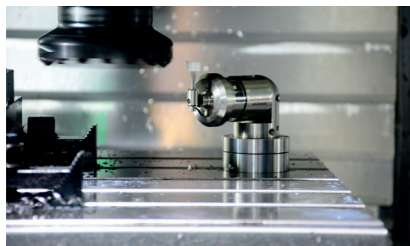
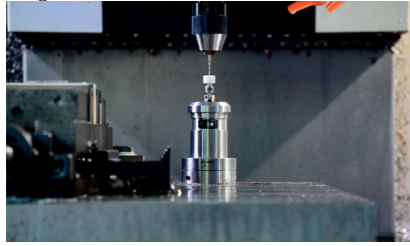


Composition of Probe System

OTS-40 series optical tool setter system include two pieces of hardware and one software package, the two pieces of the hardware are:

- 1) OTC200 series optical tool setter;
- 2) OSI-30 optical receiver(the standard cable length 8m/the optional lengthened cable).



(OTC200-V)

Technical Parameters

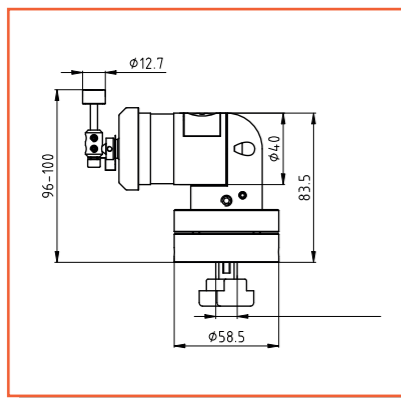
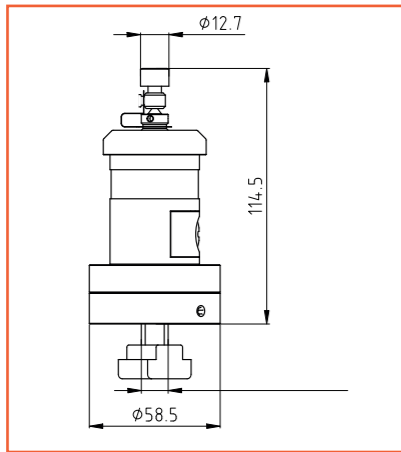
- 1) The technical parameters of OTC200 series optical probe :
 - ◆ Sensing direction of the pillar: $\pm X, \pm Y, -Z$;
 - ◆ The pillars sensing over-travel : $X\text{-}Y \pm 5\text{mm}, Z -8 \text{ mm}$;
 - ◆ The diameter of the touching pillar(for cutting tool touching): $12.7 \pm 0.005 \text{ mm}$; the pillar' s hardness : HM8.5 ;
 - ◆ The trigger repeatability of the pillar(2σ): $\leq 1 \mu\text{m}$;
 - ◆ Working days of new batteries (5% utilization rate in a single shift):90- 140 days;
 - ◆ Seal grade: IP68.
- 2) The technical parameters of OSI-30 optical receiver:
 - ◆ Optical signal receiving/sending distance: 3 m;
 - ◆ Input voltage: $24\text{V} \pm 10\%$ (DC);
 - ◆ Output load current: 50 mA;
 - ◆ Seal grade: IP68.

Technical Characteristics

- ◆ Tool setter switch on/off method: M code on/off;
- ◆ Infrared coded signals are used to transmit information between th etool setter and the receiver;
- ◆ OTC200-V can be selected based on actual operating conditions;
- ◆ The position of tool setter pillar can be roughly and precisely adjusted by the connecting link of the pillar and the adjusting link of tool setter for mounting.

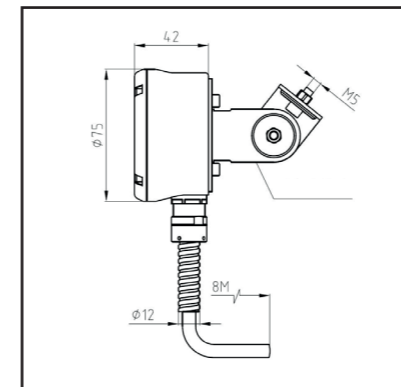
Application

- ◆ Set lengths parameter of cutting tools automatically before CNC processing;
- ◆ Detect wear and breakage of cutting tools automatically between two processes or after the CNC processing;
- ◆ Through checking cutting tool parameters to control the change of machining precision from the temperature change of the machine;



Basic configuration of the probe system

- 1) OTC200 Series tool setter
 - ◆ Standard tool setter pillar model: M0-S31.5-CP12.7;
 - ◆ Battery specification: 14250, 3.6V, 1000mAh; 2 ps.;
- 2) OSI-30 receiver
 - ◆ The cable length usually is 8 meters;
 - ◆ Fixed bracket with universal adjustment function is equipped.



Notes:

- ◆ If the square pillar of tool setter is needed, customers should give special instructions when ordering the products.
- ◆ As for the cable length, verify if the 8-meter cable equipped with the OSI-30 receiver is enough for installing it in the machine tool. If it is not, the additional instruction is required when ordering the product;

