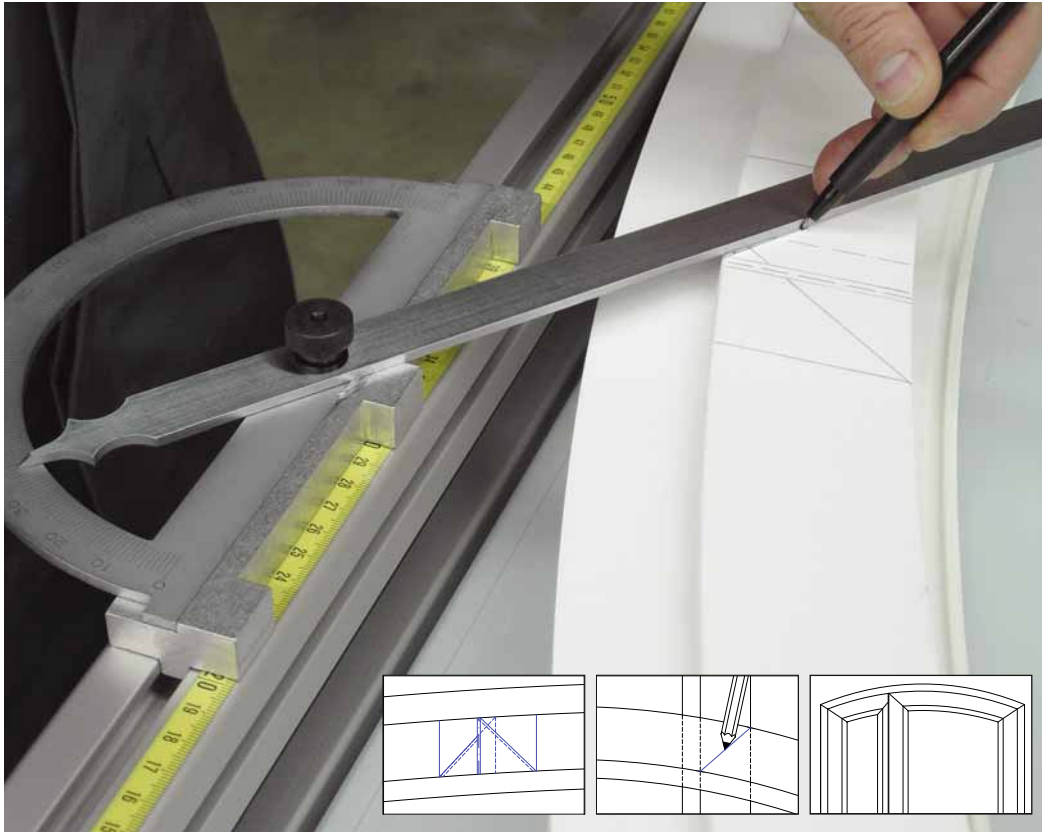


BOWI – The Universal Design Table for Special Window Construction

Art.: 5 29 40 052

Used to determine true cutting lines and angles for special window frame designs in vinyl, aluminium and wood



Your advantages

- Fast but precise handling
- Replaces the use of cutting patterns
- Allows markings directly on the profile
- One-man handling, even for complex and large elements
- In contrast to computer-calculated angles, it can automatically compensate 100% for angle changes due to alterations in profile width caused by the bending process
- Quick changeover to different profile systems
- Greatest precision even in the case of improper curvature or incorrect profile dimensions
- Precision previously not achieved in grooves, yielding the tightest of tolerances for the fittings
- The angles determined graphically can be adjusted exactly on the welding machine
- Fast clamping action allows quick handling
- Other welding factors can be taken into consideration.

Areas of application

- Determination of all cutting lines and angles in preparing the frame components
- Determination of all cutting lines and angles for casement components
- Especially designed for bending operations, profile cutters and special window manufacturers
- Can be converted quickly to any profile system
- Especially suited to the tricky - mullion contour milling machine for matching mullions to curved profiles.
- Direct determination of all true cutting lines

and angles for special window constructions of all kinds, in wood, vinyl, aluminium, steel, etc. as well as other applications

Weight

67 kg, including legs

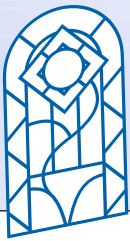
Length/Width/Height

230 x 214 x 104 to 115 cm

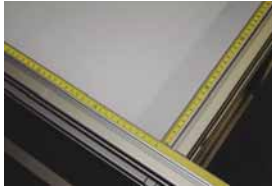
Deliverable as assembly kit, including handbook and assembly instructions.

We reserve the right to make changes based on technical developments.

Universally suitable for precision frame cutting



Design Table, consisting of:



Fully dimensioned measuring armature, able to directly measure window height and width, as well as all other important special points required.



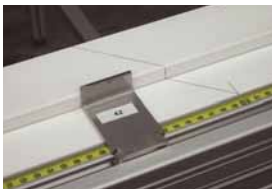
Moveable measuring frame, with adjustable arm, providing for variable adjustment of the window width



Quick clamping system, allowing speedy handling of the profile sections.



Sliding gauge with protractor, to determine and mark angles.



Measuring jig, for marking 45° cutting lines on frame and sash



Variable height adjustment, for frame depth between 54 and 160mm.

BOWI

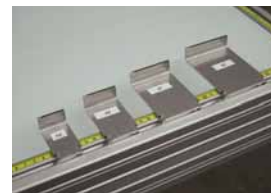
In German BOWI stands for arch and angle and is an universally adaptable work area for the construction of special windows, and especially for one-man operations. The accessories enable fast processing.



Options:



Additional sliding gauges, for other special widths.



Additional measuring jigs, additional frame widths.

Technical Data:

• BOWI Weight	54 kg
• Weight of Supports	13 kg
• Dimensions	230 cm x 214 cm x 104 to 115 cm
• Maximum frame depth	54 mm to 160 mm
• Maximum window width	up to 206 cm
• Maximum window height	up to 226 cm
• Sliding gauge for angle knife	Dependent on system
• Protractor	0-180°
• BOWI measuring jig	Dependent on system
• BOWI Extension, 50 cm, for window height	to 276 cm
• BOWI Extension, 100 cm, for window height	to 326 cm
• BOWI Extension, 50 cm, for window width	to 256 cm
• BOWI Extension, 100 cm, for window width	to 306 cm
• Special models	On demand



Concept and Function



Quality in Minutes

The BOWI is a fully dimensioned work table which replaces the traditional working areas in special window construction. The basic concept is the simplified and precise production of special elements, no matter what kind, by one worker.

The measuring tapes pre-installed in the table make it unnecessary to make extra measurements by hand, since all dimensions can be read off directly, and presettings can be made directly on the table, e.g. window widths and welding position.

Markings are made directly on the profile. Errors due to transfer from patterns or computer calculations can be avoided. The system works on two levels, allowing angles and parallel lines to be maintained, assuming the table has been correctly assembled. The cutting angles on the frame can be determined directly by matching the profiles to each other in the end position, providing a high degree of precision.

The protractor shows the exact angle, allowing the saw and welding head to be adjusted correctly.

The cutting angles in the arch of the window are created for every type of window according to the same principle.

The procedure described below for the precise measurement of window frame patterns takes only a few minutes. A window marked in this manner meets the highest quality demands in terms of precision. The fittings used here can be properly placed and assembled. Claims and resulting costs in assembly are minimized.



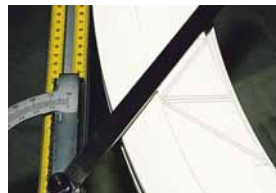
The sash frame is placed in the BOWI frame against the window frame, with the gap depth guides. The profile centre can be read off on the upper part of the arch and the protractor positioned on the sliding gauge, providing the centre marking.



The width of the gap between sash frames is then marked in relation to the centre marking, i.e. half of the gap width to the left and half to the right of the centre marking. Then in a similar manner, the width of the visible surface of the sash frame profile is marked to the left and right of the centre marking.



Connecting the exterior sash frame marking and the interior sash frame marking yields the exact mitre angle.



Using parallel lines, the exact cutting lines can be determined by adjusting for the material loss of the profile due to the weld.



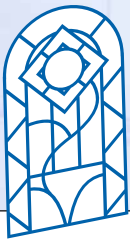
The difference in height of the arch, measured from the height of the centre of the arch to the lower part of the arch at the outer edge, determines the length of the sash frame.



This dimension (difference in height between arch centre-outer edge) can be transferred to the sash frames. If the sash frame is not centred, the dimension will have to be measured for two different positions of the sash.



Parallel marking using the protractor on the sliding jig allows the cutting pattern to be transferred directly to the sash profiles.



clever
machines
for tricky
windows



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Rationalisation in special window construction

Modern special window construction



The special construction of windows used to mean working according to traditional methods, using patterns and laying out the elements on the workshop floor. That takes time and is imprecise. Errors in transferring angles are practically unavoidable.

A demanding special window can require a whole day to assemble, even with well-qualified (and well-paid) workers.

Precise, but wrong angles



Computers can provide angles for window assembly, but these are theoretical ones, calculated under ideal conditions, and cannot take into account changes in dimensions as a result of the bending process. The apparently precise angle is thus in actuality only an

estimate, and can be completely wrong as a result of several such dimensional changes, since it is practically impossible to measure angles properly on arches without coming up with additional deviations.

BOWI – Your Advantage



Producing the windows yourself, means a high degree of flexibility and therefore customer satisfaction, cost reduction as a result of rationalisation, increase in value and profit, as well as competitive advantages. You can influence directly the quality

of your special windows, and adapt to your standard production. BOWI provides you with a production system guaranteeing simplified and precise construction of special windows, and taking into account the true conditions prevailing in the production of arched profiles. The system allows you to determine angles precisely, and compensate for incorrect dimensions in the arch elements. Welding seams can be taken into consideration and the use of highly-paid specialists is no longer necessary. Different window sizes and shapes can be produced quickly and rationally.

FAX ANSWER CARD

Company: _____
Street: _____
City/Country: _____
Name: _____
Telephone: _____
Telefax: _____
E-Mail: _____

Signature

Yes, we order:

(Enter number desired)

- ▶ pc. Art. 52940052 BOWI with table support
- ▶ pc. Art. 52940052050 BOWI Extension 50 cm
- ▶ pc. Art. 52940052100 BOWI Extension 100 cm
- ▶ pc. Art. 52940352 BOWI Width Extension 50 cm
- ▶ pc. Art. 52940452 BOWI Width Extension 100 cm
- ▶ pc. Art. 529430 . . Measuring jig
- ▶ pc. Art. 52942. . Sliding gauge for protractor

Yes, we would like an offer: