

# Cutting & Slitting

Automatic Roll Slitting | Semi Automatic Roll Slitting



# AMP PISANI ROLL SLITTING MACHINES

AMP Pisani, a leading manufacturer of cutting machines, has over than 40 years of experience in the production of automatic and semiautomatic roll slitting machines for every application with high productivity, affordability, safety features and ergonomically designed for the operator.

Extensive experience in slitting allows AMP Pisani to offer solutions for any slitting need of fabric and non-woven materials with or without adhesive and, with suitable devices, for slitting technical materials such as foam rolls in polyethylene and PVC, glass and carbon fibres, plastic films, rubber, masking tapes, roofing materials, and more.

Our production range of automatic slitters consists of high performances models for heavy rolls class T/1000E\_LFT with loading device for rolls of weight up to 200 kg, T1000EX, T/540, T/520EX and T/500EX with worm-screw positioning of the blade carriage plus model T/300EX with pneumatic displacement of the blade carriage having an excellent price/performance ratio.

The semiautomatic roll slitting machine class T/100EX is the best solution for cutting different types of rolled materials. The machine is ergonomically designed and easy to use by the operator as the blade carriage automatically indexes to the preset cutting width. The blade is totally enclosed in a guard and the operator can start the blade and roll rotation for the cut only if both hands are engaged on pushbuttons. The machine is available for slitting rolls with length up to 250 cm.

The simplified semiautomatic roll slitting machine class T/50EX, less expensive but with features similar to T/100EX machine, can cut smaller rolls and it is the best solution for the end user.

We offer also the semiautomatic model T50EX\_HD, designed for slitting plastic films in roll and other special applications

All the units comply with the strict European safety standards and, for the **first time in the market**, the whole range of equipments has obtained from IMQ (Italian Institute for Quality Trademarks <a href="https://www.imq.it">www.imq.it</a>) the **Certification of Examination "CE" for standards 2006/42/EC.** 

The technical file of each machine has been deposited by IMQ organization that has certified the conformity to EC (European Community) Machine Safety Standards.

This means that, while AMP PISANI issues the "CE" certification of the machine, IMQ (Independent organization) confirms that the unit fulfils the requirements of the aforementioned directive



# AMP PISANI RANGE OF SLITTING MACHINES

MODEL	ТҮРЕ	BLADE DIAMETER	ROLL DIAMETER	ROLL LENGTH
T/1800F	Automatic with	800 mm	750 mm	2.000 mm
	Numerical Control	(31.5")	(29.5")	(78.7")
T1000EX_LFT	Automatic with	600 mm	500 mm	2.000 mm
	Numerical Control	(23.6")	(19.7")	(78.7")
T1000EX (b)	Automatic with	500 mm	400 mm	2.000 mm (*)
	Numerical Control	(19.6")	(15.7")	(78.7")
T/540	Automatic with	500 mm	400 mm	1750 mm (*)
	Numerical Control	(19.6")	(15.7")	(68".3/4)
T/520EX (a) (c)	Automatic with	450 mm	300 mm	1.850 mm (*)
	Numerical Control	(17.7")	(11.8")	(73")
T/500EX (a) (c)	Automatic with	450 mm	300 mm	1.850 mm (*)
	Numerical Control	(17.7")	(11.8")	(73")
T/300EX (a)	Automatic Pneumatic	450 mm (17.7")	250 mm (9.84")	1.830 mm (*) (72")
T/100EX (a)	Manual	450 mm (17.7")	300 mm (11.8")	1.850 mm (73") (*)
T50EX	Manual	400mm (17.7")	250mm (9.84")	1.600 mm (****) (63")
T50EX_HD	Manual	360 mm	200 mm	1.600 mm (****)
(***)		(14.2")	(7,87")	(63")

Because of the continuous development, the technical data are not binding. The company can vary them at any time without notice.

- (a) Other roll length on requests
- (b) Machine available on requests with blade diam. 600 mm for max roll dimensions 500 x 2.000 mm
- (c) Machine available on requests with blade diam. 500 mm for max roll dimensions 400 x 1850 mm
- (d) Machine for slitting laminated plastic foils (NOT for fabrics)
- (e) Machine can load rolls up to 200 cm long but blade carriages move at 160cm max from the chuck
- 1. **Roll length** refers to the max displacement of the blade carriage from the chuck
- 2. The maximum roll length that is possible to load on the machine is 2.400 mm (94.5") for T1000EX, 2.150 mm (82.6") for T/300EX, T/500EX, T/520EX and T/100EX; 2.000 mm (78.75") for T/540,
- 3. T/1000EX\_LFT, T/50EX and T50EX\_HD
- 4. The unit T/50E is available with longer roll shaft support to slit rolls up to 220 cm width (86" 1/2) but with the max displacement of the blade carriage from the chuck is still 160 cm (63")



T/1800F

# AUTOMATIC ROLL SLITTER FOR FOAM, RUBBER AND FILMS

NUMERICALLY CONTROLLED AUTOMATIC ROLL SLITTER CLASS T/1800F

Numerically controlled automatic roll slitting machine for rolls with max diameter 750 mm, blade diameter 800mm, max displacement of the blade carriage from the chuck of 175 cm and possibility to load rolls with max length 200 cm from the front of the machine with a removable roll shaft. This machine has been designed with the utmost attention to safety features using the same devices of model **T/1000EX** which has obtained the **Certification of Examination "CE" for standards 2006/42/EC (Ref. IMQ/300)** from **IMQ** (Istituto Italiano del Marchio di Qualità - Italian Institute for Quality Trademarks).

The machine can process rolls of foam (PVC and polyurethane) even laminated with or without adhesives, rubber, plastic films, material for thermal and acoustic insulation of the buildings, glass and carbon fibers, roofing materials etc.

# **FEATURES**

- Machine totally closed and highly safe for its operator. LED lights for very clear internal illumination of the machine. All machine motors are brushless.
- Automatic opening of the machine front door with pneumatic cylinder and safety system to avoid its sudden drop in case of power cut or interruption of the compressed air supply
- Numerically controlled positioning of the blade carriage with brushless motor and automatic cut with the possibility of programming up to 6 cutting measures for each automatic cycle.
- Closed loop controlled brushless motors to adjust the blade rotation speed up to 600 RPM and the roll rotation speed up to 500 RPM with possibility to choose the roll rotation direction.
- Numerically controlled blade penetration movement into the roll with three adjustable cutting speeds (entry speed into the roll, cutting speed and cardboard core cutting speed) adjustable on continuous rate with wormscrew movement and brushless motor closed loop controlled. Photocell to detect the roll diameter and laser pointer to indicate the actual position of the blade on the roll.
- Laser system to measure the blade diameter and its circularity error with automatic adjustment of stop position near the roll support shaft. No knob to adjust the forward travel end of the blade carriage.
- Quick blade return function out of the roll after slitting during the automatic cycle. The stop position outside the roll can be varied with the machine joystick
- Automatic blade positioning function at the roll edge with possibility of automatic blade carriage return to an initial preset position
- Self-centering pneumatic chuck with double clamping mechanism on the cardboard core and on the roll external surface with possibility to adjust the clamping pressure plus adjustable mechanical travel end of the external grippers stroke to avoid excessive pressure on the roll surface in case of soft materials
- Expanding rotary shaft removable from the front of the unit with easy-to-replace plastic grippers along the whole shaft extension. Shaft diam. 3" with the possibility of using interchangeable 4" and 5 "shafts."
- Automatic sharpening of the circular knife on both sides with adjustable sharpening time after a programmed number of cuts. Blade speed will be set automatically to the optimal sharpening speed during operation. Sharpening parameters of the auxiliary sharpener can be programmed with values different from those of the main sharpener. The unit includes a device to dress the main grindstone with a diamond.
- Automatic blade lubrication and cooling system with adjustable frequency (single or multiple) and lube on/off times with possibility to use pure silicon oil or water mixed with silicone glycol
- Up to 50 different cutting cycles. All cutting parameters can be stored and retrieved into the machine memory from each program. Machine prepared for connection Industry 4.0 with Modbus/TCP protocol
- PLC controlled machine with a separate safety PLC to control the safety devices and equipped with complete diagnostic software to inform the operator of any possible alarm and to display instructions to restart the unit on a touch screen graphic panel. Maximum roll dimensions: diam. 750 mm (29" ½) x 2.000 mm (79"), Max weight Kg 100 (220 lbs)

#### **DEVICES ON REQUEST**

- T500/CLN Automatic blade cleaning system on both sides
- T500/COL Blade cooling system with compressed air temperature minus 20 °C
- T1000/LNK Internet link for connection to AMP Pisani service for troubleshooting and software updates
- T1800/BAR3 Expanding roll shaft for cardboard tubes with internal diameter 3 "
- T1800/BAR4 Expanding roll shaft for cardboard tubes with internal diameter 4 "
- T1800/BAR5 Expanding roll shaft for cardboard tubes with internal diameter 5 "

- ➤ Max roll dimensions .....: diam 750 x 2.000 (29" ½ x 80") Kg. 100
- > Blade diameter .....: 800 mm (31" ½)
- Roll shaft diameter ......: 3" (76 mm). Other measures on request
- > Space requirements and weight .....: 3300 x 2100 x 1900 (h) mm, Kg. 2.900
- Compressed air .....: 6 bar
- ➤ Accuracy of blade positioning .....: ±0.01 mm



**T/1000E LFT** 

HEAVY DUTY NUMERICALLY CONTROLLED SLITTING MACHINE WITH LOADING DEVICE

NUMERICALLY CONTROLLED SLITTING MACHINE CLASS T/1000E LFT

The numerically controlled slitting class T/1000ELFT for heavy rolls can slit rolls up to diam 500mm (20") and length 2000mm (78") with maximum weight 200kg. The maximum displacement of the blade carriage from the chuck is 1920mm. The roll lifting system allows the operator an easy loading of heavy rolls. The roll trolley can move manually along the whole length of the roll shaft to thread easily the roll and the up/down movement is controlled by brushless motors. This machine is designed with the utmost attention to safety features in order to obtain from IMQ (Italian Institute for Quality Trademarks <a href="https://www.imq.it">www.imq.it</a>) the Certification of Examination "CE" for standards 2006/42/EC (ref. IMQ299). The technical file of the machine has been deposited by IMQ organization that has certified the conformity to EC (European Community) Machine Safety Standards. This means that, while AMP PISANI issues the "CE" certification of the machine, IMQ (Independent organization) confirms that the unit fulfils the requirements of the aforementioned directive.

This unit is particularly suitable to slit large and heavy rolls of nonwoven, foam and laminated foam, felt, glass fibres, rubber and roofing materials, tar rolls, films, fabrics, laminated fabrics etc.

#### **FEATURES**

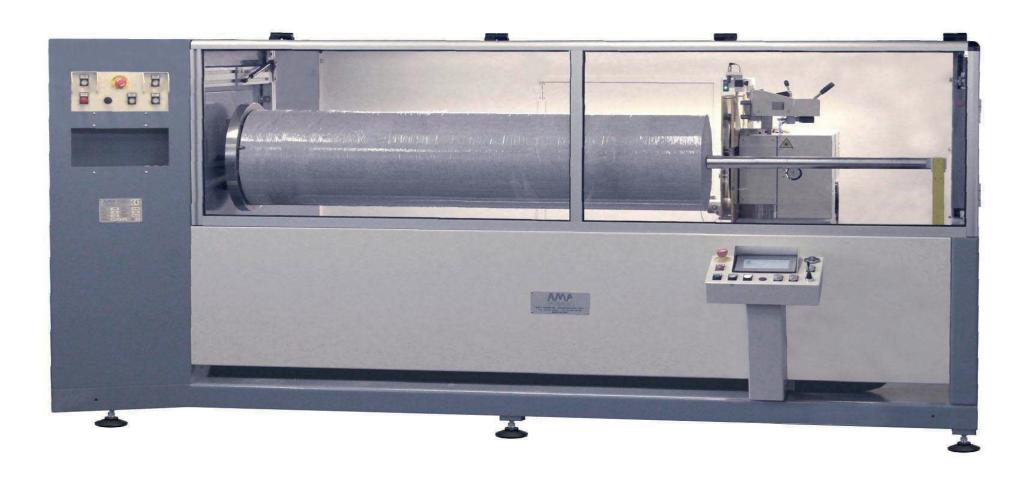
- Machine totally closed and highly safe for its operator. Automatic opening of the machine front door with pneumatic cylinder and safety system to avoid the its sudden drop in case of power cut or interruption of the compressed air supply
- Numerically controlled positioning of the blade carriage with brushless motor and automatic cut with the possibility of programming up to 6 cutting measures for each automatic cycle. LED lights for a clear illumination inside the machine
- All machine motors are brushless. Roll motor, blade motor and blade positioning motors are closed loop controlled. A signal tower indicates the actual machine status
- Adjustable blade rotation speed (up to 700 RPM) and adjustable roll rotation speed (up to 450 RPM) with possibility to choose the roll rotation direction.
- Numerically controlled blade penetration movement into the roll with three adjustable cutting speeds (entry speed into the roll, cutting speed and cardboard core cutting speed) adjustable on continuous rate with wormscrew movement and brushless motor. Photocell to detect the roll diameter and laser pointer to indicate the actual position of the blade on the roll.
- Laser system to measure the blade diameter and its circularity error with automatic adjustment of stop position near the roll support shaft. No knob to adjust the forward travel end of the blade carriage.
- Quick blade return function out of the roll after slitting during the automatic cycle with a measuring photocell to stop a reverse stroke of the blade carriage once the blade is completely out of the roll. The blade stop position outside the roll can be adjusted with the machine joystick. Automatic blade positioning function at the roll edge with possibility of automatic blade carriage return to an initial preset position
- Self-centering pneumatic chuck with double clamping mechanism on the cardboard core and on the roll external surface with possibility to adjust the clamping pressure plus adjustable mechanical travel end of the external grippers stroke to avoid excessive pressure on the roll surface in case of soft materials
- Expanding rotary roll shaft with plastic grippers along the whole shaft length which can be easily replaced. Roll shaft diam. 76,4 mm (3") or 80 mm as per choice. This unit cannot be supplied with interchangeable roll shafts
- Automatic lock system of the roll shaft extremity by a sliding arm with pneumatic clamping system
- Automatic sharpening of the circular knife on both sides with adjustable sharpening time after a programmed number of cuts by BORAZON grindstones. Blade speed will be set automatically to the optimal sharpening speed during operation. The sharpening parameters of the auxiliary sharpener can be programmed with values different from those of the main sharpener.
- Automatic blade cooling system with nebulized water and collection tank in stainless steel. The liquids can be discharged outside the machine with a tube.
- Automatic blade lubrication with adjustable frequency (single or multiple) and lube on/off times with possibility to use pure silicon oil or water mixed with silicone glycol
- . Door on the rear side of the machine for easy access to the blade carriage with sensor to sudden stop the machine once it has been opened
- Up to 50 different cutting cycles. All cutting parameters can be stored and retrieved into the machine memory from each program. Machine prepared for connection Industry 4.0 with Modbus/TCP protocol
- PLC controlled machine with a separate safety PLC to control the safety devices and equipped with complete diagnostic software to inform the operator of any possible alarm and to display instructions to restart the unit on a touch screen graphic panel. Maximum roll dimensions: diam. 500 mm (20"), length 2000 mm (78"), weight Kg. 200 (440 lbs).

# **DEVICES ON REQUEST**

- T500/CLN Automatic blade cleaning system on both sides
- T1000/LNK Internet link for connection to AMP Pisani service for troubleshooting and software updates
- T500/COL Blade cooling system with compressed air temperature minus 20 °C

Max roll dimensions	: diam 500 mm x 2.000 mm (20" x 80") – Kg. 200
Blade diameter	: 600 mm
Roll shaft diameter	: 76,4 mm (3") or 80 mm at choice.
Electrical data	
Space requirements and weight	: 5.070 x 2.130 x 1.750 (h) mm, Kg. 2500
Compressed air	: 6 bar
Water	: 2 bar
Accuracy of blade positioning	: ±0.01 m





T1000EX
NUMERICALLY CONTROLLED SLITTING MACHINE FOR HEAVY ROLLS

# NUMERICALLY CONTROLLED SLITTING MACHINE CLASSE T1000EX

The T1000EX numerical controlled roll slitter for heavy rolls up to 400mm diameter and with a maximum weight of 100 kg. The maximum displacement of the blade carriage from the chuck of 200 cm with possibility to load rolls with maximum length 235cm. This machine is designed with the utmost attention to safety features to obtain from IMQ (Italian Institute for Quality Trademarks) the **Certification of Examination** "**CE**" for standards 2006/42/EC (ref. IMQ300). The technical file of the machine has been deposited by IMQ organization that has certified the conformity to EC (European Community) Machine Safety Standards. This means that, while AMP PISANI issues the "CE" certification of the machine, IMQ (Independent organization) confirms that the unit fulfils the requirements of the aforementioned directive.

The unit is particularly suitable to slit large and heavy rolls of nonwoven, foam and laminated foam, felt, glass fibres, rubber and roofing materials, tar rolls, films, fabrics, laminated fabrics etc.

#### **FEATURES**

- Machine totally closed and highly safe for its operator. LED lights for very clear internal illumination of the machine. All machine motors are brushless.
- Automatic opening of the machine front door with pneumatic cylinder and safety system to avoid the its sudden drop in case of power cut or interruption of the compressed air supply
- Numerically controlled positioning of the blade carriage with brushless motor and automatic cut with the possibility of programming up to 6 cutting measures for each automatic cycle.
- Closed loop controlled brushless motors to adjust the blade rotation speed up to 700 RPM and the roll rotation speed up to 450 RPM with possibility to choose the roll rotation direction.
- Numerically controlled blade penetration movement into the roll with three adjustable cutting speeds (entry speed into the roll, cutting speed and cardboard core cutting speed) adjustable on continuous rate with wormscrew movement and brushless motor closed loop controlled. Photocell to detect the roll diameter and laser pointer to indicate the actual position of the blade on the roll.
- Pivoting cutting head (on request) with adjustment of the angle between the blade and the roll controlled by a brushless motor with commands on the machine panel and dial indicator to display the position reached.
- Laser system to measure the blade diameter and its circularity error with automatic adjustment of stop position near the roll support shaft. No knob to adjust the forward travel end of the blade carriage.
- Quick blade return function out of the roll after slitting during the automatic cycle. The stop position outside the roll can be varied with the machine joystick
- Automatic blade positioning function at the roll edge with possibility of automatic blade carriage return to a initial preset position
- Self-centering pneumatic chuck with double clamping mechanism on the cardboard core and on the roll external surface with possibility to adjust the clamping pressure plus adjustable mechanical travel end of the external grippers stroke to avoid excessive pressure on the roll surface in case of soft materials
- Automatic sharpening of the circular knife on both sides with adjustable sharpening time after a programmed number of cuts. Blade speed will be set automatically to the optimal sharpening speed during operation. Sharpening parameters of the auxiliary sharpener can be programmed with values different from those of the main sharpener. The machine includes a device to dress the main grindstone with a diamond.
- Automatic blade lubrication with adjustable frequency (single or multiple) and lube on/off times with possibility to use pure silicon oil or water mixed with silicone glycol
- Up to 50 different cutting cycles. All cutting parameters can be stored and retrieved into the machine memory from each program. Machine prepared for connection Industry 4.0 with Modbus/TCP protocol
- PLC controlled machine with a separate safety PLC to control the safety devices and equipped with complete diagnostic software to inform the operator of any possible alarm and to display instructions to restart
  the unit on a touch screen graphic panel. Maximum roll dimensions: diam. 400 mm (18") x 2.350 mm (92"), Max weight Kg 100 (220 lbs)

## **DEVICES ON REQUEST**

- T500/CLN Automatic blade cleaning system on both sides
- T1000/D60 Machine with blade diam. 60 cm for rolls max diam. 50 cm
- T1000/LNK Internet link for connection to AMP Pisani service for troubleshooting and software updates
- T1000/BROT Rotary shaft
- T1000/BAR75 Extra for roll shaft with diameter 75 mm (3")
- T500/COL Blade cooling system with compressed air temperature minus 20 °C
- T1000/PVT Blade carriage with pivoting head

- ➤ Max roll dimensions ...... diam 400 x 2.000 (16" x 80") Kg. 100
- > Blade diameter .....: 500 mm
- > Roll shaft diameter .....: 50 mm (other measures on request)
- Space requirements and weight .....: 3260 x 1930 x 1640 (h) mm, Kg. 2850
- Compressed air ...... 6 bar
- ➤ Accuracy of blade positioning .....: ±0.01 mm





T/540

# AUTOMATIC ROLL SLITTING MACHINE FOR FOAM, RUBBER AND FILMS

NUMERICALLY CONTROLLED AUTOMATIC ROLL SLITTING MACHINE FOR FOAM, RUBBER AND FILMS T/540

Numerically controlled automatic roll slitting machine for rolls with max diameter 400 mm, max displacement of the blade carriage from the chuck of 175 cm and possibility to load rolls with max length 200 cm.

This machine is designed with the utmost attention to safety features in order to obtain from IMQ ( www.imq.it Italian Institute for Quality Trademarks) the Certification of Examination "CE" for standards 2006/42/EC (ref. IMQ299). The technical file of the machine has been deposited by IMQ organization that has certified the conformity to CE (European Community) Machine Safety Standards.

The machine can process rolls of foam (PVC and polyurethane) even laminated with or without adhesives, rubber, plastic films, material for thermal and acoustic insulation of the buildings, glass and carbon fibers, roofing materials etc.

#### **TECHNICAL FEATURES**

- Totally closed machine. Highly safe for the operator, no diffusion of cutting dust and less noise. LED lights for a clear illumination inside the machine
- Numerically controlled positioning of the blade carriage with brushless motor and automatic cut with the possibility of programming up to 6 cutting measures for each automatic cycle.
- All machine motors are brushless. Roll motor, blade motor and blade positioning motors are closed loop controlled.
- Adjustable blade rotation speed (up to 700 RPM) and adjustable roll rotation speed (up to 450 RPM) with possibility to choose the roll rotation direction.
- Numerically controlled blade penetration movement into the roll with wormscrew movement and brushless motor. with three adjustable cutting speeds (entry speed into the roll, cutting speed and cardboard core cutting speed) adjustable on continuous rate. Photocell to detect the roll diameter and laser pointer to indicate the actual position of the blade on the roll.
- Laser system to measure the blade diameter and its circularity error with automatic adjustment of stop position near the roll support shaft. No knob to adjust the forward travel end of the blade carriage
- Automatic blade positioning function at the roll edge with possibility of automatic blade carriage return to an initial preset position
- Automatic roll diameter adjustment with a measuring photocell to stop the reverse stroke of the blade carriage once the blade is out of the roll. The stop position outside the roll can be adjusted with the machine joystick
- Self-centering pneumatic chuck with double clamping mechanism on the cardboard core and on the roll external surface with possibility to adjust the clamping pressure plus adjustable mechanical travel end of the external grippers stroke to avoid excessive pressure on the roll surface in case of soft materials
- Expanding rotary roll shaft with plastic grippers along the whole shaft length which can be easily replaced. Roll shaft diam. 76,4mm (3") or 80mm as per choice. This unit cannot be supplied with interchangeable shafts
- Automatic sharpening of the circular knife on both sides with adjustable sharpening time after a programmed number of cuts. Blade speed will be set automatically to the optimal sharpening speed during operation. The sharpening parameters of the auxiliary sharpener can be programmed with values different from those of the main sharpener.
- Automatic blade cooling system with nebulized water and collection tank in stainless steel. The liquids can be discharged outside the machine with a tube.
- Automatic blade lubrication with adjustable frequency (single or multiple) and lube on/off times with possibility to use pure silicon oil or water mixed with silicone glycol
- Up to 50 different cutting cycles. All cutting parameters can be stored and retrieved into the machine memory from each program. Machine prepared for connection Industry 4.0 with Modbus/TCP protocol
- PLC controlled machine with a separate safety PLC to control the safety devices and equipped with complete diagnostic software to inform the operator of any possible alarm and to display instructions to restart the unit on a touch screen graphic panel. Max roll dimensions: diam. 400 mm, length 2000 mm, weight Kq.60.

#### **DEVICES ON REQUEST**

- T500/CLN Automatic blade cleaning system on both sides
- T500/COL Blade cooling system by compressed air expansion
- T500/NET Device for remote connection of the machine through internet to our technical offices.

#### **TECHNICAL DATAS**

Blade diameter	:	500 mm
Expanding roll shaft diameter		76.4 mm

> Expanding roll shaft diameter .....: 76,4 mm (3") or 80 mm (at choice).

➤ Dimensions and weight ...... 290 x 191 x 160 (h) cm – Kg 1.150 kg

➤ Installed power...... 5 kW in standard configuration.

Compressed air .....: 6 bar

➤ Accuracy of blade positioning .....: ±0.01 mm





T/520EX
AUTOMATIC ROLL SLITTING MACHINE

# NUMERICALLY CONTROLLED AUTOMATIC ROLL SLITTING MACHINE T/520EX

Numerically controlled automatic roll slitting machine for rolls with max diameter 300 mm, max displacement of the blade carriage from the chuck of 185 cm and possibility to load rolls with max length 215 cm.

This unit is designed with the utmost attention to safety features in order to obtain from IMQ ( www.imq.it | Istituto Italiano del Marchio di Qualità - Italian Institute for Quality Trademarks) the Certification of Type Examination for standards 2006/42/EC(Ref.IMQ300). The technical file of the machine has been deposited by IMQ organization that has certified the conformity to EC (European Community) Machine Safety Standards.

The movement of the blade carriage towards the roll with wormscrew and brushless motor. The machine can process most of materials in rolls such as technical materials, bias or straight fabrics, non-woven with and without adhesives. With special devices, machine can slit foam rolls in polyethylene and PVC, glass and carbon fibers, plastic films, rubber, masking tapes, roofing materials, and more.

#### **TECHNICAL FEATURES**

- . Totally closed machine. Highly safe for the operator, no diffusion of cutting dust and less noise. LED lights for a clear illumination inside the machine
- Numerically controlled positioning of the blade carriage with brushless motor and automatic cut with the possibility of programming up to 6 cutting measures for each automatic cycle.
- Numerically controlled blade penetration movement into the roll with three adjustable cutting speeds (entry speed into the roll, cutting speed and cardboard core cutting speed) adjustable on continuous rate with wormscrew movement and brushless motor. Photocell to detect the roll diameter and Laser pointer to indicate the actual position of the blade on the roll.
- Adjustable blade rotation speed (up to 600 RPM) and adjustable roll rotation speed (up to 400 RPM) with digital vectorial inverter. Possibility to select the roll rotation direction.
- Up to 50 different cutting cycles. All the cutting parameters can be stored and retrieved into the machine memory.
- Laser system to measure the blade diameter with automatic adjustment of stop position near the roll shaft. No knob to adjust the forward travel end of the blade carriage.
- Automatic positioning of the blade at the edge of the roll and automatic return of the blade to the initial position of the automatic cycle
- Quick blade return function out of the roll after slitting during the automatic cycle. The stop position outside the roll can be adjusted with the machine joystick
- Self-centering pneumatic chuck with double clamping mechanism on the cardboard core and on the roll external surface with possibility to adjust the clamping pressure plus adjustable mechanical travel end of the external grippers stroke to avoid excessive pressure on the roll surface in case of soft materials
- Automatic sharpening of the circular knife on both sides with adjustable sharpening time after a programmed number of cuts. Blade speed will be set automatically to the optimal sharpening speed during operation. The sharpening parameters of the auxiliary sharpener can be programmed with values different from those of the main sharpener. The machine includes a device to dress the main grindstone with a diamond.
- Machine standard equipped with non-rotating roll shaft. Rotating shaft and expanding rotating shaft on request available with extra cost.
- Pneumatic system to lift and support the roll shaft for easier loading/unloading operations.
- PLC controlled machine with a separate safety PLC to control the safety devices and equipped with complete diagnostic software to inform the operator of any possible alarm and to display instructions to restart the unit on a touch screen graphic panel. Machine prepared for connection Industry 4.0 with Modbus/TCP protocol
- Max roll dimensions: diam. 300 mm, length 2150 mm, weight Kg.60. Machine available on request for longer rolls and larger roll diameter.

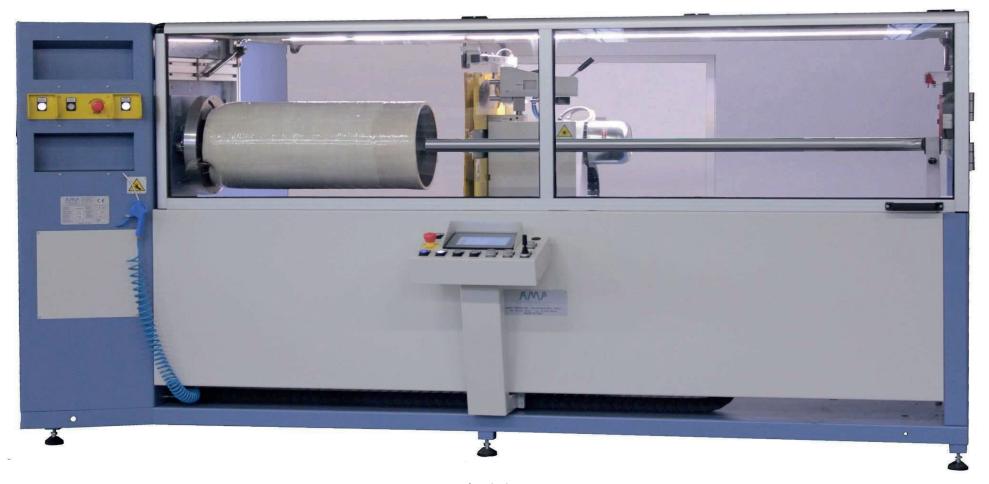
#### **DEVICES ON REQUEST**

•	T300/SIL	Automatic blade lubrication system for the blade
•	T500/CLN	Automatic blade cleaning system on both sides

- T500/D50 Machine with blade diam. 50 cm for rolls max diam. 40 cm
- T500/COL Blade cooling system by compressed air expansion
- T500/WLUB Machine modified for blade lubrication and cooling system with water or silicon at choice.
- T500/NET Device for remote connection of the machine through internet to our technical offices.
- T100/RIL Wormscrew reducer for the blade

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	Blade diameter	:450 mm (diam. 500 mm on requests)
	Roll shaft diameter	:50 mm (other diameters on requests)
	Voltage	:400V ±5% 50Hz 3-phases (other voltages on request)
	Dimensions and weight	:3100 x 1850 x 1600 (h) mm – Kg 1.150 kg
	Installed power	:4,5 kW in standard configuration.
	Compressed air	:6 bar
	Accuracy of blade positioning	:±0.01 mm
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T/500EX
AUTOMATIC ROLL SLITTING MACHINE

# **AUTOMATIC ROLL SLITTING MACHINE T/500EX**

Automatic roll slitting machine for rolls with max diameter 300 mm, max displacement of the blade carriage from the chuck of 185 cm and possibility to load rolls with max length 215 cm.

This machine is designed with the utmost attention to safety features in order to obtain from IMQ (Italian Institute for Quality Trademarks) the **Certification of Examination "CE" for standards 2006/42/EC (ref. IMQ300**). The technical file of the machine has been deposited by IMQ organization that has certified the conformity to EC (European Community) Machine Safety Standards.

The unit can slit most of the material in rolls such as natural and synthetic fabrics straight or in bias, non-woven with and without adhesives etc.

With special devices, the machine can also slit foam rolls in polyethylene and PVC, glass and carbon fibers, plastic films, rubber, masking tapes, roofing materials and more.

#### **TECHNICAL FEATURES**

- Totally closed machine. Highly safe for the operator, no diffusion of cutting dust and less noise. LED lights for a clear illumination of the machine
- Numerically controlled positioning of the blade carriage with brushless motor and automatic cut with the possibility of programming up to 6 cutting measures for each automatic cycle.
- Blade penetration speed in the roll and blade penetration force adjustable on continuous rate and photocell to stop the blade carriage movement when the blade is out of the roll (automatic roll diameter adjustment).
- Adjustable blade rotation speed (up to 600 RPM) and adjustable roll rotation speed (up to 400 RPM) with possibility to choose the roll rotation direction.
- Automatic sharpening of the circular knife on both sides with adjustable sharpening time after a programmed number of cuts. Blade speed will be set automatically to the optimal sharpening speed during operation. The machine includes a device to dress the main grindstone with a diamond.
- Self-centering pneumatic chuck with double clamping mechanism on the cardboard core and on the roll external surface with possibility to adjust the clamping pressure plus adjustable mechanical travel end of the external grippers stroke to avoid excessive pressure on the roll surface in case of soft materials
- Machine equipped with a fixed roll shaft support. Rotary roll shaft or expansion rotary shaft available on request with extra cost.
- Photocell to detect the roll diameter and laser pointer to indicate the position of the blade on the roll
- Lateral pneumatic lifting device of the roll shaft with additional lifting device on the blade carriage for an easy loading and unloading of the heavy rolls
- Rear door for an easy access inside the machine with sensor to sudden stop the machine once it has been opened
- PLC controlled machine with a separate safety PLC to control the safety devices and equipped with complete diagnostic software to inform the operator of any possible alarm and to display instructions to restart the unit on a touch screen graphic panel.
- Max roll dimensions: diam. 300 mm, length 2150 mm, weight Kg.60. Machine available on request for larger roll diameters

#### **DEVICES ON REQUEST**

- T300/SIL Automatic blade lubrication system for the blade with presettable lube on/off time
- T500/D50 Machine with blade diam, 50 cm for rolls max diam, 40 cm
- T500/WLUB Double lubrication system with two tanks and selection of the liquid
- T500/CLN Automatic blade cleaning system on both sides
- T500/COL Blade cooling system by compressed air expansion

 OTTIVIONE DIVINO	
Blade diameter	:450 mm (other diameters on requests)
Roll shaft diameter	:50 mm (other diameters on requests)
Voltage	:400V ±5% 50Hz 3-phases (other voltages on request)
Space requirements and weight	:3000 x 1580 x 1600 (h) mm Kg. 1.050
Installed power	:4,5 kW
Compressed air	:6 bar
Accuracy of blade positioning	:±0.03 mm





T/300EX
PNEUMATIC AUTOMATIC ROLL SLITTING MACHINE

# **AUTOMATIC PNEUMATIC ROLL SLITTING MACHINE T/300EX**

Automatic pneumatic roll slitting machine for cutting rolls with max diameter 300 mm (12"), max blade carriage displacement from the chuck 1,850 mm (72"3/4) and possibility to load rolls with max length 2,150 mm (84" 1/2") and weight 60 kg (132 lbs). The unit has been designed with the utmost attention to safety features to obtain from IMQ (Italian Institute for Quality Trademarks) the **Certification of Examination "CE" for standards 2006/42/EC (ref. IMQ300)**. The technical file of the machine has been deposited by IMQ organization that has certified the conformity to EC (European Community) Machine Safety Standards.

The unit can slit most of the material in rolls such as natural and synthetic fabrics straight or in bias, non-woven with and without adhesives etc.

With special devices, the machine can also slit foam rolls in polyethylene and PVC, glass and carbon fibres, plastic films, rubber, masking tapes, roofing materials and more.

#### **FEATURES**

- Automatic cut with pneumatic displacement of the knife carriage with cutting width set on a ruler. Machine can also easily be operated manually.
- Max cutting width: 200mm (7" 3/4). Possibility to set multiple displacements before slitting for larger cuts (Example: set # 3 displacements of 200mm to get a 600 mm cutting width)
- Adjustable blade rotation speed up to 600 rpm and adjustable roll rotation speed up to 400 rpm with digital inverters and possibility to choose the roll rotation direction.
- Blade penetration speed and force adjustable on continuous rate with photocell to detect automatically the roll diameter and to set the blade forward speed to the preset cutting speed.
- Self centering mechanic chuck with grippers to lock the roll on the cardboard and on the external diameter.
- Automatic blade sharpening (both sides) with adjustable sharpening time after a programmed number of cuts. Automatic blade speed setting to the optimal sharpening speed during operation.
- The machine includes a device to dress the main grindstone with a diamond.
- Automatic blade lubrication system T300/SIL available on request with adjustable frequency (single or multiple) and lube on/off times and possibility to use pure silicon oil or water mixed with silicone glycol
- Lateral pneumatic lifting device of the roll shaft with additional lifting device on the blade carriage for an easy loading and unloading of the heavy rolls
- · LED lights for a clear internal illumination of the machine
- Machine totally closed and highly safe for its operator. Door on the rear side of the machine for easy access to the blade carriage with sensor to sudden stop the machine once it has been opened
- PLC controlled machine with a separate safety PLC to control the safety devices and equipped with complete diagnostic software to inform the operator of any possible alarm and to display instructions to restart the unit on a touch screen graphic panel
- Max roll dimensions: diameter 30cm x 215 cm, weight Kg. 60. Machine for longer rolls available on requests.

# **DEVICES ON REQUEST**

- T300/SIL Automatic blade lubrication system with presettable lube on/lube off time
- T500/CLN Automatic blade cleaning system on both sides
- T500/COL Blade cooling system by compressed air expansion
- T100/RIL Wormscrew reducer for the blade
- T300/CHUCK Pneumatic chuck

# **TECHNICAL DATAS**

Blade diameter :450 mm (18")

Roll shaft diameter :50 mm (other measures on requests)
 Voltage :400V ±5% 50Hz 3-phases (other on request)

Space requirements and weight :3000 x 1630 x 1600 (h) mm

Installed power
 Compressed air
 Accuracy of blade positioning
 ±0.3mm





T/100EX
SEMIAUTOMATIC ROLL SLITTING MACHINE FOR LARGE ROLLS

# SEMIAUTOMATIC ROLL SLITTING MACHINE FOR LARGE ROLLS CLASS T/100EX

The semiautomatic roll slitting machine class T/100E can easily slit with the highest safety for the operator most of materials in roll up to diam. 300 mm (12") and max weight 60 kg such as bias or straight fabrics, non-woven with and without adhesives and also foam rolls in polyethylene and PVC, glass and carbon fibers, plastic films, rubber, masking tapes, roofing materials, and more. This machine has been designed with the utmost attention to safety features to obtain, for the first time in the market, from IMQ (www.imq.it Italian Institute for Quality Trademarks) the Certification of Examination "CE" for standards 2006/42/EC (Ref. IMQ/304). The technical file of the machine has been deposited by IMQ organization that has certified the conformity to "CE" European Community Safety Standards.

#### **TECHNICAL FEATURES**

- Highly safe for the operator. The blade is totally protected by a guard and the operator can perform the cut only if both hands are on a pushbutton and on the cutting lever.
- Machine standard equipped with inverter for blade speed control up to 600 rpm and for roll speed control up to 400 rpm
- Fast semiautomatic positioning of the blade carriage. The operator pushes a button and the pneumatic cylinder indexes the blade carriage to the preset measure.
- Cutting width easily presettable on a graduated knob with magnifying glass for a clear view of the ruler
- Sharpening of the knife on both sides with pneumatic displacement towards the blade of the motor driven main grindstone and an auxiliary grindstone to remove the sharpening burrs .
- Machine includes a diamond to dress the main grindstone. Main grindstone in Borazon available on requests.
- Pneumatic device to lift the roll shaft on the side of the support.
- Self-centering chuck with external grippers for the cardboard and for the roll with possibility to choose the roll rotation direction. Pneumatic chuck T100/CHUCK available on request
- PLC controlled machine with a separate safety PLC to control the safety devices of the unit
- Machine available on requests for special applications

## **DEVICES ON REQUEST**

• T100/D50 Machine with blade diameter 50 cm for max roll diameter 40 cm

T100/REV Winding device to rewind rolls on the paper tube in the roll shaft support

T100/CM Mechanic meter counter for T100/REV winding device. (Only for woven fabric, not for knits)

• T100/250CM Extra for machine with roll shaft length up to 250 cm (100")

• T100/BAR Extra roll shaft support with diameter at choice (between 34 and 55 mm)

• T100/B75 Extra roll shaft support with diameter 75 mm (3")

T100/FLA Flange with springs for roll support

T100/LFT Pneumatic lifting device for roll shaft on blade carriage (for heavy rolls)

T500/COL Blade cooling system by compressed air expansion

T100/FWD Automatic movement of the blade towards the roll with adjustable speed

• T100/CHUCK Pneumatic chuck

- > Roll dimensions ......diameter 30 cm x 185 cm<sup>(1)</sup> Kg.60 max
  - (1) Rolls up to 220 cm width can be loaded but the first cut can be done at a maximum distance of 185 cm from the chuck
- > Accuracy of blade positioning ..:±0.3 mm
- > Blade diameter .....:45 cm (18").
- > Roll shaft diameter ...... Standard 49,3 mm On request from 34 to 75 mm
- ➤ Installed power and voltage .....:4 kW 400V ±5% 50Hz 3-phases (other voltages on request)
- > Compressed air .....6 bar





T/50EX
SEMIAUTOMATIC ROLL SLITTING MACHINE

# SEMIAUTOMATIC ROLL SLITTING MACHINE CLASS T/50EX

The T/50EX manual slitting machine with semiautomatic movement of the blade carriage to the cutting measure can cut easily with the highest safety for the operator most of materials in rolls (bias or straight cut, polyester, non-woven, synthetic leather, PVC, interlinings, adhesives and so on).

This machine has been designed with the utmost attention to safety features to obtain, for the first time in the market, from IMQ (<a href="www.imq.it">www.imq.it</a> Italian Institute for Quality Trademarks) the Certification of Examination "CE" for standards 2006/42/EC (Ref. IMQ/304). The technical file of the machine has been deposited by IMQ organization that has certified the conformity to "CE" European Community Safety Standards.

#### **TECHNICAL FEATURES**

- Highly safe for the operator. The blade is totally enclosed and the operator can do the cutting operations only when both hands are resting on a pushbutton and on the cutting lever.
- Fast semiautomatic positioning of the blade carriage. The operator presses a button and the pneumatic cylinder indexes the blade carriage to the preset measure.
- Cutting width easily presettable on a graduated knob with magnifying glass for a clear view of the ruler
- Machine standard equipped with digital inverters to adjust the blade speed up to 600 rpm and the roll speed up to 400 rpm
- Sharpening of the knife on both sides with pneumatic displacement towards the blade of the motor driven main grindstone and an auxiliary grindstone to remove the sharpening burrs
- Machine includes a diamond to dress the main grindstone.
- Self-centering mechanic chuck with double locking of the roll on the external of the roll (3 pliers) and one extra plier to lock the cardboard core
- PLC controlled machine with a separate safety PLC to control the safety devices of the unit

## **DEVICES ON REQUEST**

T50/SIL Manual blade lubrication system
 T50/FLA Flange with springs for roll support

• T50/BAR Additional roll shaft support with diameter at choice (between 34 and 55 mm)

T50/BAR75 Roll shaft support with diameter 75 mm

T50/REV Winding device to rewind rolls on the paper tube in the roll shaft support
 T50/CM Mechanic meter counter for winding system (not for knitted fabric)

• T50/L220 Roll support extended to L=220 cm. Max blade displacement from the chuck 160cm

# **TECHNICAL DATAS**

> Roll dimensions ...... diameter 250 mm x 2000 mm (1) Kg.20 max

> Compressed air ......6 bar

> Net weight ...... 450 kg

(1) Rolls up to 2000 mm can be loaded but the first cut can be done at a maximum distance of 1600 mm from the chuck.





T50EX HD
SEMIAUTOMATIC ROLL SLITTING MACHINE FOR PLASTIC FILMS

# SEMIAUTOMATIC ROLL SLITTING MACHINE FOR PLASTIC FILMS CLASS T50EX HD

The T50EX HD manual slitting machine with semiautomatic movement of the blade carriage to the cutting measure and semiautomatic movement of the blade carriage towards the roll is specifically projected to cut plastic films such as polyethylene or polyurethane but it can cut also most of materials in rolls.

This machine has been designed with the utmost attention to safety features to obtain, for the first time in the market, from IMQ (<a href="www.imq.it">www.imq.it</a> Italian Institute for Quality Trademarks) the Certification of Examination "CE" for standards 2006/42/EC (Ref. IMQ/304). The technical file of the machine has been deposited by IMQ organization that has certified the conformity to "CE" European Community Safety Standards.

#### **TECHNICAL FEATURES**

- Highly safe for the operator. The blade is totally enclosed and the operator can do the cutting operations only when both hands are engaged on two pushbuttons
- Fast pneumatic positioning of the blade carriage. The operator presses a button and the blade carriage indexes to the preset measure on a screw.
- Cutting width easily presettable on a graduated knob with magnifying glass for a clear view of the ruler
- Machine standard equipped with digital inverters to adjust the blade speed up to 70 rpm and the roll speed up to 140 rpm
- Automatic movement of the blade towards the roll at the maximum speed and photocell to slow down the speed to the preset cutting speed just before the blade reaches the roll to cut
- Adjustable cutting force and cutting speed to obtain an absolutely uniform cut along the roll.
- Sharpening of the knife with pneumatic displacement towards the blade of the motor driven main grindstone in BORAZON and an auxiliary grindstone to remove the sharpening burrs
- Blade cooling system available on requests
- Self-centering mechanic chuck with double locking of the roll on the external of the roll (3 pliers) and one extra plier to lock the cardboard core
- PLC controlled machine with a separate safety PLC to control the safety devices of the unit

# **DEVICES ON REQUEST**

T50/SIL Manual blade lubrication system
 T50/FLA Flange with springs for roll support

• T50/BAR Additional roll shaft support with diameter at choice (between 34 and 55 mm)

T50/BAR75 Roll shaft support with diameter 75 mm

• T500/COL Blade cooling system by compressed air expansion

# **TECHNICAL DATAS**

> Roll dimensions ...... diameter 200 mm x 2000 mm (1) Kg.20 max

➤ Accuracy of blade positioning ....: ±0.3 mm

> Blade diameter ...... 360 mm (diam 400 mm on request)

> Roll shaft diameter ...... 50 mm (on request 75mm)

> Compressed air .....: 6 bar

> Space requirements ...... 2500 x 1300 mm approx.

> Net weight .....: 500 kg

(1) up to 2000 mm can be loaded but the first cut can be done at a maximum distance of 1600 mm from the chuck





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For further information and even more machinery visit our website www.i2europe.co.uk