

NEW!

Ream Roller

SUGINO
SUPER! TECHNOLOGY

Designed for Super Quick Operation

We listened to input and experiences shared by our customers, and developed this combined tool to help you achieve a mirror-finish with this reamer and roller.

Precision ID Finish

Roller works as a guide to restrict vibration or run-out during operation.

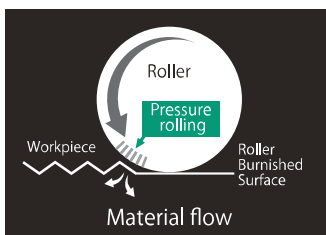
Quick, One-Pass Operation

The combination of high speed Reamer and Roller enables short operation time as well as mirror finish.



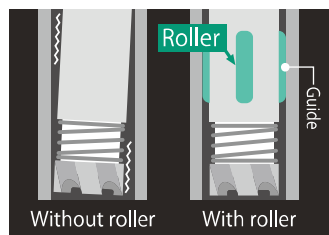
ROLLER

Roller Burnishing



Rollers compress the metal, creating a mirror finish suitable for sliding or sealing surfaces. The compressed metal surface is strong against friction and/or fatigue stress.

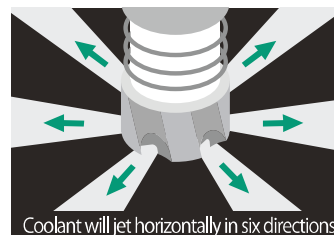
Roller Guide



Roller works as a guide to restrict vibration during operation, for a stable finish. The roller pass also erases retract-scratches made by the Reamer.

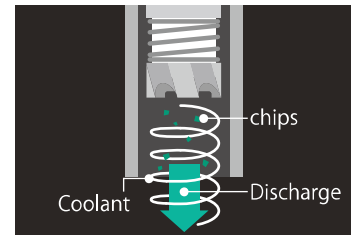
REAMER

Replaceable Reamer



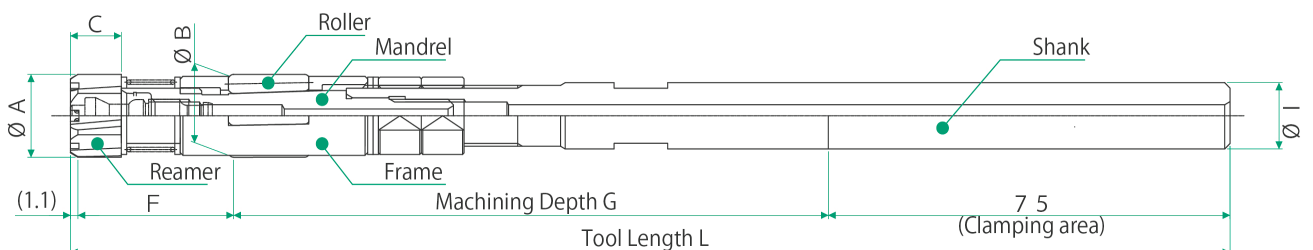
High speed cutting, with a replaceable, throw-away reamer to reduce running cost. Coolant-through specification.

Chips Discharging



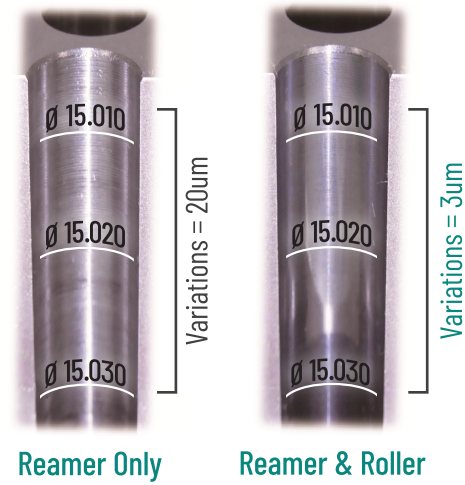
Left-helix Reamer and coolant-through flow discharges cutting chips out in a forward direction.

Dimensions (mm)



Machining Example

Material = C50/1050
Steel Diameter = 15mm
Depth = 80mm



Roughness Comparison

Reamer only



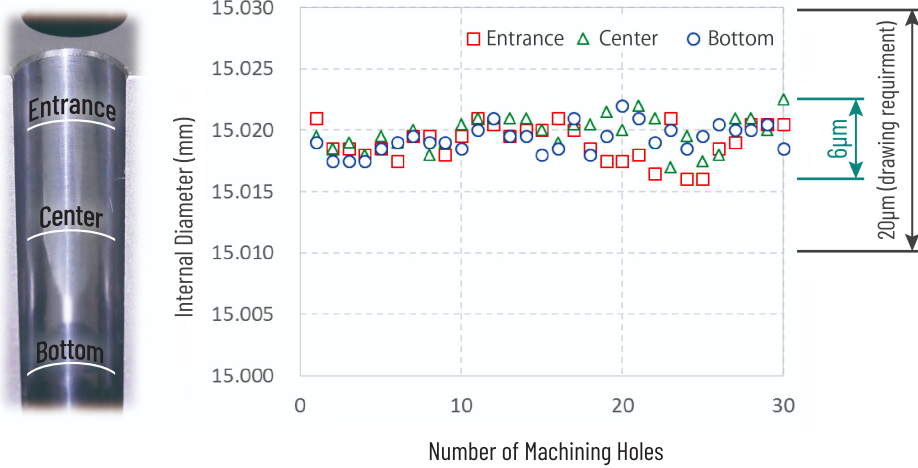
Rz 9.1 μ m

Reamer and Roller



Rz 0.8 μ m

Sequent Machining Results



Operation Time Comparison

Honing

120 sec

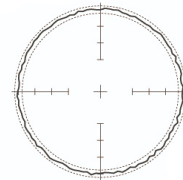
Ream Roller

28 sec

Machining Time About 1/4

Roundness

Ream Roller



2.1 μ m

Diameter	Reamer Dia. A H7	Roller Adjustable Range B	Reamer Length C	Between Reamer & Roller F	Machining Depth G	Shank Dia. I	Total Length L
$\Phi 15$	15	15.0 ~ 15.2	9.5	29.4 ~ 32.6	107 ~ 111	12	216.5
$\Phi 16$	16	16.0 ~ 16.2					
$\Phi 17$	17	17.0 ~ 17.2					
$\Phi 18$	18	18.0 ~ 18.2	10.6	34.5 ~ 37.7	117 ~ 121	12	231.6
$\Phi 19$	19	19.0 ~ 19.2					
$\Phi 20$	20	20.0 ~ 20.2					
$\Phi 21$	21	21.0 ~ 21.2	12.8	41.7 ~ 44.9	117 ~ 121	16	238.8
$\Phi 22$	22	22.0 ~ 22.2					
$\Phi 23$	23	23.0 ~ 23.2					
$\Phi 24$	24	24.0 ~ 24.2					