

# Citizen M20

Super efficient economic machining of complex parts in short cycle times. User-friendly design simplifies programming and operation utilising the latest CITIZEN technology.

## Special features

- Vertical tool holder with 5 turning tools and 4 rotary tools.
- 10-position turret for front and back machining; all positions power driven. Multiple tool holder available to given massive 80 tool capacity. Can be equipped with variable-angle rotary tools
- 3-station back machining unit for fixed and driven tools
- Conventional hydraulics and pneumatics are eliminated with the M-series 13 axis CNC system. Fast turret indexing by CNC servo control. Idle times minimised by precision CNC control of auxiliary functions.
- C axis on main spindle
- Y axis on platen
- 1° indexing on sub-spindle (C axis option)
- Synchronised thread-cutting in all driven axes
- Milling interpolation
- Simultaneous differential threading
- Hobbing
- Polygon turning
- Thirteen axes in all; nine primary and four auxiliary. Collet operation, workpiece ejection and even the magazine barfeed are operated by servo-motors. The control systems fully synchronises the axes and enables a high degree of simultaneous front and rear machining. The software simplifies programming to enable a fast-track learning curve even for first time users
- Rigid tapping
- Specially developed CITIZEN software facilitates synchronisation of the platen, turret and sub-spindle enabling simultaneous machining with 3 tools
- Part program preparation is simplified by a 3 path system whereby the platen, turret and sub-spindle are programmed separately and synchronised to operate simultaneously

## Citizen Machinery Europe

Three tooling patterns guarantee fast production by reducing idle times dramatically.



The M-series offers additional 13 axis with easy operation.

<b>Main spindle</b>	
Max. turning diameter [mm]	20
Max. turning length [mm]	320
Main spindle speed [rpm]	200-8,000
Spindle indexing [°]	1
<b>Sub-spindle</b>	
Max. turning diameter [mm]	20
Sub-spindle speed [rpm]	200-7,000
Spindle indexing [°]	1
<b>Platen</b>	
Stationary tools in vertical tool holder platen	5
Speed of driven tools [rpm]	250-5,000
<b>Turret</b>	
Driven stations on turret	10
Speed of driven tools [rpm]	200-5,000
Space requirement (without bar feeder) [mm]	2,800 x 1,300 x 1,800
Weight [kg]	2,800