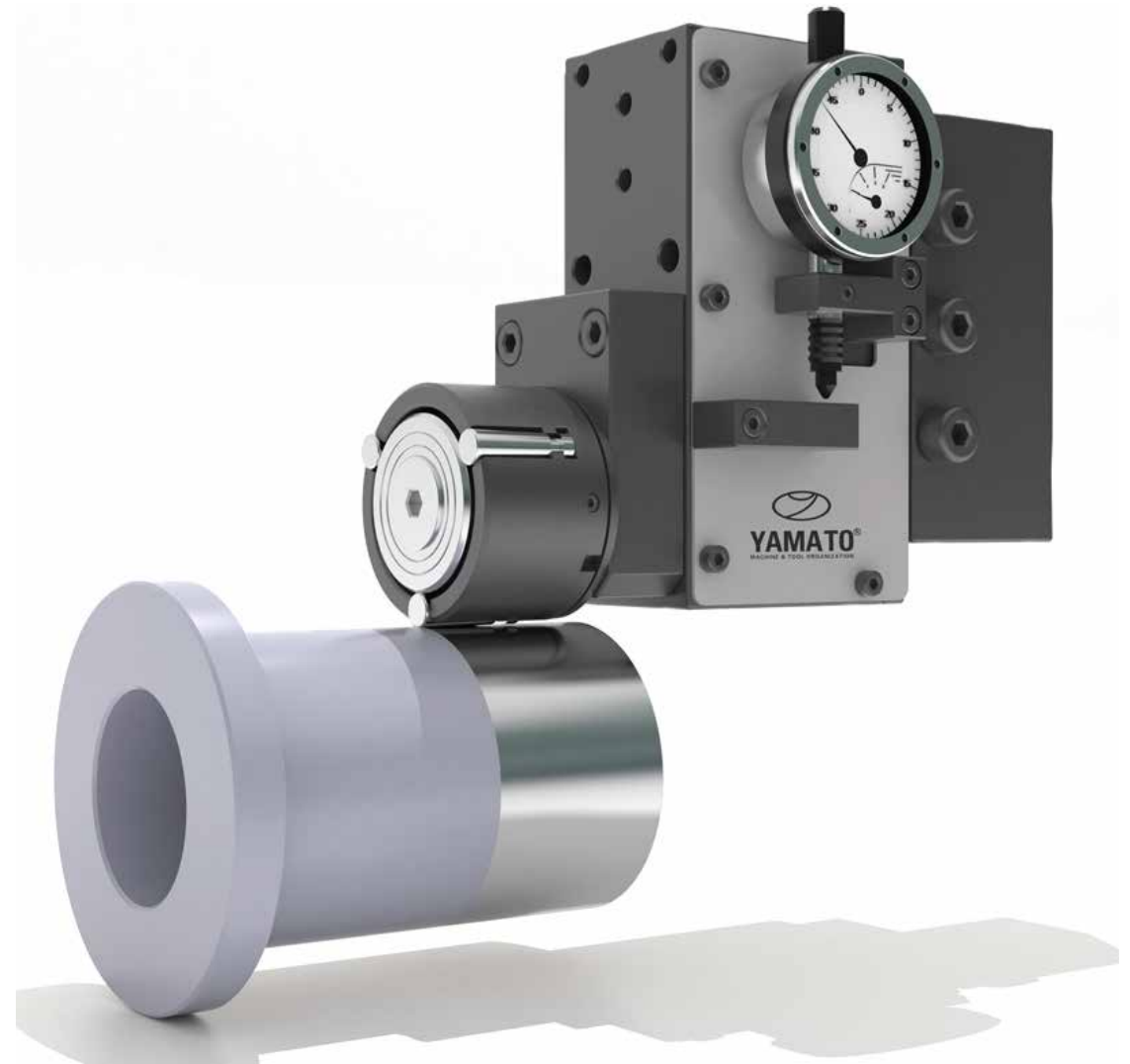


SKUV SERIES

SKUV tools consist of a body, a rolling unit and a shank.
Shanks and rolling units are designed for specific applications.

Patented body design allows the rolling unit to move with very **low friction**.

SINGLE ROLL ROBUTO



SKUV20-SINGLE ROLL ROBUTO

SKUV20-03295-001

FROM TAILSTOCK TOWARDS CHUCK SHORT

- Suitable for metals (steel, aluminium, copper etc) with tensile strength up to 1400N/mm² and max. hardness of HRC45.
- Roller head is flexible, because the tool is equipped with a spring.
- For use with either CNC-controlled or conventional lathes.
- Can be used on interrupted surface. Thanks to preload system.
- Achievable surface quality min. Ra0.02 µm.
- Unrestricted roller face for roller burnishing shoulders and other edges.
- Roller can rotate in either direction.

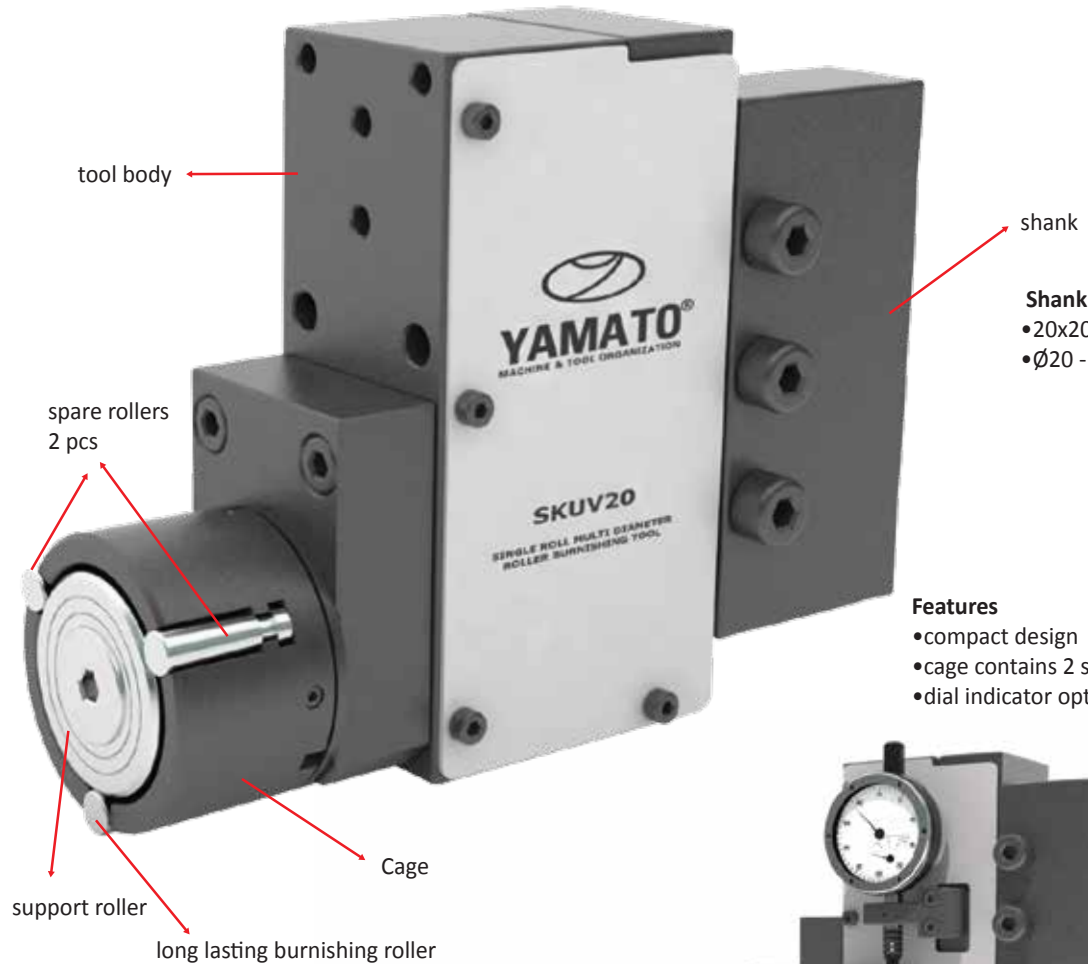
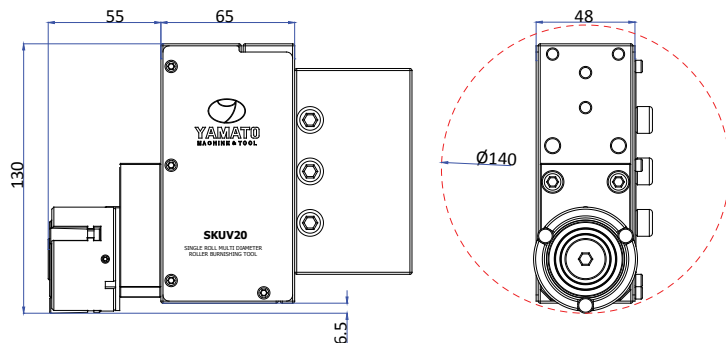
Sample Workpieces



External Diameters
and Holes (min. Ø 140)

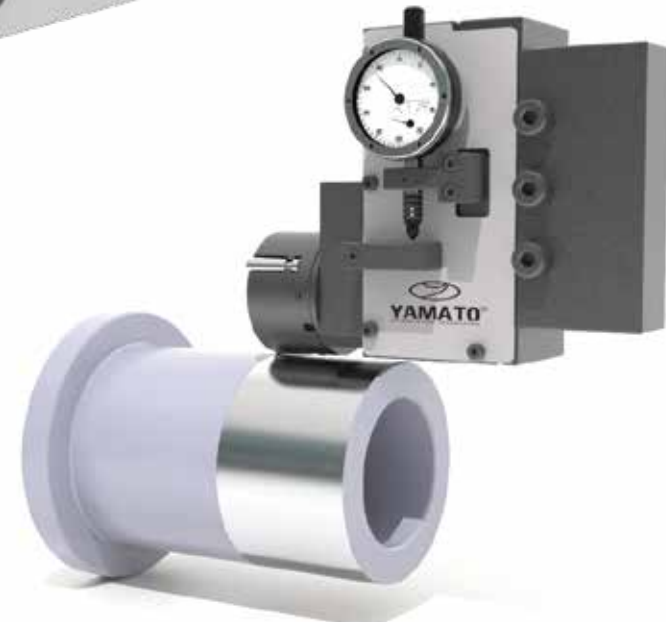
Tapered External
Surfaces

Faces



- Shank Type**
- 20x20 – 25x25 square shank
 - Ø20 - Ø25 weldon shank

- Features**
- compact design
 - cage contains 2 spare burnishing rollers
 - dial indicator option



SKUV20-SINGLE ROLL ROBUTO

SKUV20-03295-002

HOLE

- Suitable for metals (steel, aluminium, copper etc) with tensile strength up to 1400N/mm² and max. hardness of HRC45.
- Roller head is flexible, because the tool is equipped with a spring.
- For use with either CNC-controlled or conventional lathes.
- Can be used on interrupted surface. Thanks to preload system.
- Achievable surface quality min. Ra0.02 µm.
- Unrestricted roller face for roller burnishing shoulders and other edges.
- Roller can rotate in either direction.

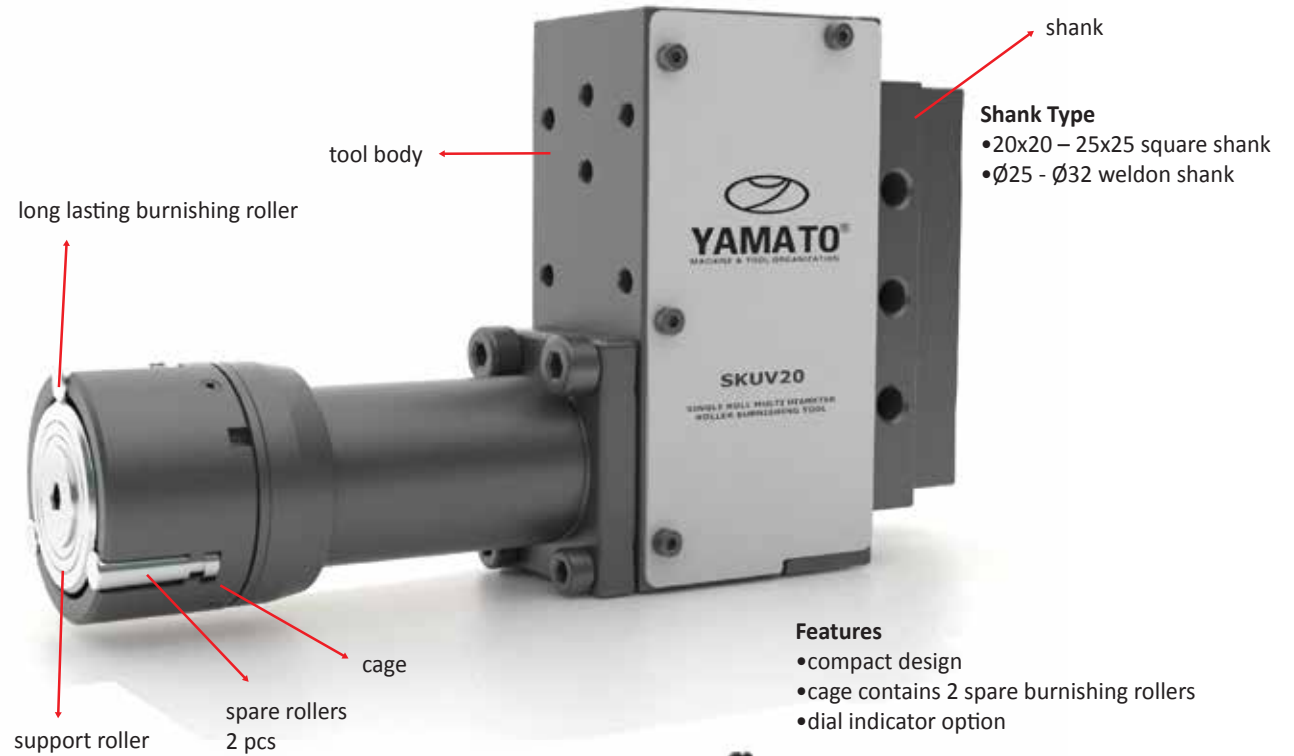
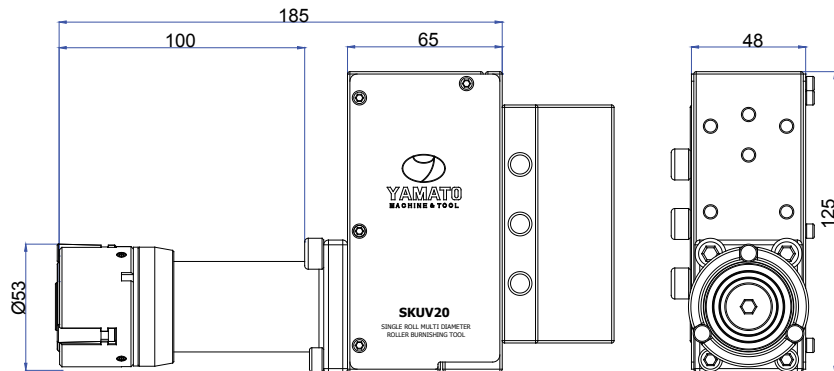
Sample Workpieces



Holes
(min. Ø55mm)

Tapered Internal
Surfaces

Grooves on Face



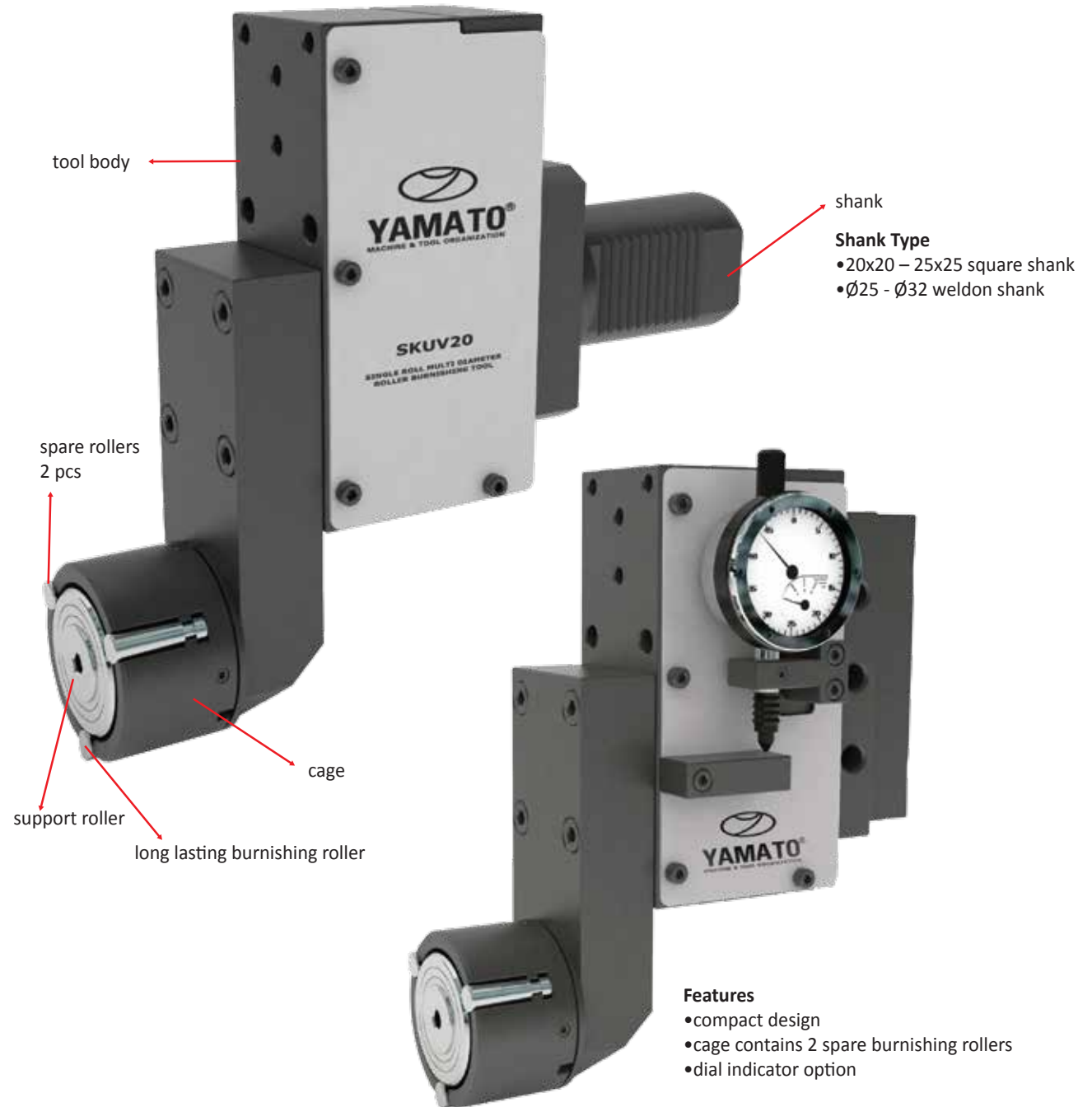
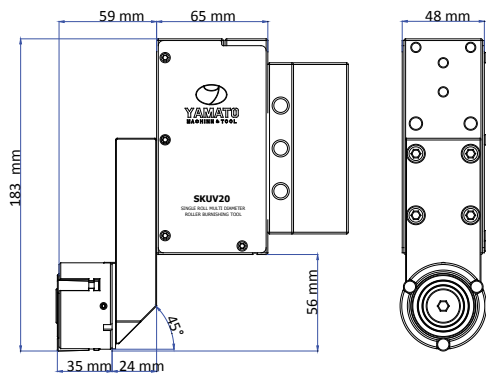
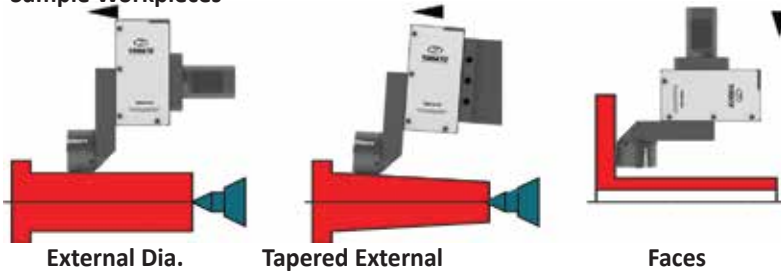
SKUV20-SINGLE ROLL ROBUTO

SKUV20-03295-003

FROM TAILSTOCK TOWARDS CHUCK LONG

- Suitable for metals (steel, aluminium, copper etc) with tensile strength up to 1400N/mm² and max. hardness of HRC45.
- Roller head is flexible, because the tool is equipped with a spring.
- For use with either CNC-controlled or conventional lathes.
- Can be used on interrupted surface. Thanks to preload system.
- Achievable surface quality min. Ra0.02 µm.
- Unrestricted roller face for roller burnishing shoulders and other edges.
- Roller can rotate in either direction.

Sample Workpieces



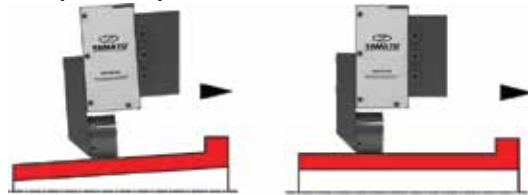
SKUV20-SINGLE ROLL ROBUTO

SKUV20-03295-004

FROM CHUCK TOWARDS TAILSTOCK LONG

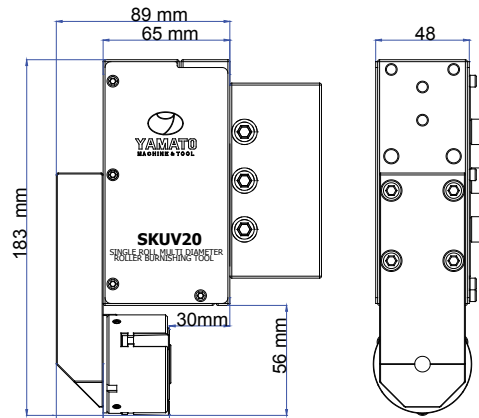
- Suitable for metals (steel, aluminium, copper etc) with tensile strength up to 1400N/mm² and max. hardness of HRC45.
- Roller head is flexible, because the tool is equipped with a spring.
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- Can be used on interrupted surface. Thanks to preload system.
- Achievable surface quality min. Ra0.02 µm.
- Unrestricted roller face for roller burnishing shoulders and other edges.
- Roller can rotate in either direction.

Sample Workpieces



Tapered External

External Dia.



tool body



shank

Shank Type

- 20x20 – 25x25 square shank
- Ø25 - Ø32 weldon shank



spare rollers
2 pcs

cage

long lasting burnishing roller

Features

- compact design
- cage contains 2 spare burnishing rollers
- dial indicator option

SKUV-R- SINGLE ROLL RADIUS ROBUTO

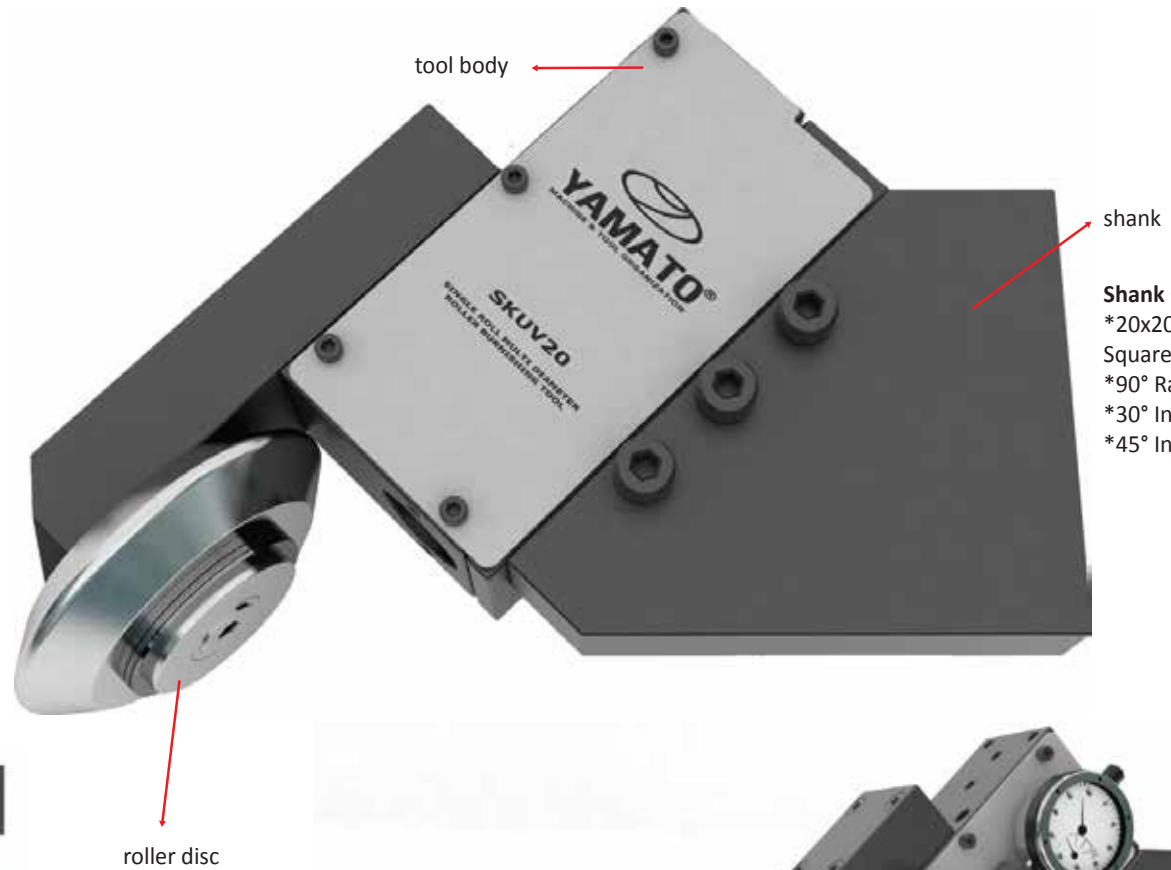
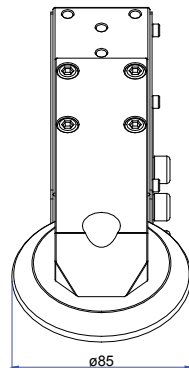
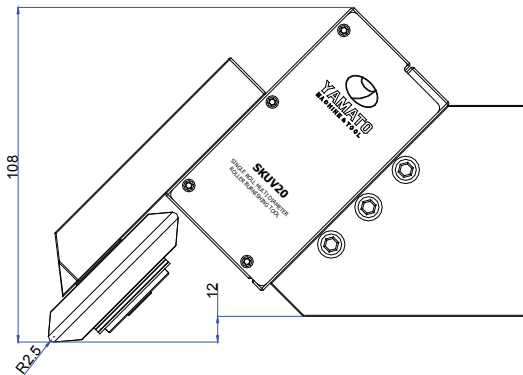
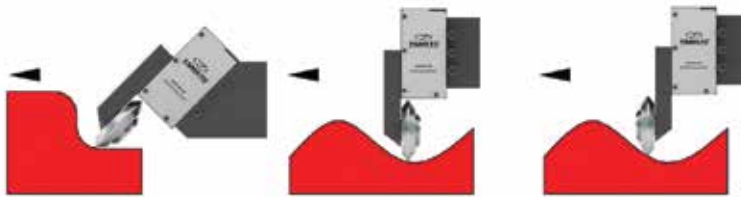
SKUV20-2.5R80-001

30°-45°-90° INCLINED SHANKS

Features

- Standard radius is R2.5 mm.
- Roller disc with special radius is available.
- Shank with different inclination is available.
- Diameter of roller disc is Ø85 mm.

Sample Workpieces



- Shank Options**
- *20x20 – 25x25
 - Square shank
 - *90° Radial shank
 - *30° Inclined shank
 - *45° Inclined shank

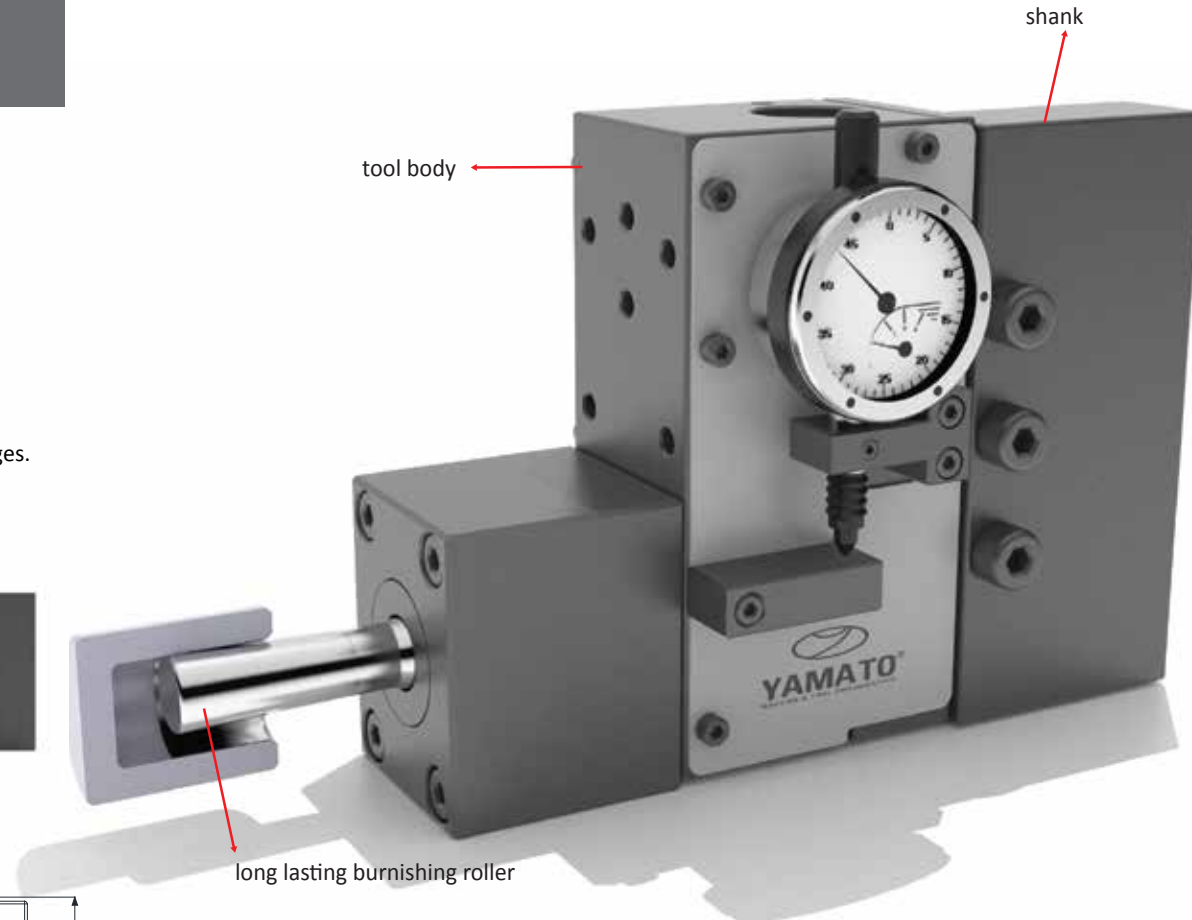
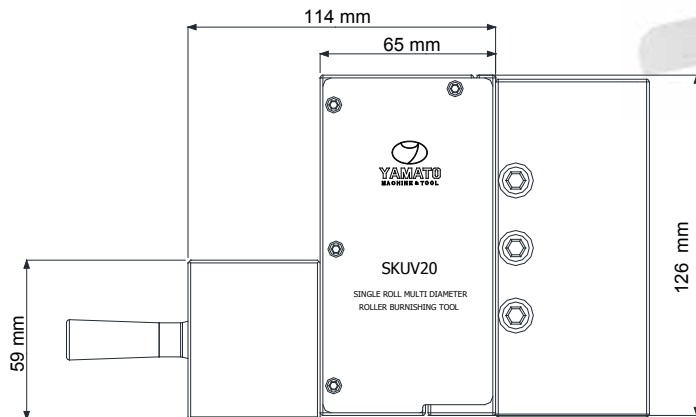
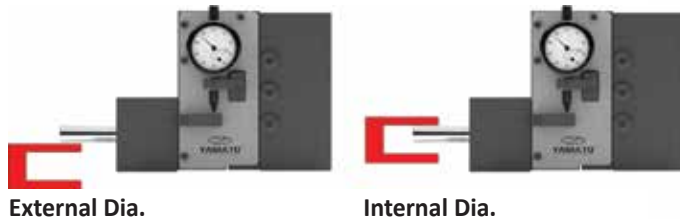


SKUV20-SINGLE ROLL ROBUTO

SKUV20-01XXX-LXX.X

- Suitable for metals (steel, aluminium, copper etc) with tensile strength up to 1400N/mm² and max. hardness of HRC45.
- Roller head is flexible, because the tool is equipped with a spring.
- For use with either CNC-controlled or conventional lathes.
- Can be used on interrupted surface. Thanks to preload system.
- Achievable surface quality min. Ra0.02 µm.
- Unrestricted roller face for roller burnishing shoulders and other edges.
- Roller can rotate in either direction.

Sample Workpieces



Shank Type

- 20x20 – 25x25 square shank
- Ø25 - Ø32 weldon shank

Features

- compact design
- dial indicator option

SKUV OPTIONS

COOLANT NOZZLE

Direct coolant flow on the contact point between roller and workpiece.



DIAL INDICATOR SET

All SKUV20 single roll tools can be equipped with dial indicator that indirectly measures the burnishing force.



SKUV 20 SPECIAL APPLICATIONS

Deep rolling with SKUV tools increases the fatigue strength of dynamically loaded parts. Because of eliminating the surface imperfections and forming compressive residual stresses, resistance to fatigue failure is improved up to %300.



SAMPLE WORKPIECES



O-Ring grooves or grooves with special profiles can be roller burnished with SKUV tools.

SAMPLE WORKPIECES



SKUV 20 SPECIAL APPLICATIONS

SPECIAL TOOL SUITABLE FOR YOUR WORKPIECE & LATHE IS AVAILABLE WITH
VERY SHORT DELIVERY AND PRICE.

LONG VERSION
with single small burnishing roller



SHORT VERSION
with single large burnishing roller



FOR SMALL HOLES



SPECIAL STEPPED ADAPTER

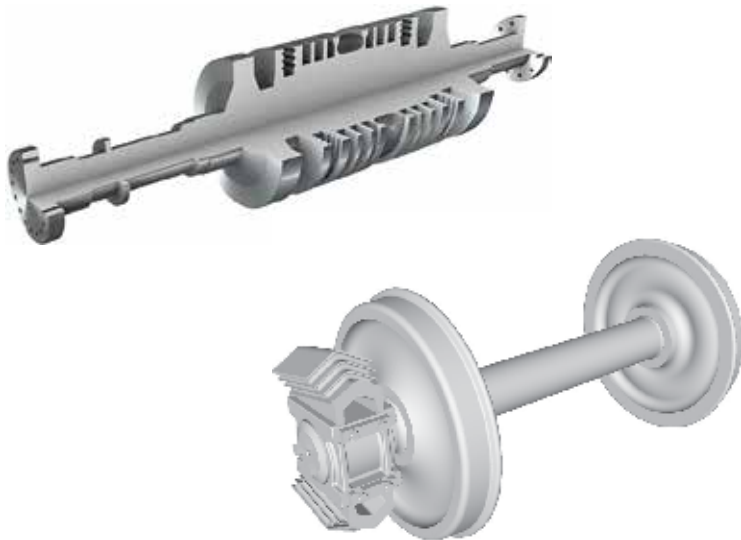


SKUV 30 DEEP ROLLING ROBOTO

SKUV30 has been engineered for Deep Rolling applications on surfaces and radiuses of highly stressed work-pieces such as

- transport axles,
- train axles,
- transmission shafts,
- propeller shafts,
- turbine shafts, etc.

SAMPLE WORKPIECES



SKUV30 can apply 10KN of pressure with 90° shank and over 5KN of pressure with 45° inclined shank with an extremely long life and reliability of both the roll and the internal mechanism.

Improvements of the mechanical resistance from the compression residual surface stresses include:

- Increase of surface hardness
- Lower surface Ra
- Elimination of stress factors, corrosion, cracks
- Increased corrosion resistance
- Elimination of working signs, scratches, porosity
- Less Friction
- Less noise levels