

# Radial Drilling Machines **R 80 VT PRO**



### SKU:101648

The R-VT models represent the new generation of the widely used conventional radial drill presses. The unique operating concept simplifies machining and supports the user during the selection of operating parameters. These models allow precise drilling, countersinking, and thread cutting and are an ideal solution for single parts and small batch productions. These radial drill presses are widely used in repair and maintenance operations, tool and steel construction.

- Unique operating concept
- Advanced control of machine functions
- Servomotor-driven quill feed
- Rigid design with proven high stability

# **TECHNICAL SPECS**

#### WORKING AREA

Drilling capacity	80 mm
Drilling capacity, cast iron	105 mm
Tapping capacity, cast- iron	M 60
Tapping capacity, steel	M 52
Drilling depth (max.)	400 mm
Throat	465 mm - 2550 mm
Spindle nose-to-table surface distance	360 mm - 1560 mm
Drill head travel (horizontal)	2095 mm

#### HEADSTOCK

Speed range	30 1/min - 1400 1/min
Spindle mount	MK 6

#### FEED

Feeds 0 mm/min - 350 mm/min

#### **DRIVE CAPACITY**

Motor rating main drive	7.5 kW	
Stroke motor	2.6 kW	

#### MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	3.59 m x 1.25 m x 3.56 m
Weight	7400 kg









## **PRODUCT DETAILS**

- Base, column, boom and gear head are made of premium high-quality cast
- Major design features include a large column and a highly torsion-resistant boom
- Boom height adjustment via a powerful motorized drive and vertical spindle
- The boom lifting gears run in an oil-bath for maximum reliability and minimum wear
- Swivel axis and travel axis feature extremely smooth operation to make the operator's everyday production work easier
- A central lubrication system ensures reliable lubrication of the column

#### Electronically controlled servo quill feed with large touchscreen display

- Drilling depth is electronically set and the input value is checked by the system
- Measuring units for input and display can be selected by the operator (mm or inch)
  The high-performance coolant system enabled at the touchscreen and will be turned
- The high-performance coolant system enabled at the touchscreen and will be turned on and off as a function of the main spindle
- The machine has 2 gear steps, and the rpm can be infinitely varied and displayed at the monitor
- A servo motor provides infinitely variable control of the quill feed upon reaching the preselected drilling depth, the quill automatically returns to the starting position
- Thread cutting is, however, completely manual, i. e., the operator changes the quill's rotational direction upon reaching the drilling depth
- The operator sets the boom height by touching the respective icon, whereupon the system automatically releases and fixates the hydraulic clamps, turns off the lift motor, and considers all set limit stops
- Drill head and column can be clamped/released together or separately
- Boom can be moved vertically without losing the spindle-to-bore alignment
- The control software also provides recommendations for rpm and feed in relation to the desired drill size
- Various alarm screens warn the operator in case of operational errors and display information on the operational state

#### R 60 VT PRO and R 80VT PRO with thread cutting feature (SKU 101657/101648)

- On this model, the automatic thread cutting function can be enabled at the touchscreen
- Depending on the tap size, the correct pitch and recommended rpm are automatically read from the internal database
- The thread cutting process is performed with automatic feed
- The spindle speed is synchronized with the thread leads, and the depth stop limits the thread depth
- Once the preset depth has been reached, the spindle reverses its rotation and the quill automatically returns to the starting position

## **CONTROLS & SOFTWARE**

#### Touchscreen control panel

- New command panel design. Most old conventional functions are replaced by electronically controlled ones and integrated in a powerful touch screen controller.
- The large touchscreen display gives access to most of the machine's functions.
- Drilling depth is electronically set, and the input value is checked by the system. On the screen the feed is displayed in two ways: feed per revolution and feed per minute.
- "Measuring units for input and display can be selected by the operator (mm or inch).
- The operator sets the arm height by touching the respective icon, whereupon the system automatically releases and fixates the hydraulic clamps, turns off the lift motor, and considers all set limit stops.
- The infinitely varied rpm is displayed as well on the monitor.
- Multiple main functions can be easily activated or deactivated just by pressing their corresponding icon, such as turning on/ off the coolant system or clamping/releasing the headstock and column.
- Various alarm screens warn the operator in case of operational errors and display information on the operational state.

## STANDARD EQUIPMENT

Touchscreen control panel Automatic thread cutting cycles Servo motor for quill feed Accessory set for drilling Cube table Manual central lubrication Coolant system Work light Height adjustable spindle cover Operator instructions