic trimming for damaged core parts , on right and left face.
- MINUM JOINING SOFTWARE PACK - Exclude automatically the joining when the joint point fall within a defined distance from the cutting edge - selected by touch screen panel
- OVER LIMIT SOFTWARE PACK - In case the joining will be not used it allow to cut inside the waste core, but reducing the guaranteed cutting tolerance.
- Recipe Mode Software Pack – Allow to cut cores on a certain sequence to have a list of different lengths separated raw by raw.
- 4.0 Software Pack –Possibility to connect the machine with other Units or main office in order to send cutting list directly to the Core cutter from a remote position
- 4.0 Predisposition – Allow to exchange cutting information from the office to the Core cutter
- Database Memory Core system – Allow to memorize the different cores used and be recalled with a Code NR or Letter.
- Carosel System – Can separate the different cutting length on more different cages – Can be composed by 10 or 20 cages or customized
- Multiple Loader – Composed by 5 drawer which can be loaded with different cores diameter. Righth draw can be recalled by touch screen panel

GA.VO. MECCANICA

Developed the project Recyclo
In partnership with



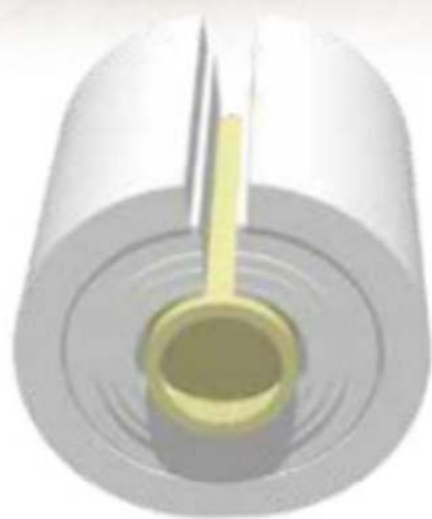
FOR AN EASIER SEPARATION OF THE WRAPPED MATERIAL FROM THE CORE

ROLL
Patent Pending

ROLL RECYCLO



a partnership with
GAYO
MECCANICA



 **RECYCLE**

 **REUSE**



TECHNICAL DATA SHEET

Minimum Core Diameter (mm)	76 mm / 3"
Max Core Diameter (mm)	304 mm / 12"
Max Roll External Diameter (mm)	600 mm
Max Material Thickness to be Removed	100 mm
Max Roll Length (mm)	1500* mm/ 2500** mm
Max Roll Weight (Kg)	150 Kg
Roll Loading	Manual
Roll Unloading	Manual
Material Unloading	By Removable Carriage
Machine Length (mm)	2644 (mm)
Machine Width (mm)	824 (mm)
Machine Height (mm)	1552 (mm)
Machine Weight (Kg)	680(Kg)
Installed Power (kW)	0.8 (kW)
HMI	Asem Touch screen 7" router VPN integrated optional
PLC	Panasonic

Thanks