

UT400E Seal Manufacturing System



UT400E at a glance

- √ Complete machine system for seals up to 400mm OD
- √ Pragati 12-station electric tool turret
- √ FAST Insert tool clamping system
- √ Latest FANUC Oi-TF drive and control system
- √ PC with UTECFLEX software
- √ Chip cutter & suction unit
- √ Material clamping system
- √ Cutting tools & holders
- √ Automatic lubrication system
- √ Coolant (cutting fluid) system

Control & Drive System

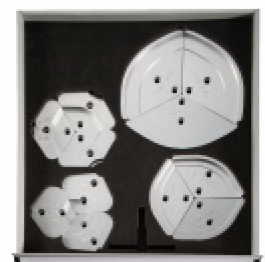
UTEC machines are equipped with the latest technology of FANUC, the world-wide leader of control systems for machine tools. The FANUC Oi-T* 2-axis control and the iServo-Drive System offer a state-of-the-art, high precision machine control system with high efficiency and reliability.

Tools & Holders

The quality of cutting tools is of highest importance in the production of lathe-cut seals. A complete set of high-precision cutting tools made of fine-grain carbide is supplied with every UTEC machine. In order to cover the complex, complete range of existing seal profiles, most tools have a special geometrical shape and are custom made for seal production.

Material Clamping System

In order to efficiently clamp the raw material billets, special clamping jaws are mounted on to the steel body of the high-precision 3-jaw machine chuck. These sets of multi-range clamping jaws are made of high-grade aluminum and are designed to clamp certain diameter ranges of semi-finished billets.



Chip Cutter & Suction Unit

A well working chip cutter and suction unit play an important role in the manufacturing process of seals and engineered plastic parts, as they contribute to preventing swarf buildup around the tool and thus to a better surface finish of the end product.

The chip cutter is made of high-grade aluminum, using HSS tools to hack up the chips and keep the tools clean for optimal machining performance.



UT400E Technical Data

General Dimensions

- Width x Depth x Height: 1560 x 1510 x 1500mm
- Total weight (without Suction Unit): 2200Kg

Machining Capacity

- Max. machining diameter: 400mm
- Swing over bed: 450mm
- Max. travel X-axis: 250mm
- Max. travel Z-axis: 260mm
- Max. turning length: 155mm
- Max. billet length: 240mm

Main Spindle Drive

- Max. speed: 3500rpm
- Through-hole diameter: 50mm
- Power: 5.5kW
- Max. current: 32A
- Noise level normal/max.: 78/82dB

Coolant System

- Coolant adjustment: 1 nozzle/pos. + 2 flexible tubes
- Coolant tank capacity: 100L

CNC Type / Software

- Fanuc Control version: Oi-TF
- User Software: UTEC Flex

Machining Accuracy

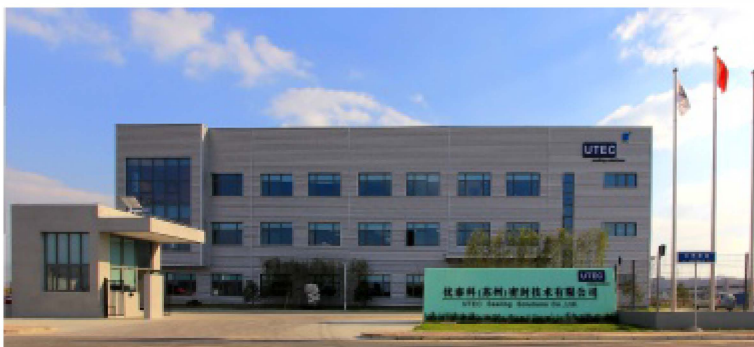
- Cylindrical accuracy: IT6
- Surface roughness: Ra 0.4-0.6 μ m
- Roundness: \leq 0.005mm
- Positional accuracy: X: 0.006mm / Z: 0.009mm
- Repeated pos. accuracy: X: 0.004mm / Z: 0.006mm

Tool System

- Tool turret: electric (Pragati, India)
- Max rotating/indexing time: 0.16s/30°
- Tool positions: 12
- Tool holders: "FAST Insert"

Suction Unit

- Suction unit motor: 4kW
- Max airflow: 8600L/min
- Chip container capacity: 100L
- Dimensions (L x W x H): 1250 x 650 x 1600mm
- Weight: 185Kg



UTEC

sealing solutions

UTEC Sealing Solutions Co., Ltd.

No. 25 JiangTianli Rd., South JiePu Rd., SIP
Suzhou, P.R. China

ZH | EN | KO | RU – alan.wang@utec.cc
DE | EN | ES | FR | PT – tom.pohl@utec.cc

www.utec.cc