



Feed-through Aluminum Profile Fabrication Centre SCHIRMER ALU BAZ

"The Ultimate Aluminum Fabrication Centre" that offers best in class precision, finish quality and productivity with maximum flexibility. Schirmer automated aluminum profile processing centres are for customers who want the raw bar to turn into fully processed components in one equipment with minimum operator intervention and part movements without being restricted by the shape of the extrusion.

GENERAL

The Schirmer ALU-BAZ machines are "high end" feed-through aluminum fabrication centres. Over 40 years of focus only on machines of this type allows Schirmer to be able to offer unique advantages to its customers. Quality, precision and maximum flexibility are standard with every Schirmer system. Each Schirmer cutting and machining center comes with exclusive technologies like servo clamp adjustments, servo profile guiding elements, axial feed during milling by servo clamping units and more. Unmatched level of automation capability and modular machine concept are other strengths of Schirmer, which sets it apart from all other machines.

PROFILE FEEDING

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CUTTING UNITS

Various cutting units are available:

Front feed: 4 axis sawing unit with 600mm saw blade performs straight cuts, miter cuts and notches in combination with milling tools and/or milling disc.

Top feed: 4 axis sawing unit with 550mm saw blade performs straight cuts, miter cuts and notches in combination with milling tools and/or milling disc.

Vertical V-saw: Double 550mm saw blades cuts exclusively 45° Above sawing units can be combined in the same configuration in order to achieve the max flexibility.

END MILLING UNITS

Available with O-Module: 3 servo axis end milling unit with up to 12 places tool magazine for milling tool including heavy shaped cutter heads. This unit can also use angular heads to perform end drilling/tapping, milling.

Available with Orbit-C: Standard tool changer accommodates end milling disc cutters that can be used by any of the two spindles being able to orient the cutter 360° around the profile thus enabling additional notching flexibilities. Various cutting units are available:

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Every profile is oriented to the ideal feeding position with servo controlled profile raisers when necessary, perfectly supported by servo controlled profile guiding elements regardless of its shape. Therefore, the profile does not have to have a flat surface to stand on to be handled. Profile length measuring to verify correct stock length and to avoid damages on gripper arm.

Profile aligner ensures accurate gripping position and checks the profile dimensions to verify if the correct profile is loaded, if the profile is in tolerances or if correction for milling or sawing operations to be applied thus compensating inaccuracies of the extrusion.

Various profile capacities are available depending on available floor space and target level of autonomy.

MACHINING UNITS

Various machining units are available in Schirmer feed-through fabrication centres:

O-Module: 360° rotary turret with 6 spindles and optional automatic rapid tool changer with 20 tools magazine.

Orbit-C: C-shaped rotary turret with 2 spindles with standard automatic rapid tool changer with 20 tools magazine.

6-Axis Dual Module: 2 independent machining units each covering 2 sides with 2 spindles. 2 spindles can work simultaneously on different sides.

No matter which machining unit is in question and regardless of the shape of the extrusion, the optimum close clamping is always provided thanks to the servo controlled unique Schirmer clamping system. This allows Schirmer cutting and machining centres to achieve unmatched milling feed speeds with minimum vibrations and a perfect finish quality in a very quiet operation.

O-module and Orbit-C machining modules can be combined for applications require both high volume and flexibility.

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Thanks to its 4 servo-axes, the outfeed gripper can grip the finished part at any point and can place it rapidly on the outfeed conveyor. The gripper can be equipped with vacuum cups for extremely short parts.

Inline outfeed magazine option together with the automatic label applicator offers longer autonomous working utilizing the entire area covered by the outfeed magazine.

Further automation with automatic part sorting and handling robot to achieve manless production for several hours is available only on Schirmer cutting and machining centres.