

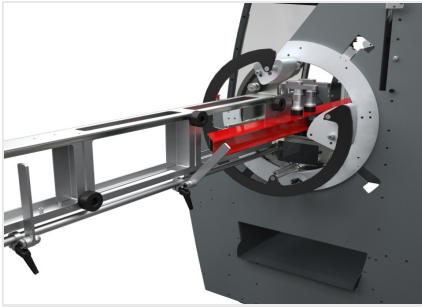


# **TKE 158 N**

## Copy Router



Copy router with 2 controlled axes, ideal for machining aluminium profiles, PVC and steel up to 2 mm, with possibility of machining stainless steel up to 2 mm (optional). The work cycle is managed by intuitive software which guides the operator through simple instructions on the touch screen display. The USB connection allows easy connection to the PC. The 4-faced rotary work table allows increasing working speed and precision. It also allows using shorter tools thus limiting to a minimum passing machining which causes vibrations and noise. Quick tool change ISO 30. Work area with pneumatic control protection.



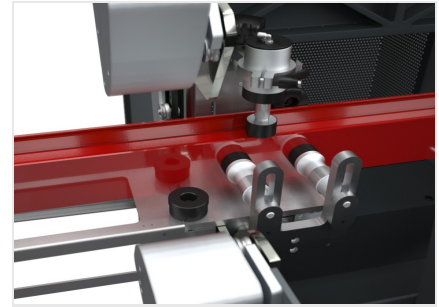
### Workpiece rotation

Via the release control on the console, the slewing ring with rotary movement can be moved manually and blocked in 4 preset positions by pneumatic stops, for processing to be performed on the other sides of the profile.



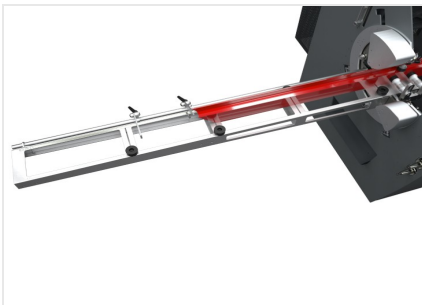
### Control joystick

The lever allows performing the vertical movement of the milling unit. A motor starter button is found on the joystick. The electrospindle has a tool holder with an ISO 30 quick coupling; there are 4 housings on the sides of the machine for 4 toolholders.



### Vices

The machine has pneumatically-controlled horizontal and vertical vices with low pressure device and can be regulated manually, which assure the correct blocking of the profile in the machine.



### Stop devices and roller conveyors

The roller conveyors positioned on the right and left support the machining of the very long profiles. Moreover, a system of manually-regulated stop devices, also on the right and left, allows positioning the workpiece in the machine correctly, taking it to the work area. The position of the stop devices to which the workpiece refers is indicated each time by the numerical control.



### Numerical control

The interface with 5.7" touch screen display replaces the template and allows defining the figures to be realised and their positioning on the workpiece, therefore indicating the position of the relative stop device. The operator instructions are given in real time with signals and messages on the display, making the job simple and intuitive. The milling movements referring to the X and Y axes are managed electronically by the controlled interpolated axes.

**TKE 158 N / COPY ROUTER****CHARACTERISTICS**

|                                                       |   |
|-------------------------------------------------------|---|
| Workpiece rotation for machining on 4 sides           | ● |
| Numerical control axes (X, Y)                         | 2 |
| Manual head lowering with a pneumatic blocking system | ● |
| Head movement along precision linear guides           | ● |

**AXIS STROKES**

|                                 |     |
|---------------------------------|-----|
| X AXIS (longitudinal) (mm)      | 380 |
| Y AXIS (transversal) (mm)       | 125 |
| Z AXIS (vertical - manual) (mm) | 250 |

**ELECTROSPINDLE**

|                          |               |
|--------------------------|---------------|
| Motor with inverter (kW) | 1,1           |
| Tool speed (rpm)         | 1.000 ÷ 8.300 |
| Rapid tool change        | ISO 30        |
| Max. tool diameter (mm)  | 10            |
| Max. tool length (mm)    | 95            |

**LUBRICATION SYSTEM**

|                                                                                                                                                                                            |   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| Micro-mist lubrication system with water and oil emulsion                                                                                                                                  | ● |
| Injection lubrication system                                                                                                                                                               | ○ |
| Air refrigeration system (temperature reduction of 30°C at 6 bar compared to the inlet air temperature) and lubrication with 1 injection nozzle, for applications with dry machining tools | ○ |
| Laser pointer                                                                                                                                                                              | ○ |

**EQUIPMENT**

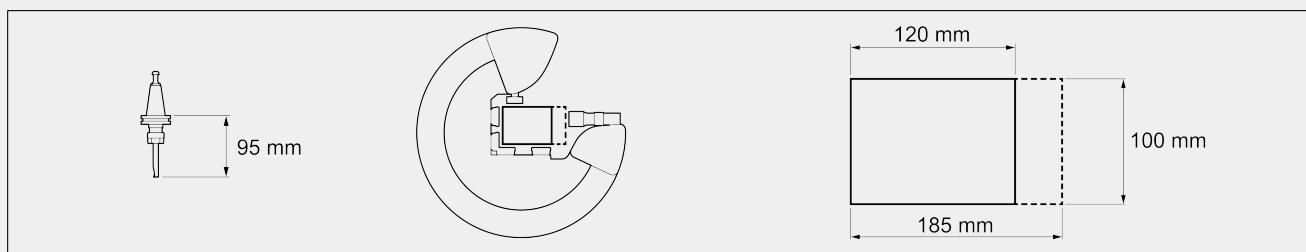
|                                                        |                |
|--------------------------------------------------------|----------------|
| One tooth end-mill (mm)                                | Ø = 5 - 10     |
| Mill-holder collet complete with lock-nut (mm)         | Ø = 5/6 - 9/10 |
| Tool holder storage built into the base, holds 4 tools | ●              |

**WORKPIECE LOCKING**

|                                                                  |     |
|------------------------------------------------------------------|-----|
| Horizontal vices with dual hold-down and low pressure device     | 2   |
| Vertical vices with low pressure device                          | 2   |
| Maximum opening of the horizontal clamps (mm)                    | 185 |
| Maximum opening of the vertical clamps (mm)                      | 100 |
| Pair of vertical vices with low pressure device on side brackets | ○   |
| PVC adjustable vice jaws                                         | ●   |

**WORKABLE SIDES**

|                                                      |   |
|------------------------------------------------------|---|
| With direct tool (top face, side faces, bottom face) | 4 |
|------------------------------------------------------|---|

**WORK AREA**

|                                                                       |           |
|-----------------------------------------------------------------------|-----------|
| Maximum machinable section on 4 sides - L x H (mm)                    | 120 x 100 |
| Maximum machinable section (partially) on the upper face - L x H (mm) | 185 x 100 |
| Y-axis machinable width on the upper face (mm)                        | 120       |

**PROFILE POSITIONING**

|                                                                   |   |
|-------------------------------------------------------------------|---|
| Right and Left profile-supporting shelves with 4 excludable stops | ● |
| Central stop that slides along linear guides                      | ● |

**COMMAND AND CONTROL UNIT**

|                                               |   |
|-----------------------------------------------|---|
| Windows CE operating system                   | ● |
| Standard figures and macro execution software | ● |
| 5.7" touch screen colour LCD                  | ● |
| USB port                                      | ● |

Included ● Available ○