VEGAMILL **FIRST EDITION**

THROUGH FEED PROCESSING CENTERS

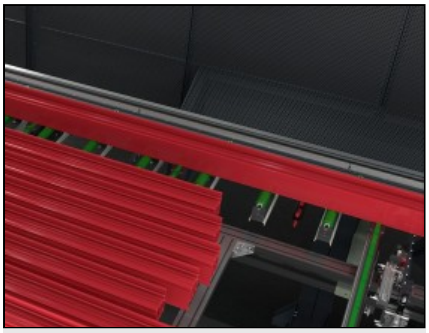


14-axis CNC machining and cutting-off centre, built for cutting, drilling and milling aluminium and light alloy profiles. VEGAMILL consists of four main units. Automatic belt loading magazine for profiles with a length of max. 7.500 mm. A high-precision and high-speed push-feed system with gripper for profile picking and conveying to a machining area. The adjustment of horizontal and vertical position of the gripper is automated by means of an electronic positioning system on two controlled axes. A 4-axis CN milling unit with drilling and milling functions performs machining on the upper and lateral faces of the profile; a second 3-axis NC optional unit works on the lower face. The cutting unit with 600 mm blade performs cuts with an inclination of up to 22°30' to the right and left, with the precision and efficiency of a brushless motor on CNC rotation axis with absolute magnetic band. The unloading unit consists of a storage table equipped with an automatic extractor and an automatic tilting and translation system. The units making up VEGAMILL are protected by guards in such a way that they do not require additional enclosure guards, lending compactness and flexibility to this cutting-off and machining centre.

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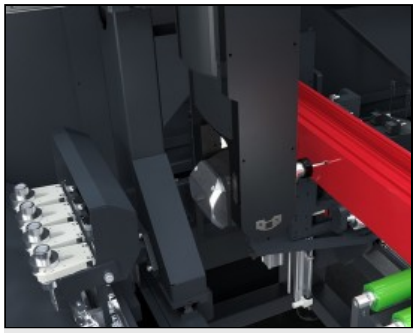
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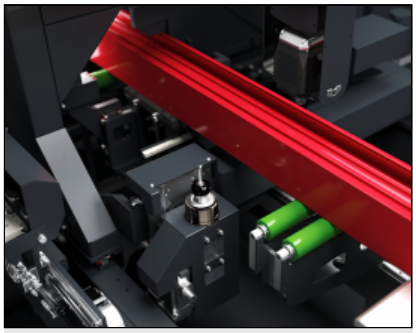
Bar feed system

Numerically controlled, high precision and high speed bar positioning system. The system is complete with a profile clamping gripper with manual position adjustment; optionally, automatic horizontal and vertical position management on two CNC axes is possible. The belt loading magazine is used for loading profiles with length of up to 7.5 m.



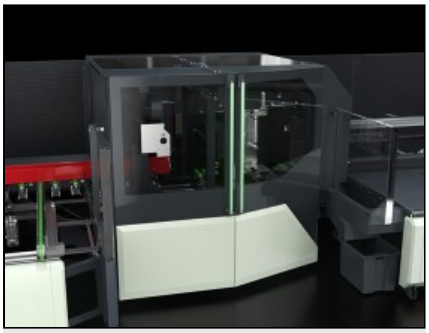
Milling unit

The 4-axis CNC milling unit consists of a 11 kW electrospindle in S1 that can reach the speed of 24.000 rpm. The electrospindle movement along A axis performs -120° to +120° rotation, allowing to work on 3 sides of the profile with no need to reposition it. It can be used on profiles made of aluminium, PVC and light wood.



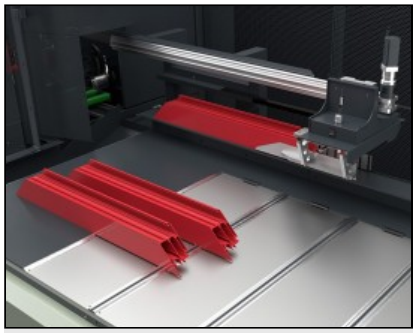
Lower milling unit

The machine is equipped with an optional milling unit, which allows machining of the profile bottom face. This solution allows the machine to work on all faces of the profile, facilitating the management of the entire cutting and machining cycle, from the raw bar to the finished workpiece.



Integral protection booth

The integral protection booth has been designed to offer optimal functionality, accessibility, soundproofing and lighting while fulfilling safety and ergonomics requirements. The innovative and refined design makes the machine unique and unmistakeable. The large glass windows allow the operator to easily and safely control the execution of the machining operations.



Extraction system for machined workpiece

Vegamill can be equipped with two workpiece extraction systems. The first consists of a conveyor belt that extracts the processed and cut workpieces by depositing them in a collection container. The belt is sized to ensure the evacuation of small components typical to the operation of this machine. The second one includes an unloading workbench with an extractor equipped with a CNC gripper to unload larger workpieces, up to 2.500 mm in length.



Label printer with peeling device

Label printer with peeler allows each cut part to be identified with geometric and management characteristics from the cutting list. In addition, barcode printing enables easy identification of the profile itself, which is particularly useful for subsequent machining steps on Machining Centres or assisted assembly lines.

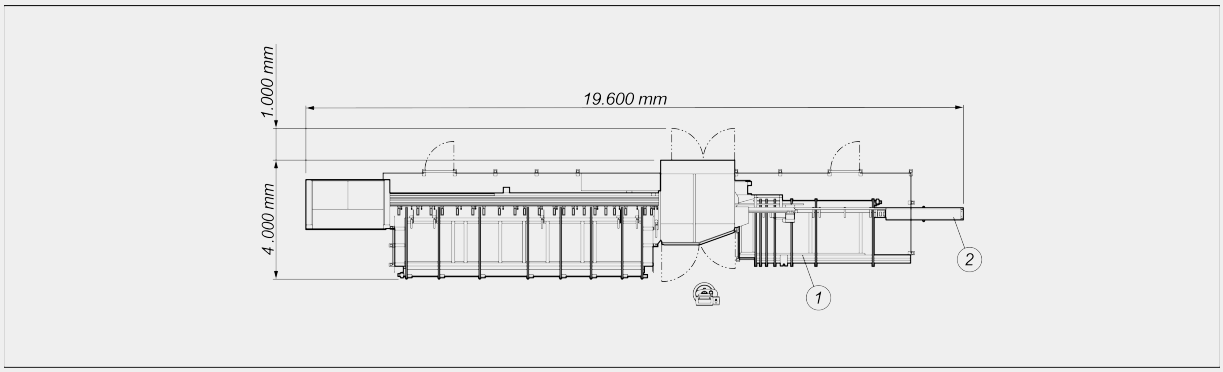
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VEGAMILL FIRST EDITION / THROUGH FEED PROCESSING CENTERS

LAYOUT



The overall dimensions may vary depending on the product configuration.

1. Unloading unit with belt magazine
2. Roller conveyor with tunnel

AXIS STROKES

U0 AXIS (feeder) (mm)	8.500
X0 AXIS (longitudinal) (mm)	200
Y0 AXIS (transversal) (mm)	975
Z0 AXIS (vertical) (mm)	470
A0 AXIS (electrospindle rotation)	-120° ÷ +120°
V0 AXIS (transversal) (mm)	210
W0 AXIS (vertical) (mm)	95

POSITIONING SPEED

U0 AXIS (feeder) (m/mm)	0 ÷ 85
X0 AXIS (longitudinal) (m/mm)	56
Y0 AXIS (transversal) (m/mm)	22
Z0 AXIS (vertical) (m/mm)	22
V0 AXIS (transversal) (m/mm)	25
W0 AXIS (vertical) (m/mm)	25

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LOADING UNIT: PROFILE POSITIONING

Loading feeder with adjustable gripper	●
Belt loading magazine	●
Max. loadable profile length (mm)	7.500
Theoretical minimum cutting length (mm)	0
Max. loadable profile width (mm)	200
Profiles loadable into the magazine	9
Electronic axis gripper positioning (V and W axes)	●
Minimum profile section that can be loaded without counterblocks (mm)	30 x 30

MILLING UNIT

Maximum power in S1 (kW)	11
Electrospindle with encoder for rigid tapping	●
Maximum speed (rpm)	24.000
Toolholder cone	HSK - 63F
Cooling through heat exchanger	●
Minimal oil diffusion lubrication system	●
Automatic tool rotation	-120° ÷ +120°

TAPPING CAPACITY (with Tap On Aluminium And Through Hole)

Rigid	M8

LOWER MILLING UNIT

Maximum power in S1 (kW)	2,0
Maximum speed (rpm)	24.000
Toolholder	ER 25
Electrospindle controlled on 3 axes with simultaneous interpolation	●
Machinable section in Y (mm)	200

TILTING CUTTING UNIT

Widia blade	●
Blade diameter (mm)	600
Blade thickness (mm)	5
Brushless blade motor power (kW)	2,5
CN blade feed	●
Minimal oil diffusion lubrication system	●

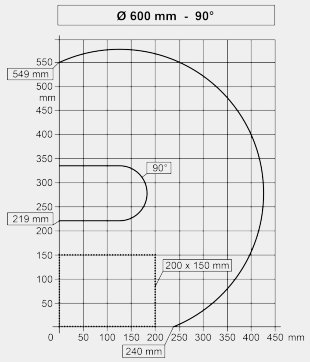
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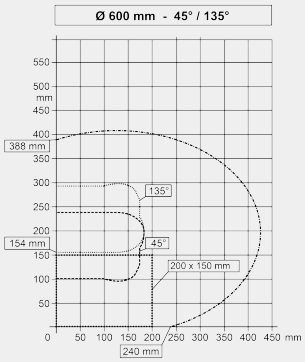
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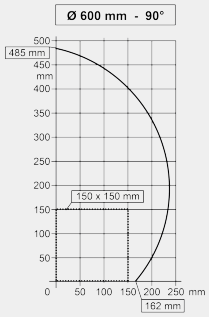
CUTTING AND MACHINING DIAGRAMS

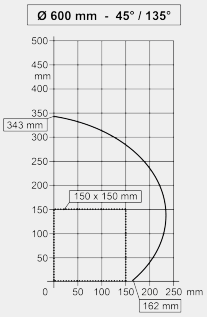
Radial cut

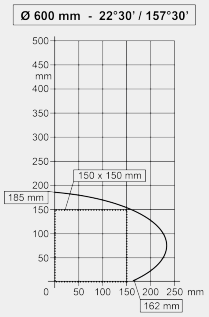




Standard cut







UNLOADING UNIT WITH BELT MAGAZINE

Unloading workbench with automatic ejector	●
Max. profile length that can be unloaded automatically (mm)	4.000

Included ● Available ○

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