

Application

YAMASA MXM type machines are used for the aim of burnishing the cylindrical stepped and plain shafts. The machine provides as well as surface hardness and low rate calibration (measurement accuracy) beside of burnishing. Because of the high processing power and speed ability, it provides time saving. These are the preference causes for the serial production.

Technical features

YAMASA MXM roller burnishing machines can process the cylindrical shafts up to H8 tolerances with a single adjustment. These machines are capable to process all kinds of metallic materials with 1400 N/mm² tensile strength and hardness up to max. 42-45 HRC. Super finish surfaces up to Ra= 0,02 µm can be obtained.

With MXM type burnishing machines, part feeding and tolerance adjustment can be done automatically. The machine takes the workpiece and then removes out after the burnishing process is completed. The machine has full automatic specifications. It is capable to achieve a rapid production in order to the automatic feeding system. It can be integrated to each production line for every kind of serial production. As well as automatic loading system can be integrated.

Desing and function

MXM roller burnishing machines are capable to process any kind of diameter between Ø3-Ø40 mm by changing the roller heads. One roller head is used for each nominal diameter. Each roller head has an adjustment capacity of 0,5 mm. The nominal diameter of the roller head can be adjusted with the tolerance between -0,40 and +0,10.

Advantages

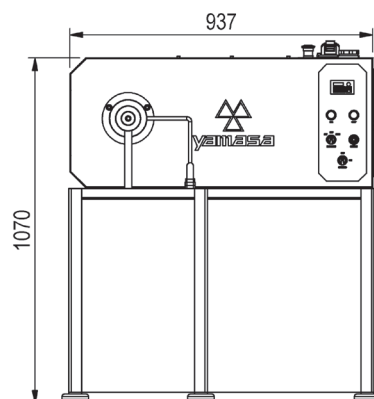
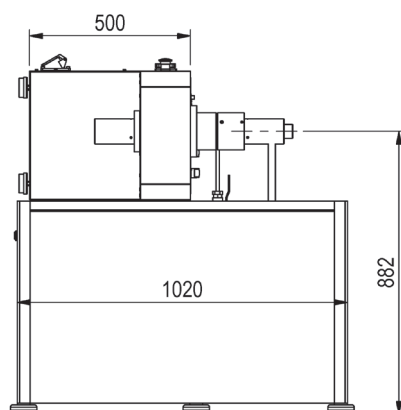
- It is capable to achieve a rapid and serial production.
- Saves time, money and energy.
- The roller heads can be replaced easily and rapidly.
- A precision and fast adjustment can be done through the adjustment mechanism.
- No sawdust and residues occur.

MXM Models, properties and parameters

MXM Models	DVH-1	DVH-2	DPH-1	DPH-2	NC-1	NC-2
Working range (Ø-mm)	1-20/25*	1-40	1-20/25*	1-40	1-20/25*	1-40
Control panel	Dijital		Digital		Numarical control(NC)	
Coolant system	Manuel or spraying		Continuously lubrication-internal coolant			
Coolant	Oil		Oil or emulsion			
Coolant tank capacity	-		30 Liter (including filter)			
Electric connection	400 V 50 Hz					
Processable surfaces	Plain/stepped shafts					
Proccesing length	Unlimited					
Revolution	0-1400 rev./min (with speed control)					
Feed rate	0,9 - 3 mm/rev.					
Pre-machining rough.	Rz= 5 - 20 µm					
Burnishing allowance	up to 0,02 mm					

* Optional

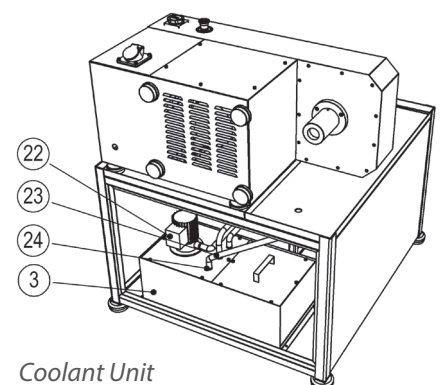
MXM DVH-1
Roller burnishing machine
Manuel lubrication or
minimal lubrication spraying system



MXM DPH-1
Roller burnishing machine
internal coolant system

Sample of applications

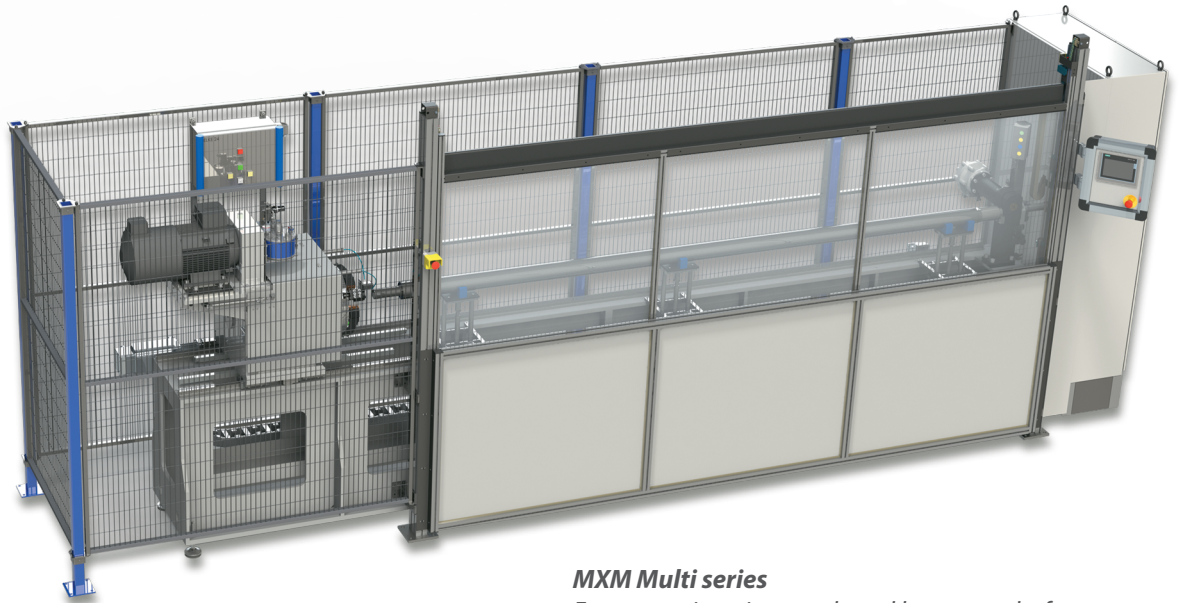
Shock absorber shafts, pneumatic cylinder shafts, HDD shafts, coil, powered tooth brush drive shafts, printer guide shafts, air hammer parts, air condition shafts, pump shafts, motor shafts, optical drum for copying machine, wire etc.



Coolant Unit

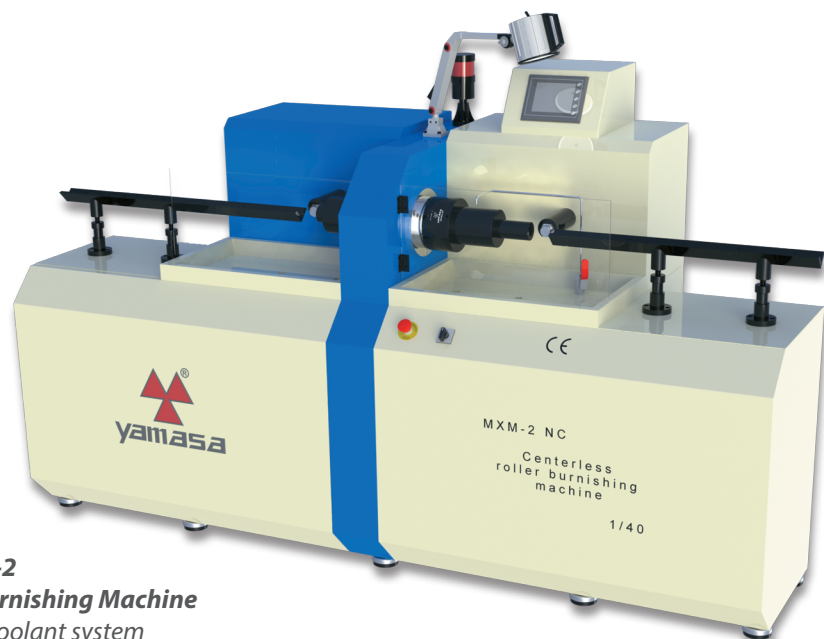
MXM Series | For cylindrical shafts

Roller Burnishing Machines



MXM Multi series

For processing piston rods and long type shafts



MXM NC-2
Roller burnishing Machine
internal coolant system