

Application

YAMASA UX Type Tools can burnish two different hole sizes at the same time. Beside of this, tools are used for the aim of providing a precision measurement and surface quality by keeping axially. The tools provide as well as surface hardness and calibration (measurement accuracy) beside of the burnishing. The tools provide time saving through a high processing power and speed and this is a motive to prefer for the serial production.

Technical Features and Advantages

- The surfaces in quality of $Rz < 1 \mu m$ ($Ra < 0,2 \mu m$) can be obtained.
- With same setting it can burnish till H8 hole allowance
- It is capable to burnish all kinds of metallic materials up to the tensile strength of $1400 N/mm^2$ and to the hardness 42-45 HRC.
- Used on Universal and CNC Controlled Lathe Machines, machining centers, milling, drilling etc. machines and also production centers and machines which controlled manuell.
- Roller burnishing force can be adjusted. So it is possible to achieve high quality and standard roughness values.
- Diameter adjustments are independent from each other.
- During the operation the tool and workpiece rotate.
- Roller burnishing of shoulders and other edges is possible up to the end.
- The tool is automatically discharge for do not damage the surface while pulling back.
- It is easy to change the spare part.
- Short process time provides time saving.
- It removes the second or third tool, machine and personnel requirements.
- It is enough a few lubrication (oil or emulsion).
- It does not make sawdust.



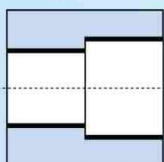
Technical Datas

Circumferential speed	: max. 250 m/min.
Feeding	: per roller 0,1 – 0,3 mm/rev.
Pre-machining	: Reaming or lathening
Coolant	: Oil emulsion or cutting oil

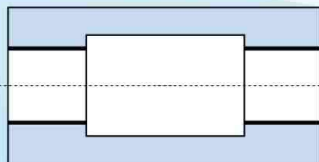
Tool Structure

UX Type Tools consist of a very precision body which is special designed and roller head. The bodies of the tools have a very special mechanism which enables to make adjustment independent from each other of the roller heads. The roller head consists of cage, cone and rollers. Roller head is specially designed according to workpiece measurements. According to the preference, shank is delivered as morse taper or cylindrical.

Stepped hole



Axial hole



Rolling Length

Rolling length and step increment are designed specially according to workpiece dimensions. While machining the workpiece, the roller heads of this tools which remove the plenty of tool using and provide time saving are designed to machine max. 3 steps.