# KNUTH MACHINE TOOLS

## Vertical Machining Centers
# LabCenter 260 CNC

**SKU : 181615**

The LabCenter is ideal for CNC training, but also for the production of small workpieces. The compact and mobile CNC machining center represents the full range of functions of a large production machine. The main spindle rotates continuously variable up to 5000 revolutions and the Siemens 808 control offers an ideal introduction to CNC applications with its simple, intuitive operator guidance. With the ISO 20 spindle taper, automatic tool clamping and a 4-way pick-up tool changer, the LabCenter enables practice-oriented training.

- SIEMENS 808 Advance is the ideal introductory machine
- Preloaded ball screws on all axes
- Spindle speeds up to 5000 rpm
- 4-station tool changer
- Mobile machine base with storage space

## TECHNICAL SPECS

### WORKING AREA

| | |
|---|---|
| Table dimensions | 16 in x 6 in |
| Table load capacity | 44 lbs |
| Number of T-slots | 3 positions |
| T-slots, width | 0.5 in |
| T-slots, spacing | 1.6 in |
| Spindle nose-to-table surface distance | 2 in - 9 in |
| Throat | 8 in |

### TRAVELS

| | |
|---|---|
| Travel X-axis | 6.3 in |
| Travel Y-axis | 6 in |
| Travel Z-axis | 7 in |

### HEADSTOCK

| | |
|---|---|
| Spindle speed | 80 rpm - 5000 rpm |
| Spindle mount | SK 20 ISO 7388-1 (DIN 69871) |

### RAPID FEED

| | |
|---|---|
| Rapid feed X-axis | 78.74 in/min |
| Rapid feed Y-axis | 78.74 in/min |
| Rapid feed Z-axis | 78.74 in/min |

### FEED

| | |
|---|---|
| Work feed | 20 in/min |
| Work feed X-axis | 19.685 in/min |
| Work feed Y-axis | 19.685 in/min |
| Work feed Z-axis | 19.685 in/min |
| Max. torque feed motor X-axis | 1.62 ft.lb. |
| Max. torque feed motor Y-axis | 1.62 ft.lb. |
| Max. torque feed motor Z-axis | 1.62 ft.lb. |

### TOOL HEAD

| | |
|---|---|
| Number of tool stations | 4 positions |
| Tool size Ø x L (max.) | 0.39 in x 4.33 in |
| Tool weight max. | 1 lbs |
| Tool-change time tool/tool | 10 sec |

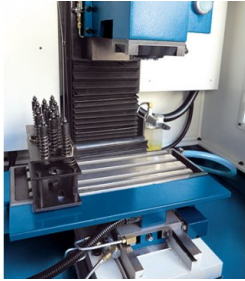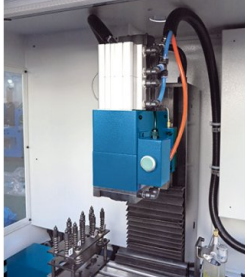### ACCURACIES

| | |
|---|---|
| Positioning accuracy X-axis | ± 0,000590 in |
| Positioning accuracy Y-axis | ± 0,000590 in |
| Positioning accuracy Z-axis | ± 0,000590 in |
| Repeatability X-axis | ± 0,0004 in |
| Repeatability Y-axis | ± 0,000393 in |
| Repeatability Z-axis | ± 0,0004 in |

### DRIVE CAPACITY

| | |
|---|---|
| Motor rating main drive | 1.3 Hp |

### MEASURES AND WEIGHTS

| | |
|---|---|
| Overall dimensions (length x width x height) | 56 in x 36 in x 71 in |
| Weight | 990 lbs |

## PRODUCT DETAILS

### Highlights
- Compact, mobile and professional for laboratories and training
- Electronic hand-wheel for efficient and professional set-up
- Mobile base with storage room for tools and materials

### Machine Design
- Precisely machined frame made of high-quality cast iron
- Dovetail guides and preloaded ball screws with servo drives on all axes

### Spindle
- Max. spindle speeds up to 5000 rpm
- Spindle mount ISO 20

### Tool Changer
- 4-station tool changer ensures flexibility and optimum productivity

*Tool holder with 4 positions*

## CONTROLS & SOFTWARE

### Siemens 808D Advance control
- SINUMERIK 808D ADVANCE -- the perfect solution for modern standard machines
- CNC and drive communicate via a high-speed bus to ensure efficient positioning control plus high precision and optimum cutting performance
- This is topped by a guaranteed superior price/performance ratio
- In combination with a new generation of spindle and axis drives, the SINUMERIK 808D ADVANCE with 8.4" LCD provides an innovative ready-to-use digital CNC solution for modern standard machines

### Advantages - Digital solution provides higher precision:
- Increased overload capacity supports a faster acceleration and deceleration of machine tools
- Constant cutting speeds result in an increased surface quality of the workpiece

### Increased ruggedness:
- During heavy machining operations, an automatic spindle torque adjustment will help protect machining tools and spindle systems.
- The SINAMICS features a wide voltage range to prevent machine shut-downs during poor voltage supply conditions. This will significantly reduce machine down-times.

### Increased operator comfort:
- A fast Ethernet connection facilitates easy start-up and diagnostics of machine tools and simplifies NC program use

## STANDARD EQUIPMENT

Siemens 808D Advance control
Electronic hand-wheel
4-station tool changer
Mobile base
Central lubrication
Work lamp
Operating tools
Operating manual and programming instructions