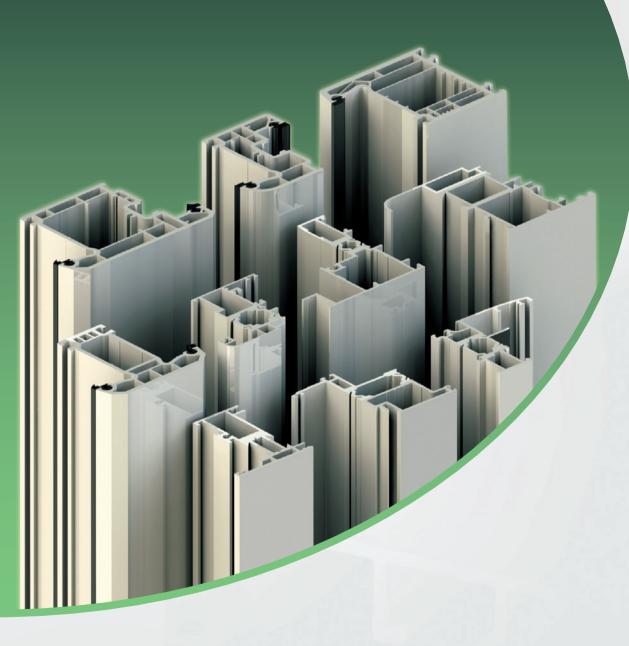
# Double head cutting machines

Machines for processing aluminium and PVC profiles





#### THE COMPANY

Pertici Industries, was founded in 1965 by Leto Pertici as Costruzioni Meccaniche Pertici.

Originally, the Company started off with the production of traditional wood-working machines and subsequently developed the production of machinery for the aluminium and PVC door and window industry.

Pertici has always been a competent and reliable supplier of machinery for the production of windows and doors with a range of products constantly developed and improved.

The volume growth and the extension of the production site, accompanied by a production cycle completely controlled inside, allowed Pertici to offer solutions of the highest quality and reliability able to meet the needs of every type of customer.

Thanks to these characteristics, since the eighties, Pertici has been the protagonist of a strong international expansion that allowed the creation of a solid distribution network around the world. In nearly fifty years of work, Pertici has installed tens of thousands of plants in Europe, America, Africa, Asia and Australia.

Today Pertici Industries is a world leader in the design and construction of machines and systems for the processing of aluminium and PVC profiles. Pertici develops and implements cutting-edge technology guaranteeing a global customer service which includes servicing, maintenance, installation, support and timely educational training.

The expertise and experience embedded in all the staff together with the strong presence in the global market are essential elements of the company constant development strategy.







# Double head cutting machines

The double head cutting machines are used for cutting aluminium, PVC and light alloy profiles, suitable for series processing and special applications guaranteeing an extremely reliability. These Series, provided with high stiffness, is equipped with two independent cutting heads, one fixed and the other one movable which operates in two different ways:

- automatically by AC motor with magnetic ruler length control system (electronic machines)
- manually with metric ruler length control system (semiautomatic machines).

All axis movements are performed on rails and slides (equipped with recirculating ball bearings only for series 550 - 600). These features enable executing centesimal precision cuts for all types of profiles, even the large ones thanks to a wide range of models equipped with 330 mm to 600 mm diameter saw blades.

Mo	odels			pag			
Series 550   Series 600	Electronic double head cutting machines 600 TSE	ALU	PVC	6			
	Electronic double head cutting machines 600 TSP	ALU	PVC	7			
	Electronic double head cutting machines 550 TSE	ALU	PVC	8			
	Electronic double head cutting machines 550 TSP	ALU	PVC	9			
Series 500	Electronic double head cutting machines 500 TS - 500 TS/22	ALU	PVC	10			
	Electronic double head cutting machines 500 CD - 500 CD/22	ALU	PVC	11			
	Electronic double head cutting machines 500 D2K - 500 D2K/22	ALU	PVC	12			
	Semiautomatic double head cutting machines 500 - 500/22	ALU	PVC	13			
Series 330/400	Electronic double head cutting machines 403 IP	WOOD ALU	PVC	14			
	Semiautomatic double head cutting machines 402 IP	WOOD ALU	PVC	16			
	Semiautomatic double head cutting machines 330 IP	WOOD ALU	PVC	17			
	Complete technical specification						

### Electronic double head cutting machine 600 TSE

- Carbide saw blade 600 mm
- 3 controlled axis (linear positioning of moveable head and 2 electronic tilting heads)
- Electronic tilting heads from 45°int to 20° ext
- Integral pneumatic protection of cutting area
- Blades lubrication system
- Pair of horizontal pneumatic clamps with low pressure device
- Pair of vertical pneumatic clamps with low pressure device
- Side support with roller 3000 mm
- X axis standard positioning speed: 30 m/min
- Blade motor power: 3 kW
- Blades speed: 2800 rpm
- Maximum cutting length (according to the model):
  - 4100 mm
  - 5100 mm
  - 6100 mm
- Minimum cutting length at 90°: 330 mm
- Minimum cutting length at 45° ext: 430 mm
- Minimum cutting length at 45° int: 611 mm
- Power supply: 8 kW
- Air consumption: 70 NI/¹
- Dimensions with roller support (length x depth x height)/ weight according to the model:
  - 8700 x 2000 x 2100 mm / 2000 kg (4 m model)
  - 9700 x 2000 x 2100 mm / 2200 kg (5 m model)
  - 10700 x 2000 x 2100 mm / 2400 kg (6 m model)



#### **Control features**

- Windows Embedded operating system
- Storing profile data (up to 1000)
- Optimization on cutting lists
- Complete diagnostic help on line
- Touch screen industrial PC panel TFT 15"
- USB port
- Ethernet port for LAN connection



### Electronic double head cutting machine 600 TSP

- Carbide saw blade 600 mm
- 1 controlled axis (linear positioning of moveable head)
- Pneumatic tilting heads from 45°int to 20° ext
- Integral pneumatic protection of cutting area
- Blades lubrication system
- Pair of horizontal pneumatic clamps with low pressure device
- Pair of vertical pneumatic clamps with low pressure device
- Side support with roller 3000 mm
- X axis standard positioning speed: 30 m/min
- Blade motor power: 3 kW
- Blades speed: 2800 rpm
- Maximum cutting length (according to the model):
  - 4100 mm
  - 5100 mm
  - 6100 mm
- Minimum cutting length at 90°: 330 mm
- Minimum cutting length at 45° ext: 430 mm
- Minimum cutting length at 45° int: 611 mm
- Power supply: 8 kW
- Air consumption: 70 NI/¹
- Dimensions with roller support (length x depth x height)/ weight according to the model:
  - 8700 x 2000 x 2100 mm / 2000 kg (4 m model)
  - 9700 x 2000 x 2100 mm / 2200 kg (5 m model)
  - 10700 x 2000 x 2100 mm / 2400 kg (6 m model)

#### **Control features**

- Windows Embedded operating system
- Storing profile data (up to 1000)
- Optimization on cutting lists
- Complete diagnostic help on line
- Touch screen industrial PC panel TFT 15"
- USB port
- Ethernet port for LAN connection



600 TSE



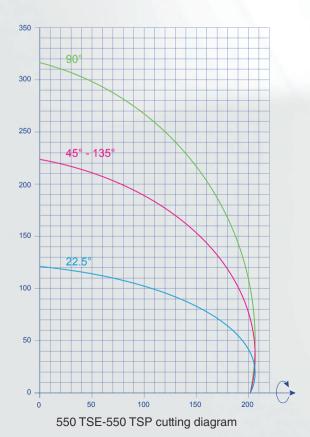
#### 600 TSE - 600 TSP options

- Profile height electronic measuring device
- Automatic intermediate support
- Office software import driver
- Label printer kit
- Repetitive cut
- Bevel cut
- Wedge cut
- Reduced wedge cut
- Extra-length cut
- Reduced cut
- Industrial dust exhauster



## Electronic double head cutting machine 550 TSE

- Carbide saw blade 550 mm
- 3 controlled axis (linear positioning of moveable head and 2 electronic tilting heads)
- Electronic tilting heads from 45°int to 20° ext
- Integral pneumatic protection of cutting area
- Blades lubrication system
- Pair of horizontal pneumatic clamps with low pressure device
- Pair of vertical pneumatic clamps with low pressure device
- Side support with roller 3000 mm
- X axis standard positioning speed: 30 m/min
- Blade motor power: 3 kW
- Blades speed: 2800 rpm
- Maximum cutting length (according to the model):
  - 4100 mm
  - 5100 mm
  - 6100 mm
- Minimum cutting length at 90°: 330 mm
- Minimum cutting length at 45° ext: 430 mm
- Minimum cutting length at 45° int: 611 mm
- Power supply: 8 kW
- Air consumption: 70 NI/¹

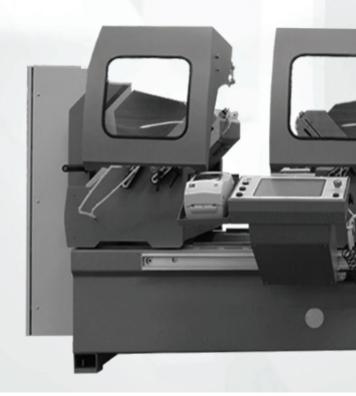




- Dimensions with roller support (length x depth x height)
   / weight according to the model:
  - 8700 x 2000 x 2100 mm / 2000 kg (4 m model)
  - 9700 x 2000 x 2100 mm / 2200 kg (5 m model)
  - 10700 x 2000 x 2100 mm / 2400 kg (6 m model)

#### **Control features**

- Windows Embedded operating system
- Storing profile data (up to 1000)
- Optimization on cutting lists
- Complete diagnostic help on line
- Touch screen industrial PC panel TFT 15"
- USB port
- Ethernet port for LAN connection



### Electronic double head cutting machine 550 TSP

- Carbide saw blade 550 mm
- 1 controlled axis (linear positioning of moveable head)
- Pneumatic tilting heads from 45°int to 20° ext
- Integral pneumatic protection of cutting area
- Blades lubrication system
- Pair of horizontal pneumatic clamps with low pressure device
- Pair of vertical pneumatic clamps with low pressure device
- Side support with roller 3000 mm
- X axis standard positioning speed: 30 m/min
- Blade motor power: 3 kW
- Blades speed: 2800 rpm
- Maximum cutting length (according to the model):
  - 4100 mm
  - 5100 mm
  - 6100 mm
- Minimum cutting length at 90°: 330 mm
- Minimum cutting length at 45° ext: 430 mm
- Minimum cutting length at 45° int: 611 mm
- Power supply: 8 kW
- Air consumption: 70 NI/'
- Dimensions with roller support (length x depth x height) / weight according to the model:
  - 8700 x 2000 x 2100 mm / 2000 kg (4 m model)
  - 9700 x 2000 x 2100 mm / 2200 kg (5 m model)
  - 10700 x 2000 x 2100 mm / 2400 kg (6 m model)



#### **Control features**

- Windows Embedded operating system
- Storing profile data (up to 1000)
- Optimization on cutting lists
- Complete diagnostic help on line
- Touch screen industrial PC panel TFT 15"
- USB port
- Ethernet port for LAN connection

#### **550 TSE - 550 TSP options**

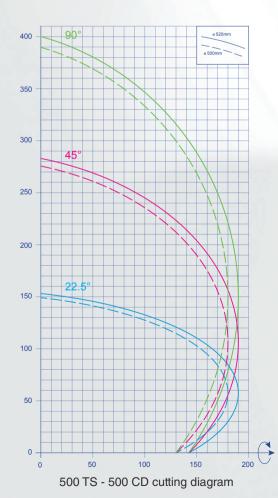
- Profile height electronic measuring device
- Automatic intermediate support
- Office software import driver
- Label printer kit
- Repetitive cut
- Bevel cut
- Wedge cut
- Reduced wedge cut



550 TSE

### Electronic double head cutting machine 500 TS - 500 TS/22

- Carbide saw blade 500/520 mm
- 1 controlled axis (linear positioning of moveable head)
- Pneumatic tilting heads from 45° ext to 90° (22,5° ext to 90° only for 500 TS/22 model)
- Integral pneumatic protection of cutting area
- Blades lubrication system
- Pair of horizontal pneumatic clamps with low pressure device
- Pair of vertical pneumatic clamps with low pressure device
- Side support with roller 3000 mm
- X axis standard positioning speed: 20 m/min
- Blade motor power: 2,2 kW
- Blades speed: 2800 rpm
- Maximum cutting length (according to the model):
  - 4100 mm
  - 5100 mm
  - 6100 mm
- Minimum cutting length from 45° ext to 90°: 222 mm (only for 500 TS model)
- Minimum cutting length from 22,5° ext to 90°: 310 mm (only for 500 TS/22 model)





- Power supply: 5,5 kW
- Air consumption: 63 NI/¹
- Dimensions with roller support (length x depth x height)/ weight according to the model:
  - 8460 x 1730 x 1900 mm / 1090 kg (4 m model)
  - 9460 x 1730 x 1900 mm / 1220 kg (5 m model)
  - 10460 x 1730 x 1900 mm / 1350 kg (6 m model)

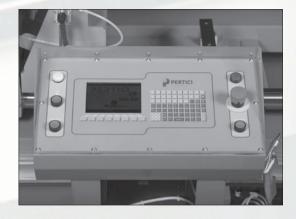
#### **Control features**

- Windows Embedded operating system
- Storing profile data (up to 1000)
- Optimization on cutting lists
- Complete diagnostic help on line
- Touch screen industrial PC panel TFT 15"
- USB port
- Ethernet port for LAN connection



### Electronic double head cutting machine 500 CD - 500 CD/22

- Carbide saw blade 500/520 mm
- 1 controlled axis (linear positioning of moveable head)
- Pneumatic tilting heads from 45° ext to 90° (22,5° ext to 90° only for 500 CD/22 model)
- Integral pneumatic protection of cutting area
- Blades lubrication system
- Pair of horizontal pneumatic clamps with low pressure device
- Pair of vertical pneumatic clamps with low pressure device
- Side support with roller 3000 mm
- X axis standard positioning speed: 20 m/min
- Blade motor power: 2,2 kW
- Blades speed: 2800 rpm
- Maximum cutting length (according to the model):
  - 4100 mm
  - 5100 mm
  - 6100 mm
- Minimum cutting length from 45° ext to 90°: 222 mm (only for 500CD model)
- Minimum cutting length from 22,5° ext to 90°: 310 mm (only for 500CD/22 model)
- Power supply: 5,5 kW
- Air consumption: 63 NI/1
- Dimensions with roller support (length x depth x height) / weight according to the model:
  - 8460 x 1730 x 1900 mm / 1090 kg (4 m model)
  - 9460 x 1730 x 1900 mm / 1220 kg (5 m model)
  - 10460 x 1730 x 1900 mm / 1350 kg (6 m model)



#### **Control features**

- Windows Embedded operating system
- Storing profile data (up to 1000)
- Optimization on cutting lists
- Complete diagnostic help on line
- Industrial PC panel TFT 6,5" with keyboard
- USB port
- Ethernet port for LAN connection

#### 500 TS - 500 TS/22 - 500 CD - 500 CD/22 options

- Profile height electronic measuring device
- Automatic intermediate support
- Office software import driver
- Label printer kit
- Chip tray
- Repetitive cut
- Bevel cut
- Wedge cut
- Extra-length cut
- Reduced cut
- Industrial dust exhauster



500 TS

# Electronic double head cutting machine 500 D2K - 500 D2K/22

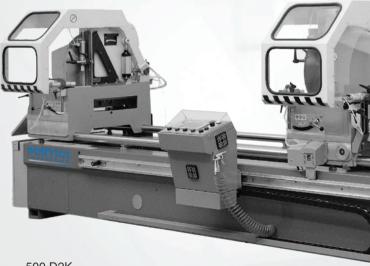
- Carbide saw blade 500/520 mm
- 1 controlled axis (linear positioning of moveable head)
- Pneumatic tilting heads from 45° ext to 90° (22,5° ext to 90° only for 500 D2K/22 model)
- Integral pneumatic protection of cutting area
- Blades lubrication system
- Pair of horizontal pneumatic clamps with low pressure device
- Pair of vertical pneumatic clamps with low pressure device
- Side support with roller 3000 mm
- X axis standard positioning speed: 20 m/min
- Blade motor power: 2,2 kW
- Blades speed: 2800 rpm
- Maximum cutting length (according to the model):
  - 4100 mm
  - 5100 mm
  - 6100 mm
- Minimum cutting length from 45° ext to 90°: 222 mm (only for 500 D2K model)
- Minimum cutting length from 22,5° ext to 90°: 310 mm (only for 500 D2K/22 model)
- Power supply: 5,5 kW
- Air consumption: 63 NI/¹
- Dimensions with roller support (length x depth x height)/ weight according to the model:
  - 8460 x 1730 x 1900 mm / 1090 kg (4 m model)
  - 9460 x 1730 x 1900 mm / 1220 kg (5 m model)
  - 10460 x 1730 x 1900 mm / 1350 kg (6 m model)

#### **Control features**

- Storing profile data (up to 200)
- Industrial control unit with black-lighted 80 characters
   LCD and protected touch-sensitive keyboard
- USB port
- Serial line RS 232 C



- Profile height electronic measuring device
- Automatic intermediate support
- Office software import driver
- Label printer kit
- Chip tray
- Repetitive cut
- Bevel cut
- Wedge cut
- Extra-length cut
- Reduced cut (111 mm for 500 D2K model, 155 mm for 500 D2K/22 model)
- Industrial dust exhauster
- Blade motor power: 3 kW



500 D2K

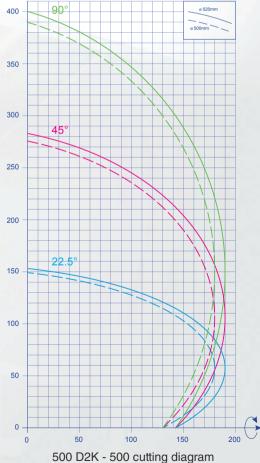
# Semiautomatic double head cutting machine 500 - 500/22

- Carbide saw blade 500/520 mm
- Manual positioning of movable head
- Length control system by metric ruler and digital readout
- Pneumatic tilting heads from 45° ext to 90° (22,5° ext to 90° only for 500/22 model)
- Integral pneumatic protection of cutting area
- Blades lubrication system
- Pair of horizontal pneumatic clamps with low pressure device
- Pair of vertical pneumatic clamps with low pressure device
- Side support with roller 3000 mm
- Blade motor power: 2,2 kW
- Blades speed: 2800 rpm
- Maximum cutting length (according to the model):
  - 4100 mm
  - 5100 mm
  - 6100 mm
- Minimum cutting length from 45° ext to 90°: 222 mm (only for 500 model)
- Minimum cutting length from 22,5° ext to 90°: 310 mm (only for 500/22 model)
- Power supply: 5 kW
- Air consumption: 63 NI/¹
- Dimensions with roller support (length x depth x height)
   / weight according to the model:
  - 8460 x 1730 x 1900 mm / 1090 kg (4 m model)
  - 9460 x 1730 x 1900 mm / 1220 kg (5 m model)
  - 10460 x 1730 x 1900 mm / 1350 kg (6 m model)



- Wedge cut (mechanical)
- Industrial dust exhauster
- Chip tray
- Blade motor power: 3 kW





### Electronic double head cutting machine 403 IP

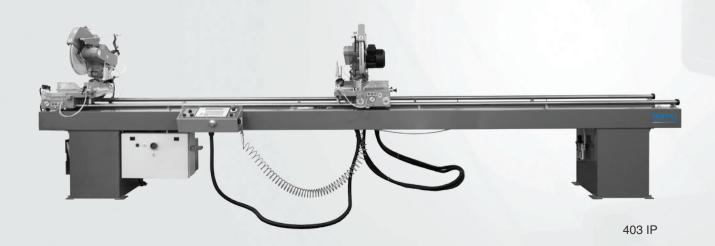
- Carbide saw blade 400 mm
- 1 controlled axis (linear positioning of moveable head)
- Part of cutting table removable
- Manual rotation heads from -45° to +45° (Ω)
- Manual tilting heads from 45° ext to 90° (µ))
- Mechanically controlled protection of cutting area
- Blades lubrication system
- Pair of horizontal pneumatic clamps with low pressure device
- Pair of vertical pneumatic clamps with low pressure device
- X axis standard positioning speed: 20 m/min
- Blade motor power: 2,2 kW
- Blades speed: 3200 rpm
- Maximum cutting length (according to the model):
  - 3500 mm
  - 5080 mm
  - 6080 mm
- Power supply: 5,5 kW
- Air consumption: 45 NI/¹
- Dimensions (length x depth x height) / weight according to the model:
  - 4530 x 1200 x 1550 mm / 500 kg (3,5 m model)
  - 6030 x 1200 x 1550 mm / 600 kg (5 m model)
  - 7030 x 1200 x 1550 mm / 700 kg (6 m model)

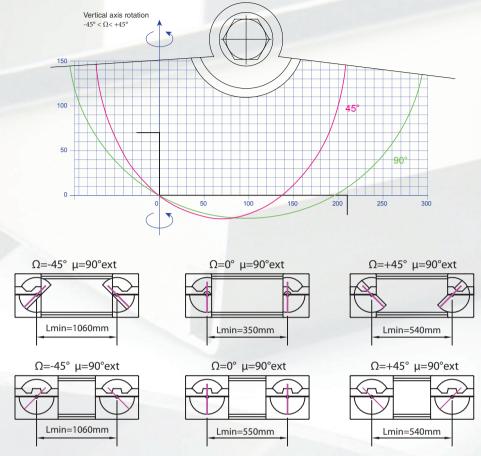
#### **Control features**

- Storing profile data (up to 200)
- Industrial control unit with black-lighted 80 characters LCD and protected touch-sensitive keyboard
- USB port
- Serial line RS 232 C

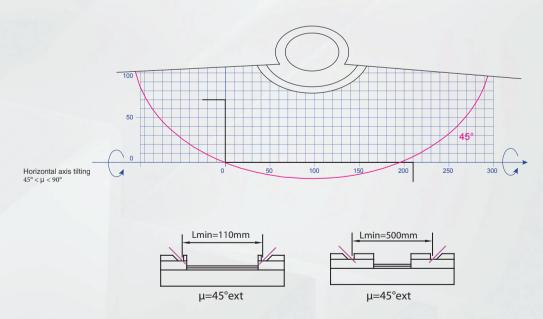


- Automatic intermediate support
- Office software import driver
- Repetitive cut
- Bevel cut
- Wedge cut (mechanical)
- Reduced cut
- Industrial dust exhauster
- Blade motor power: 3 kW
- Side support with roller 3000 mm
- Lower connection kit for dust exhaust unit





403 IP cutting diagram on vertical axis rotation



403 IP cutting diagram on horizontal axis tilting

# Semiautomatic double head cutting machine 402 IP

- Carbide saw blade 400 mm
- Length control system by metric ruler
- Reduced cutting table
- Manual rotation heads from -45° to +45° (Ω)
- Manual tilting heads from 45° ext to 90° (μ)
- Mechanically controlled protection of cutting area
- Blades lubrication system
- Pair of horizontal pneumatic clamps with low pressure device
- Pair of vertical pneumatic clamps with low pressure device
- Blade motor power: 2,2 kW
- Blades speed: 3200 rpm
- Maximum cutting length (according to the model):
  - 3500 mm
  - 5080 mm
  - 6080 mm
- Minimum cutting length: see the target below

 $\mu$ =45°ext  $\Omega$ =0°

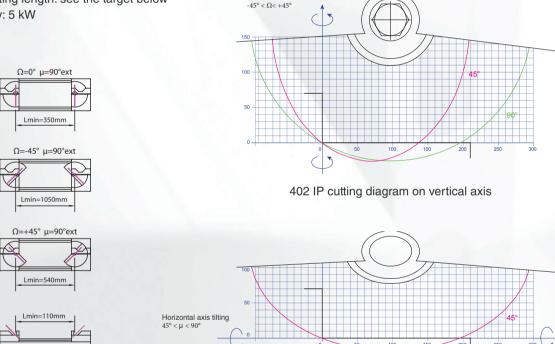
Power supply: 5 kW

- Air consumption: 45 NI/¹
- Dimensions (length x depth x height) / weight according to the model:
  - 4530 x 1200 x 1550 mm / 500 kg (3,5 m model)
  - 6030 x 1200 x 1550 mm / 550 kg (5 m model)
  - 7030 x 1200 x 1550 mm / 600 kg (6 m model)

#### **Options**

Vertical axis rotation

- Wedge cut (mechanical)
- Digital read out for length
- Industrial dust exhauster
- Blade motor power: 3 kW
- Extension working plate
- Lower connection kit for dust exhaust unit





402 IP cutting diagram on horizontal axis

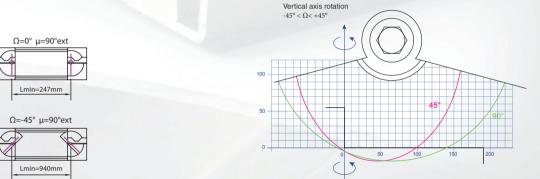
# Semiautomatic double head cutting machine 330 IP

- Carbide saw blade 330 mm
- Length control system by metric ruler
- Reduced cutting table
- Manual rotation heads from -45° to +45° (Ω)
- Manual tilting heads from 45° ext to 90° (μ)
- Mechanically controlled protection of cutting area
- Pair of horizontal pneumatic clamps with low pressure device
- Pair of vertical pneumatic clamps with low pressure device
- Blade motor power: 2,2 kW
- Blades speed: 3200 rpm
- Maximum cutting length (according to the model):
  - 3335 mm
  - 4580 mm
  - 6080 mm
- Minimum cutting length: see the target below

Ω=+45° μ=90°ext

- Power supply: 5 kW
- Air consumption: 45 NI/¹
- Dimensions (length x depth x height) / weight according to the model:
  - 4200 x 1150 x 1450 mm / 350 kg (3,3 m model)
  - 6030 x 1150 x 1450 mm / 400 kg (4,5 m model)
  - 7030 x 1150 x 1450 mm / 450 kg (6 m model)

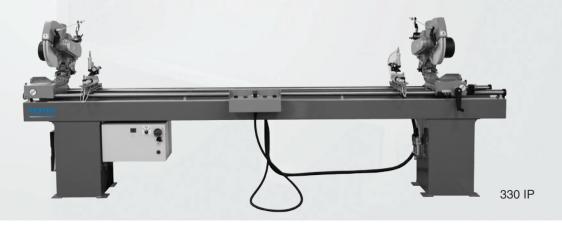
- Wedge cut (mechanical)
- Blades lubrication system
- Industrial dust exhauster
- Lower connection kit for dust exhaust unit



330 IP cutting diagram on vertical axis



330 IP cutting diagram on horizontal axis



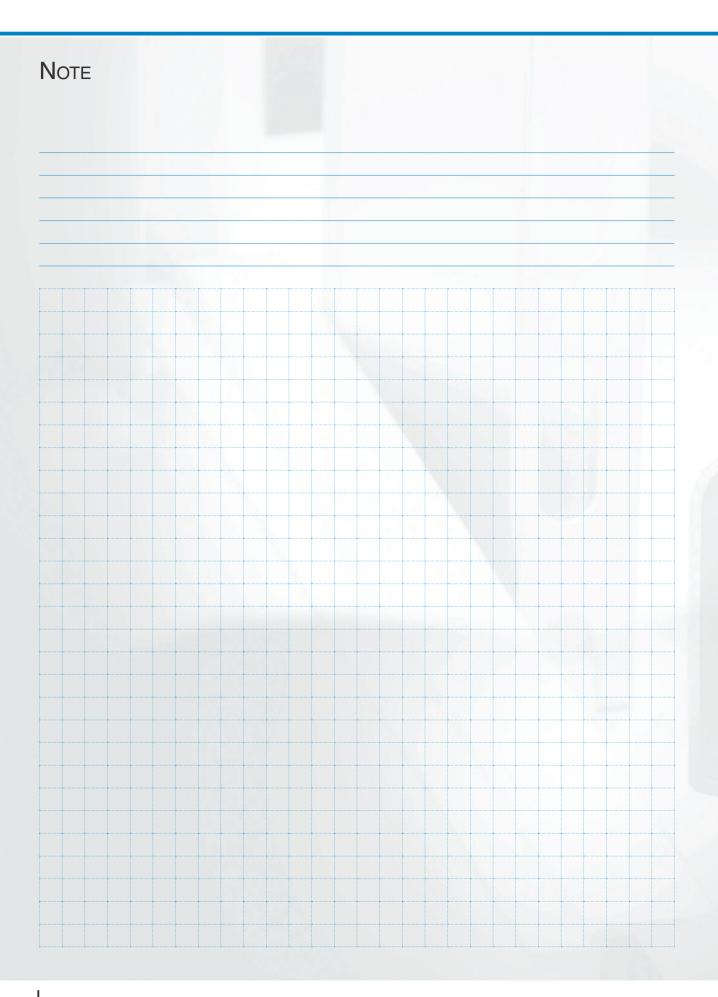
# COMPLETE TECHNICAL SPECIFICATION

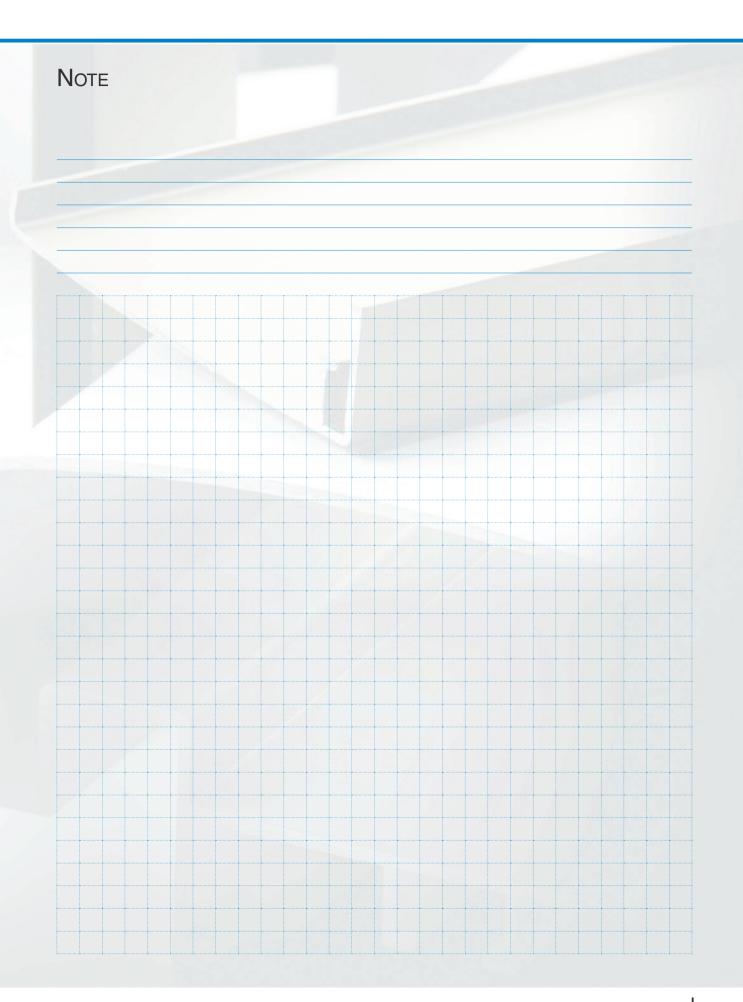
<b></b>	ES 600 ALU PVC	SERIE	ES 550 ALU PVC		
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66	00	5	50		
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Touch screen industrial PC panel TFT 15"					
Windows Embedded operating system Storing profile data (up to 1000) Optimization on cutting lists Complete diagnostic help on line USB port - Ethernet port for LAN connection					
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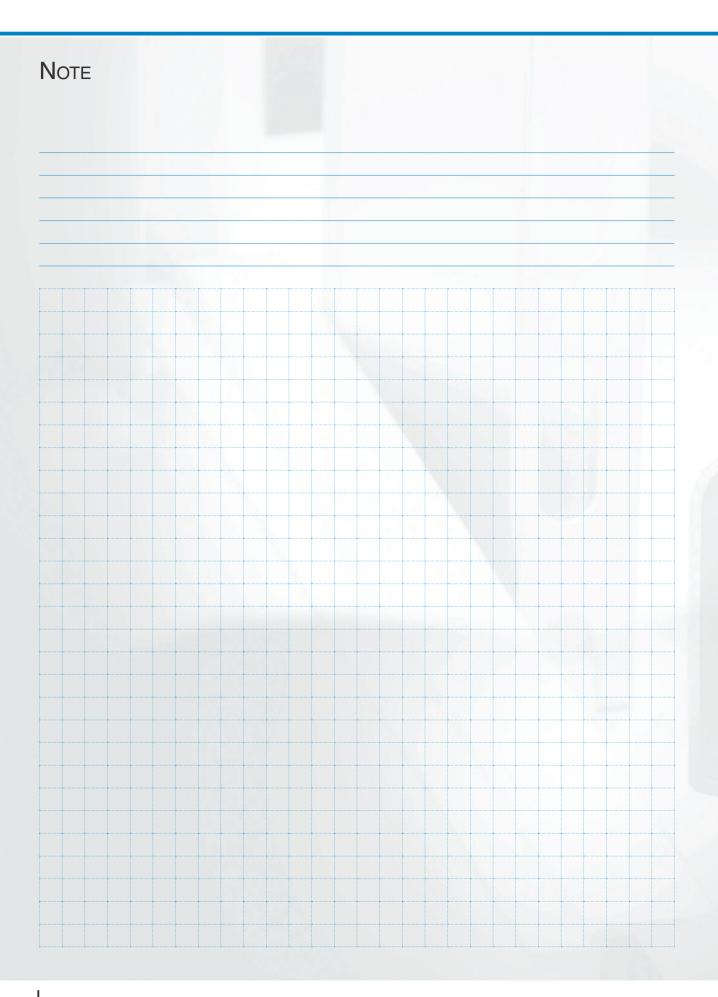
For different angles see the dedicated machine datasheet
 Roller support is not foreseen for series 400/330
 For further options see the dedicated machine datasheet

. 7.3			1,000		49.3	√ Included	å Optional	X Not available	
		S 500 ALU PVO	I				SERIES 400/330	WOOD ALU PV	
500 CD	500 CD/22	500 D2K	500 D2K/22	500	500/22	403IP	402IP	330IP	
	500/	/520					00	330	
	4100 5100 6100					3500 5080 6080		3335 4580 6080	
222	310	222	310	222	310	3	50	247	
				Ма	nual	Automatic	Ma	nual	
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45° ext ÷ 90°	22,5° ext ÷ 90°	45° ext ÷ 90°	22,5° ext ÷ 90°	45° ext ÷ 90°	22,5° ext ÷ 90°		45° ext ÷ 90°		
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	2800 3200								
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1220 1350						600 700	550 600	400 450	
Industrial PC	panel TFT 6,5"	Industrial contro	I unit with black- aracters LCD						
		Storing profile o USB Serial line	data (up to 200) port RS 232 C	X		see 500 D2K model		х	
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