

CONVENTIONAL LATHE OMG MOD.320 HEIGHT CENTER MM. 320 - DISTANCE CENTER MM. 1500



FOREWORD

The lathes we are now showing have been conceived to resolve economic and technical important problems. So, on design, we have taken into account not only **stiffness, productive power, handness, higher accuracy**, but also centralized controls and **Instantaneous spindle speeds variation. INSTANTANEOUS SPINDLE SPEEDS VARIATION MEANS TO EARN ABOUT TWO HOURS A DAY AND LESS FATIGUE FOR WORKERS.**

All gears (headstock, norton box, saddle, apron) are in Cr.Ni.Mo. steel, forged, thermal treated and ground.

THE BED

It is of **MEEHANITE** cast iron, shaped as a double wall over turned U, with a very large load bearing area. The sliding guides, induction hardened (about 500 Brinell) and ground on a very high precision machine, are protected. On the headstock side there is the gap 100 mm. deep.

THE SADDLE

It is of **MEEHANITE** cast iron, widely sized, it slides on large prismatic guides coupled to themselves with the highest accuracy. The clearance between saddle and guides is adjustable with adequate taper gibs. The top slider can be freely rotated 360°. All sliding guides are induction hardened and ground.

THE APRON

It is totally sealed and with oil bath lubrication. It contains the kinematic attachments required for both feeds, the pump for the guides lubrication, the device avoiding the contemporary coupling of feeds and lead screw, the large vernier to read longitudinal feed values, so as to check shouldered cuttings.

THE NORTON BOX

It is hermetically sealed and with oil bath lubrication. Provided with protection against overload, the box permits the selection of hundreds of threads by these systems: metric, whitworth, Module Pitch and Diametral Pitch, as well as the value of 19 T.P.I. all without any substitution of gears.

ELECTRICAL SYSTEM

The electric central equipment of the low tension system is gathered in a proper cabinet. All materials are original **KLOCKNER- MOELLER**.

THE HEADSTOCK

It is drawn from a single well ribbed shape of a special type of cast iron with a very high mechanical strength. It contains all the gears for the variation of speeds and a dual friction lamellar clutch for the reversal motion. The spindle in Cr.Ni.Mo. steel, is forged, thermal treated and ground; it turns on **GAMET** or **TIMKEN** roller bearings of a very high precision type, lubricated by oil pressure. The selection is operated by a large push-button panel placed on the devanture.

TECHNICAL CHARACTERISTICS

● max turning diameter on the guides of the bed	mm.	640
● max turning diameter on the gap	mm.	840
● max turning diameter over cross slide	mm.	460
● width of bed	mm.	420
● length of gap	mm.	518
● number of speeds	n°	24
● spindle speed	rpm	28÷1600
● spindle nose	D1	8"
● spindle hole diameter	mm.	102
● tailstock quill travel	mm.	240
● tailstock quill diameter	mm.	100
● tailstock quill length	mm.	390
● tailstock quill inside taper	C.M.	5
● cross carriage travel	mm.	410
● stroke tool holder carriage	mm.	200
● follow steady rest (max turning diameter)	mm.	240
● steady rest (max turning diameter)	mm.	280
● spindle motor	HP	15
● spindle bearing diameter	mm.	136/195
● number of standard threads	n°	254
● metric threads range	mm.	1÷56
● whitworth threads range	fx1"	0,5÷28
● modul threads range	Mod.	0,5÷28
● gamma passi diametral pitch	D.P.	1÷56
● longitudinal feed range	mm.	0,08÷3
● cross feed range	mm.	0,04÷1,5
● length of the carriage support on the bench	mm.	600
● length of the cross carriage	mm.	680
● weight machine	Kg.	3600

STANDARD ACCESSORIES

- Electrical equipment with low voltage control
- Coolant system
- Flange for menabride
- Spindle cone reduction bush
- Live center
- Steady rest
- Follow rest
- Safety prevention protections according to CE standard
- Service keys and use and maintenance manual
- Rotating stop
- Rapid feeds on the axes
- Instant variation of spindle speeds through electromagnetic frictions
- Digital Readouts
- Self-centering chuck with 3 guides
- Tool turret with tool holder