

**Refurbished NILES LATHE SC-22 (SC2000 H1000) CNC  
with FANUC 0i-TF**

NILES lathe type SC-22 (SC 2000 H1000) CNC FANUC 0i-TF is designed for turning of high work pieces (maximum 2500mm).

The machine bed frame is closed by two fixed cross rails between columns.

Columns are over-height with 1.000 mm and have ground guide ways.

Machine table has hydrostatic lifting and can accommodate work pieces weights up to 20 tones.

The main drive of the table is made by a 37 kw AC vertical Fanuc motor engaged by automatic feed box type ZF 2K 300 and large power belt.

Right vertical support is provided with increased section of coulisse 235mm x 230mm and vertical drive Z=1.500 mm.

The feed drive of kinematic chains on X and Z axis is made with ball screw 50mm diameter and Fanuc servomotors, that are engaged with reducers type PG 500 – ZF Germany.

The machine table has hydraulic lifting and central pivot with precision bearing.

The machine is fitted with tool magazine SCHIESS type, and has 12 pockets for different tool holders.

Tool magazine is mounted on the right part of cross rail.

For working at altitude, the machine is provided with a special operator elevator, that lifts on the vertical together with the Fanuc control panel.

Hydraulic station has the following functions: elevation of the bed, lubrication, blocking of cross rail and dynamic equilibration of vertical coulisse. The hydraulic components are made by ATOS Italy.

**Included Accessories:** 4 chuck jaws, 1 set of levelling feet, 12 tool holders set.

**Special accessories (on request):** 4 oscillating chuck jaws with 8 assistant points, ROTOMORSE type.

### **Technical characteristics:**

1. Maximum working diameter:	2.000 mm
2. Bed diameter:	1.800 mm
3. Maximum height of work piece under cross rail:	2.500mm
4. Vertical slide travel (Z axis):	1.500mm
5. Feed range:	0.1 – 4.000mm/min
6. Tool magazine SCHIESS with 12 pockets:	1
7. Vertical main motor Fanuc:	37 kw AC
8. Rotation range in bed:	1 – 150 rot./min
9. Total weight of machine:	38.000 daN
10. Machine gauge:	3.600 x 4.700 x 7.200 mm

### **Technical equipments:**

- Vertical feed box ZF 2K 300
- Centralized lubrication equipments AZETA
- Hydraulic station with ATOS, BERAMA, EMMEGGI components.
- Electric equipment and CNC Fanuc 0i TF.
- Ball screw STAR REXROTH make.
- Main vertical motor Fanuc 37kw AC interconnected by automatic feed box ZF 2K300 type.
- Feed servomotors BRASHLESS with ZF PG 500 reducers, and JACOB clutches.
- Micro switch for reference and drive EUCHNER.
- SCHIESS tool magazine, with 12 pockets.
- Metallic protection covers for cross rail guide ways.
- Electro-hydraulic elevator for the operator.