



**PILART**<sup>®</sup>  
S.r.l.



### About Us Who We Are...

**PILART s.r.o.** is a purely Czech trading company without foreign capital, which was founded in 2003 and is located in Blansko, about 30 km north of Brno. A modern showroom, including retail, is ready for customers. PILART not only profits as a manufacturer of PILART SPEEDY machines, but also as a supplier of woodworking and metalworking machines in the form of exclusive representation of renowned foreign producers for the Czech Republic and the Slovak Republic, including the implementation of qualified and expert service. The company has many experts in the field of woodworking and metalworking machines. An important part of PILART is its own service department, which specializes in the operational solution of machine servicing, solution of eventual claims and rapid response to the customer. Of course, thanks to new technologies, our service also provides remote technical support via an Internet interface, which in many cases allows for a shorter time-out of the machine and minimizes the time and financial losses of our customers.



PILART oversees regular training of its staff, not only in terms of continuous technical development, but also in terms of language skills. It provides them with regular teaching in their own premises and also regularly sends employees directly to our suppliers abroad, where they accumulate their knowledge so far, deepen the technical competence in the various fields. PILART's team of tradesmen and technicians present and offer professional customer service and extensive technical advice to customers.

**PERFORMANCE MANUFACTURING MACHINE** designed for cutting / sawing / milling / marking of sheet materials in continuous operation. This **CZECH PRODUCT** is composed only of components produced exclusively in the EU. Rich accessory, comfortable control system and debugged CAD / CAM software make this CNC machine a powerful production tool.

**ROUTER** is a CNC machine designed for cutting flat materials by cutting with a rotary, fixed or oscillating knife, milling and drilling machining. It is applied especially in the production of shaped parts from a wide range of materials (**all types of woven and nonwovens made of natural, artificial, glass, carbon and kevlar fibers, prepreg, aramid, kevlar, dyneema, various types of foil, single and multilayer cardboard, polyurethane foam, honeycomb and foam boards, insulating materials, leather, rubber, soft PVC, floor coverings**).

**The cutter** can be equipped with one or two "Z" slides with a quick-release system for interchangeable units. A machine with one "Z" support is suitable where there is no requirement for automatic replacement of work units in one work cycle. On the other hand, a machine with two "Z" supports is suitable where it is necessary to replace the work unit automatically between 2 operations, eg cutting and subsequent grooving in the production of packaging from cardboard or corrugated cardboard.

#### Width variants

description	unit	S	M	L	XL
X-axis machining dimension	mm	1310	1610	1910	2210
X-axis with twice Z support	mm	1238	1538	1838	2138
Overall machine width	mm	1800	2100	2400	2700

#### Length variants

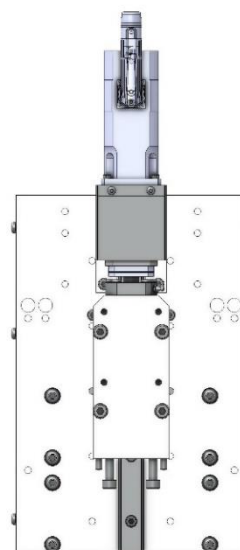
marking	unit	dimension "Y"	Overall length
1600	mm	1610	1900
2200	mm	2210	2500
2800	mm	2810	3100
3400	mm	3410	3700

#### Other technical parameters

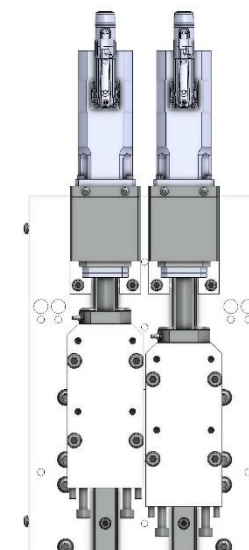
description	unit	
Travel of the "Z" (max. material height)	mm	50 / 100
Working feed range	mm / min	0 – 60 000
Rapid traverse	mm / min	60 000
Repeated travel accuracy	mm	0,01
Power supply	V / Hz	3 x 400 / 50
Power consumption	W	1200
Weight on request	kg	On request

#### Use

one Z support



twice Z support



### Pneumatic oscillating knife

Suitable for:

- foam and honeycomb materials for the production of composites
- kevlar, aramid, dyneema
- foam materials for the production of packaging
- rubber and various types of sealing materials
- floor coverings (PVC, vinyl, carpet, etc.)
- cardboard and corrugated cardboard
- layered textiles (manufacture of wearing apparel and other textile products)

#### Technical parameters of the oscillating knife:

Max cutting thickness	0 - 50 mm
Working speed	2 - 30 m / min
Operating frequency	150 Hz
Working stroke	2 - 7 mm
Air consumption	20 - 75 l / min

### Ultrasound DUKANE

Suitable for:

- rubber and sealing materials
- kevlar, aramid, dyneema
- glass and carbon prepreg

#### Technical parameters:

max. thickness of cut material	0 - 50 mm
working speed	2 - 30 m / min
operating frequency	20 kHz
generator power	600 W
air consumption	10 l / min

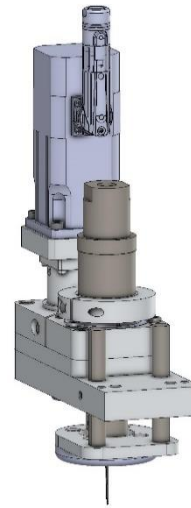
### Powered rotary knife

Suitable for:

- glass and carbon prepreg

#### Technical parameters of the rotary knife:

max. thickness of cut material	0 - 3 mm
working speed	2 - 50 m / min
spindle speed	6 000 – 15 000 rpm
power consumption	1 050 W
diameter of the driven rotary knife	32 mm



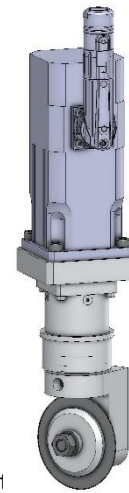
### Rotary knife, creasing and perforating wheel

Suitable for:

- glass and carbon fabric (roving)
- rubberized fabrics
- insulation materials
- cardboard perforation

#### Technical parameters of the rotary knife:

working speed	10 - 50 m / min
wheel diameter	60 mm



### Towing knife

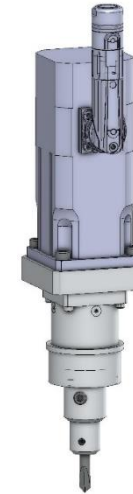
The trailing knife is designed for harder and hard materials that are able to withstand force during cut which the knife derives by its movement. The head is equipped with a continuously adjusted depth of cut limiter.

Suitable for:

- cardboard and corrugated cardboard
- thin plastic plates of various types
- thin plywood
- magnetic foils
- various sealing materials

#### Technical parameters of the trailing knife:

working speed	10 - 50 m / min
---------------	-----------------



### CNC milling

The milling unit with spring loaded glider and integrated suction is designed especially for cutting of shaped parts by milling from sheet materials. Milling is possible in a wide variety of materials such as wood, plywood, plastic boards, sandwich panels, composite boards, foam boards, etc.

**A high-quality KRESS spindle with variable speed control makes it possible to clamp the milling tools up to a diameter of 8 mm.**

The most important part of the milling unit is the flexible glider, which makes it possible to mill materials with a thickness of 0.3 - 10 mm. This system provides material pressure to the substrate during milling. Part of the milling unit also includes a chip extraction system directly from the cutting point.

#### Technical parameters of CNC milling:

Spindle speed	10 000 – 25 000 rpm
Power input	1050 W
Maximum tool diameter	8 mm
Diameter of the extractor	40 mm



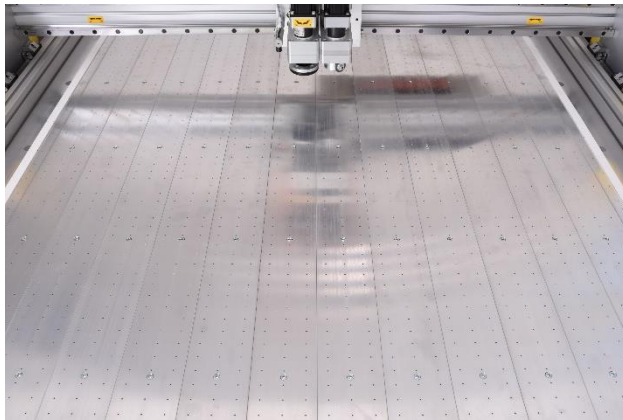
## Marking

Flexible compensation pen-type pen for different types of pen is especially applicable for marking of parts for subsequent technological processes. There are pens with very durable ink at 0.3, 0.6 and 1 mm line thicknesses. It is also possible to choose from a wide range of colors.



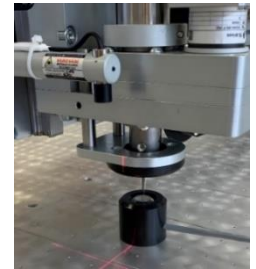
## Working table

PILART SPEEDY comes standard with a vacuum clamping system. The work surface consists of longitudinally folded Al profiles with integrated vacuum distribution. The individual sections are equipped with shut-off valves, which can be closed arbitrarily and thus define an active clamping zone.

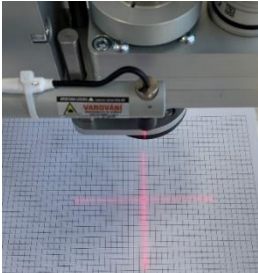


## Probe for measuring tool length automatically

Automatically measuring the length of the tool with the touch probe significantly reduces the time required to set up the machine. When using the probe, you set the machine very quickly and avoid any errors that may occur during manual measurement.



## Focus laser



The laser displays a cross on the work surface that allows you to quickly set up the machine. The laser in manual mode using the center cross simply sets the zero point.

The CNC886 control system has a clear dialog for this function that allows you to specify the displacement and rotation of the machine coordinate system. Therefore, it is not necessary to place the product on the machine in the desired position and to align it parallel with the coordinate system.

### Control system CNC886

PILART SPEEDY is equipped with a very reliable and long-lasting experience tested by the **full-digital CNC886 control system** running on the **Windows platform RTX** and interpreting standard ISO programs.

Control of all functions is displayed on the high resolution touch panel LCD panel and with 10-point control.

The control panel has a toughened glass surface, which guarantees a very long life and high scratch resistance.

**Operation of the CNC 886 is very pleasant and intuitive.**



### CAD/CAM

Easy-to-use vector drawing and editing tools with powerful 2D machining strategies for CNC cutting, milling, drilling or engraving.

Cut2D PRO provides a powerful but intuitive software solution for cutting parts on a CNC router. Cut2D PRO includes tools for 2D design, editing and effective calculation of 2D toolpath.

The software can import 2D designs from other programs, but also provides a complete set of drawing and editing tools. Toolpath options cover all typical 2D operations such as profiling, pocketing, engraving and drilling. Each strategy makes it possible to adapt the operation to specific requirements. In addition, all paths can be displayed to show what the cut-off part looks like, allowing immediate inspection.

**Cut2D<sup>®</sup>**  
**PRO**

#### Vector shape creation

- Image Tracking
- Advanced text tools
- 2D data import (DXF, DWG, EPS, AI, etc.)
- Basic dimensioning
- Transform and edit vectors
- Create circular and rectangular patterns
- Layer management
- Rulers, grid, and snap functions
- Creating vector textures
- Intelligent snapping
- Quick keys
- Check vectors

#### Toolpaths

- Material settings
- 2D profiling
- Fast and efficient pocketing - using 2 tools
- Drilling
- Auto-Inlay Toolpaths
- High Quality Previews
- Estimated machining time
- Trowel arrangement of toolpaths - divides toolpaths to suit material or machine constraints
- Shape tools
- Fast engraving of contours including fillings

#### Other functions

- Import toolpaths from other Vectric programs
- Printing
- Files with preview in windows
- Video tutorials
- Technical Support and Power Forum
- 64-bit design

#### Double-sided machining

- Double-sided machining
- Work settings and material definition
- Multi-sided display
- Drawing and Layout Tools

#### Features PRO Edition

- No size limit
- Create an associated toolpath
- Adjustment sheets
- Technology-specific templates
- Copy toolpath
- True Shape NESTING
- Gadgets - macros for quickly creating recurring operations
- Layout of engraving into the production plate

**PILART**  
S.r.l.



**PILART s.r.o.**

Ericha Roučky 2499/11, 678 01 Blansko

[pilart@pilart.cz](mailto:pilart@pilart.cz) | [www.pilart.cz](http://www.pilart.cz)

T: +420 516 410 514 **Zákaznická linka**

T: +420 516 410 515 **Prodejna nástroje**

