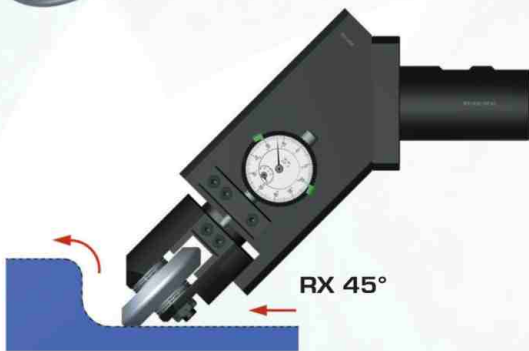


# Single Roller Burnishing Tools

**Type RX** For contours, fillets / radiuses, conical and spherical surfaces



RX-1-45°-2.5R-WE40



RX 45°

## Application

YAMASA RX Type Tools are used for the aim of burnishing the radiuses which are concurrent with cylindrical flat surface, conical, flat and spherical surfaces. The tools provide as well as surface hardness and at low rate calibration (measurement accuracy) beside of burnishing and also increase the strength against to sunderance, breaking, oxidation and cracking. The tools provide time saving through a high processing power and speed and this is a motive to prefer for the serial production.

## Tool Structure

RX Type Single Roller Burnishing Tools consist of a connecting shank, precision body which is special designed, roller head which contains special mechanism parts for long using life and a dial gauges which is assembled for adjusting the force. According to the preference, shank is delivered as Square, Weldon or VDI Shank. All shanks are demountable.

## Recommended Machining Parameters

Circumferential speed	: 100 m/min. (max.200)
Feeding	: between 0,1 – 0,3 mm/rev. (max.0,8)
Burnishing allowance	: ~ +0,005 to +0,02 mm
Pre-machining	: Precision lathening or grinding
Pre-machining roughness	: $R_z = 5-15 \mu m$
Coolant	: Oil emulsion or cutting oil

## Technical Features and Advantages

- The surfaces in quality of  $R_z < 1 \mu m$  ( $R_a < 0,2 \mu m$ ) can be obtained.
- It is possible to burnish in different sizes with same tool.
- Used on CNC, Universal and lathe machines which has copy system.
- Tool shank and indicator have a special right and left interchange. So the tool can used both on Universal and CNC Machines.
- Tools don't require settings and when the tool is fixed to the machine it is ready to use.
- During the operation the tool is fixed and workpiece rotates. Rotation is possible in two directions.
- Roller burnishing force can be adjusted. So it is possible to achieve high quality and standard roughness values.
- Special design and spring system apply rolling force consistently. So it provides high quality and standard work flow.
- Roller burnishing of shoulders and other edges is possible up to the end.
- It is capable to burnish all kinds of metallic materials up to the tensile strength of 1400N/mm and to the hardness 42-45 HRC.
- It is easy to change the spare part.
- Process time is short.
- It removes the second machine and personnel requirements.
- It is enough few lubrication (oil or emulsion).
- It does not make sawdust.



RX-1-90°-2.5R-WE40

## Samples of application

- front axle of car
- back axle housing of long vehicle
- axles
- shafts

## Order Sample

RX-1-90°-2.5R-WE40

RX : Type  
1 : Version  
90° : Angle  
2.5R : Roller radius  
WE40 : Shank  
VDI = DIN 69880  
WE = DIN 1835 Weldon  
SL = Square



RX 90°