

ELCON

SINCE 1948



ADVANCE²QUADRA

ELCON SAWING TECHNOLOGY: PRECISELY FOR YOU

The fully automatic ELCON **ADVANCE²QUADRA**



Established in 1948, ELCON has over 60 years of sawing experience and is currently a world leader in innovative panel cutting technology. The fully automatic ADVANCE²QUADRA, with patented cut-to-size technology, is the most recent example of product development by ELCON. This machine is unique being compared to a beam saw in function, but a vertical panel saw in form.



- 1 • Using touch screen controls, overall panel size and size for the initial reference cut at the bottom are entered.
- 2 • Then the height, width and the quantity of final pieces required are entered.



Fully automatic cut-to-size means:

- No need to remove then replace panels between cuts
- No need to rotate panels between cuts
- Once a new panel is placed on the machine, it is divided and sized with the operator only required to remove finished pieces
- Using only one button the operator controls the entire processing of the panel

Fully automatic panel cutting with the **ADVANCE²QUADRA**

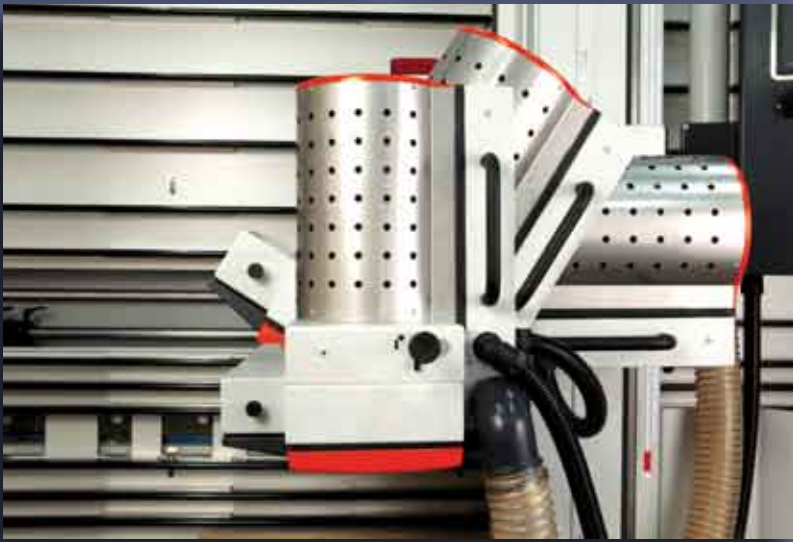


3 • With the start button on the operation lever (or on the control box) the programme is started, and the individual cuts are made. The operator need only push this one button to completely cut a panel to size.

4 • After the programme is started, the ADVANCE clamps automatically move to the top of the panel, recognise it, and lift the panel to allow the bottom reference cut to be made.

5 • Simultaneously, the saw unit positions itself for the reference cut and subsequently trims the panel.

6 • After trimming, the panel is automatically lowered onto the rollers again, and the saw unit positions itself for the first strip cut.



The ADVANCE **clamps** can lift panels up to 150 kgs (up to 225 kgs with 3 clamps). Also several panels can be clamped and lifted simultaneously with a maximum overall material thickness of 55 mm.

The QUADRA **pusher** positions the strips for the vertical cut.

The operation of the machine is controlled from the **touch screen** including scoring with the main blade (in the return direction).

The **panel clamp** secures the panel during vertical cutting.

When the ADVANCE clamps cannot be used, a bottom **panel clamp** secures the work piece and prevents movement of the strips.

On the pneumatically operated **mid-fence** smaller work pieces can be processed manually.

In manual operation mode, the fine adjustable **measuring stop** can also be used.

The **saw unit** rotates automatically for horizontal or vertical cutting.

The **vertical saw beam** positions itself automatically by the press of a button.



7 • The vertical saw beam positions itself automatically at the 0-point, while the saw unit automatically rotates from horizontal to vertical. The QUADRA pusher positions the strip for the vertical reference cut and trims it.

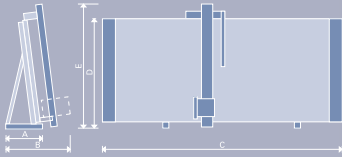
8 • The strips are automatically cut to final dimensions and the operator can take these from the machine.

9 • After that the QUADRA pusher moves to its 'park' position, the top part of the panel is put on the rollers, the saw unit rotates back into the horizontal position, the 2nd strip is then cut into final sizes. This process continues until the entire panel is cut to size.

10 • A panel can be cut to size automatically by one operator and without the need to reposition material between horizontal and vertical cuts. The whole process is controlled by pushing a single button.

TECHNICAL DATA:

MACHINE TYPE:	ADVANCE STANDARD	ADVANCE AUTOMATIC	ADVANCE ² QUADRA
Maximum cutting length:	4.300/5.300 mm	4.300/5.300 mm	5.300 mm
Maximum cutting height (vertical):	2.150 mm	2.150 mm	2.150 mm
Maximum cutting height (horizontal):	2.000 mm	2.000 mm	2.000 mm
Maximum panel height:	2.100 mm	2.100 mm	2.100 mm
Cutting depth, without Advance clamps:	80 mm	80 mm	80 mm
Cutting depth, with Advance clamps:	55 mm	55 mm	55 mm
Traverse speed:	manual	0 tot 20 m/min.	0 tot 20 m/min.
Saw blade diameter:	303 mm	303 mm	303 mm
Bore:	30 mm	30 mm	30 mm
Motor (400v/3p/50hz.):	3 kW	3 kW	3 kW
Air pressure required:	6 bar	6 bar	6 bar
Dust outlet diameter connection:	1x120/1x100 mm	1x120/1x100 mm	1x120/1x100 mm
Weight:	975 kg	980 kg	990 kg

OUTSIDE MEASUREMENTS (in mm.):	STANDARD	AUTOMATIC	QUADRA
			
A:	945	945	945
B:	1720	1720	1720
C:	5510/6510	5510/6510	6900
D:	2580	2580	2580
E:	3080	3080	3030

EXECUTION CHARACTERISTICS:

- Touch screen with PLC controls
- 99 programme memory for saving different cutting lists
- Failure diagnostics
- Choose from fully automatic, semi automatic or manual operation
- Double bearing transport rollers, including entry and exit roller
- Panel securing for horizontal cutting with pneumatic panel clamp
- 3 pneumatically controlled mid-fences, for 3 metre support area
- Dimensions displayed for horizontal cuts via electronic digital read-out on control panel
- Fine adjustment for measuring stop
- Round hardened steel guidance bar for vertical and horizontal axis
- Closed top beam (for saw beam guidance), self rigid, carrying module 600 x 100 mm
- Bottom beam with transport rollers (for panel support): closed, self rigid, carrying module 600 x 100 mm
- Automatic movement of rear material support
- 3 dust collection channels to remove dust from the rear of the material
- Cutting list/ document holder
- CE-execution

OPTIONS:

- PC link
- Panel optimisation software (from ARDIS)
- Cutting length 6300 mm (or more by request)
- Extra ADVANCE clamps
- Motor 4 or 5.5 kW
- Separate scoring unit





Quality, made in Holland

The family owned company was founded in 1948 by the two brothers Gerard and Frans Meijer. Today innovation is top priority as the company is taken forward into a new millennium by the current owners, Piet and Pieter Meijer. As a result during the last decades many innovative ideas were transformed into reality and patented. These ideas, which have revolutionised working with vertical panel saws, can be found in the new panel saw model ADVANCE²QUADRA. Users are enthusiastic about the numerous unique concepts that are realised in the ADVANCE²QUADRA, often describing it as a vertical beam saw.

"Whilst we are convinced that with the ADVANCE range of panel saws we have created an almost perfect machine, we will not stop to work on further innovations" – Pieter Meijer, 2009.

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