

HMV



THREAD CUTTING MACHINES

OK 3 and OK 5

Bed plate and saddle

The bed plate and saddle are generously dimensioned, ensuring that precision can be maintained throughout operations, even under the most severe stresses.

Vice

The machine vice is fitted with replaceable hardened steel jaws and can be adjusted vertically, while a sturdy handwheel allows the workpiece to be clamped firmly and rapidly in place.

Automatic disengagement

As a standard feature, the die head opens automatically once the required thread length has been reached. The thread length is set with the help of two movable stops on the disengaging rod. The dies return automatically to their working position when the saddle is retracted.

Cooling

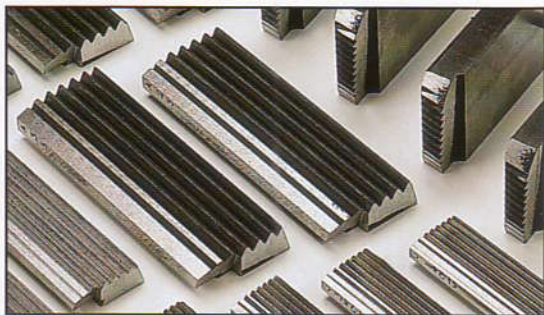
A pump and coolant tank are located in the machine frame in an easily accessible position.

Lubrication

All shafts, including the main spindle, are journaled on ball bearings and are splash-lubricated. The bearings in the main spindle are fitted with axial pressure oil seals. Low friction and low operating temperatures guarantee long life.

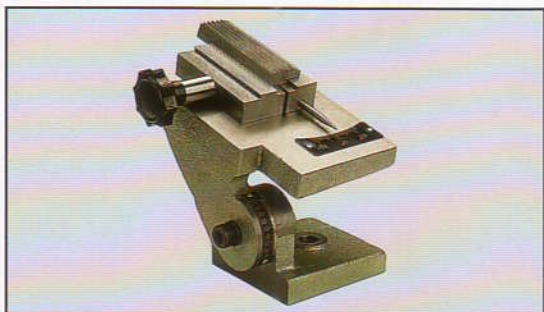
Thread cutting dies

The thread-cutting dies are manufactured from high-speed steel, to give high cutting speeds, excellent thread cutting and extended service life for the tools.



Grinding fixture

The thread cutting dies are easily sharpened by grinding the end surface of the cutters. A special fixture for this purpose is available as an optional extra.



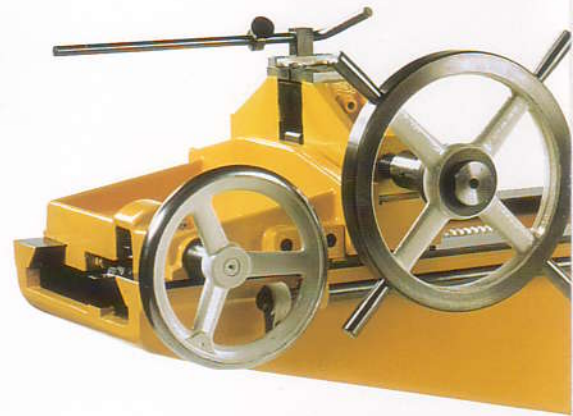
OK SERIES THREAD

Our OK machines are excellent examples of modern, easily operated purpose built equipment with high production capacity. These machines are specifically designed for thread cutting, ensuring a considerably shorter operating time per thread length than can be achieved, for example, on a lathe.

OK machines produce the finished thread in a single cutting operation, irrespective of thread pitch or the initial diameter of the material. The workpiece is clamped in a double-acting vice head and drawn forward in the longitudinal plane by a rotating die head as thread cutting proceeds.

HMV thread cutting machines are available in two sizes: the OK 3 model for medium thread cutting and the OK 5 model for larger and coarser workpieces.

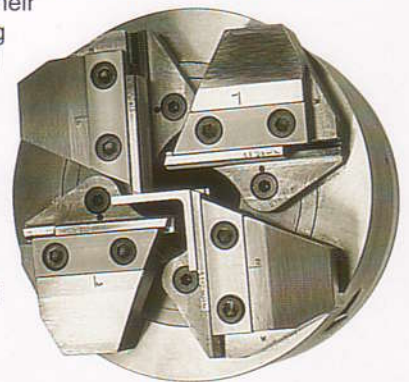
Both models feature simple and robust design and are easy to operate, even by non-skilled staff.



Die head, type GH

The machine is fitted with a special die head so that the entire working range can be covered with a single set of die holders.

The tangential cutting system makes for good chip clearance, coupled with high cutting and production capacity. The dies can be rapidly and accurately adjusted in their holders with a special setting template, while the required thread size can be set, conveniently and accurately, by reference to the thread scale on the die head. The standard version is graduated in Whitworth, BSP and metric, although other thread systems or special sizes can be provided upon request.

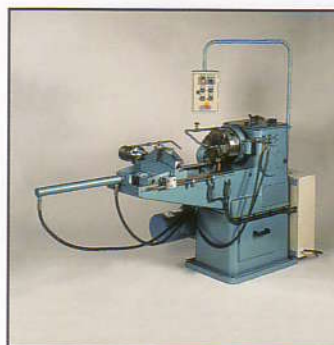


The die head is fitted with four integral pitch dies, to ensure substantial benefits in terms of operating economy and labour-saving, as the head requires only one set of dies for each thread pitch.

CUTTING MACHINES

Models OK 3 and OK 5 are supplied complete with:

- Electrical system for 3-phase AC and a selection of operating voltages
- Pump, tank and coolant spray nozzle
- Set of spanners for quick die replacement
- Detailed operating instructions



OK 3 A



OK 5 H



OK 5

Optional extras and equipment include:

- Die holders for left-and threads
- Grinding fixture for dies
- Thread tap wrenches
- Dies for left-hand and right-and threads and for special pitches
- Special chamfering head
- Pipe chamfering tool
- Pipe chamfering cutters
- Standard dies (always in stock)
- Thread cutting oil
- OK machines can be automatized an fitted with hydraulic equipment, or mechanized to meet customers' individual requirements.

Technical Data

Model	OK 3	OK 5
Thread cutting range, Wh- + UNC	3/8" - 2"	5/8" - 3"
Thread cutting range, BSP	1/4" - 2"	1/2" - 4"
Thread cutting range, metric	M8 - M48	M16 - M80
Number of speeds	8	8
Speeds, rpm	20, 28, 40, 48, 58, 70, 97, 140	14, 20, 28, 32 40, 48, 64, 94
Motor output, hp	1.8 - 3	2.7 - 4.5
Motor output, kW	1.3 - 2.0	2.3 - 3.0
Motor speed, rpm	700/1390	700/1400
Spindle bore, mm	62	118
Spindle bore, in	2 ⁷ / ₁₆ "	4 ²¹ / ₃₂ "
Max. thread cutting length without relocation, mm	450	450
without relocation, in	17 ³ / ₄ "	17 ³ / ₄ "
with relocation	infinite	infinite
Dimensions and weight	OK 3	OK 5
Overall length, mm	1450	1570
Overall length, in	57"	61 ¹³ / ₁₆ "
Overall width, mm	850	1015
Overall width, in	33 ¹ / ₂ "	40"
Overall height, mm	1030	1270
Overall height, in	40 ⁹ / ₁₆ "	50"
Height from floor to bed plate, mm	760	830
Height from floor to bed plate, in	29 ⁵⁹ / ₆₄ "	32 ¹¹ / ₁₆ "
Width of bedplate, mm	330	370
Width of bedplate, in	13"	9 ⁹ / ₁₆ "
Required floor space, mm	1450 x 870	1570 x 1015
Required floor space, in	57 x 34 ¹ / ₄ "	61 ¹³ / ₁₆ " x 40"
Bed plate, L x W, mm	715 x 511	815 x 580
Bed plate, L x W, in	28 ⁵ / ₃₂ x 20 ⁷ / ₆₄ "	32 ³ / ₃₂ x 22 ⁵³ / ₆₄ "
Net weight, kg	540	785
Weight, packed, kg	590	835
Weight, packed for export, kg	730	960
Size of packing crate, L x W x H, mm	1600 x 800 x 1350	1700 x 900 x 1550
Size of packing crate, L x W x H, in	63 x 31 x 53"	67 x 23 x 61"
Crate volume, cu m	1.7	2.4
Crate volume, cu ft	63	88

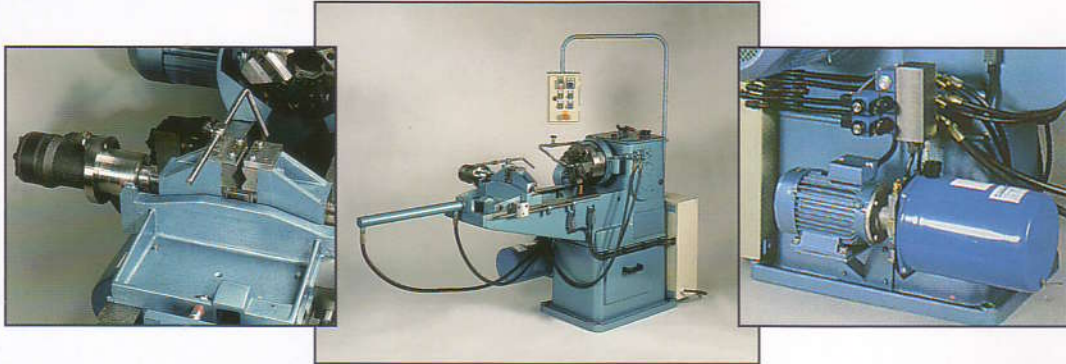
OPTIONAL HYDRAULICS SYSTEM

Hydraulics save labour and enhance capacity

Our OK 3 and OK 5 machines can be supplied fitted with hydraulic equipment that provides operators with a pair of strong, extra hands for heavier operations. The equipment ensures higher production capacity and less muscular effort, while also allowing one operator to mind two machines at the same time, thereby enhancing earnings capacity.

OK 3 A

A stands for automation



The vice jaws are operated by an hydraulic piston. The evenly distributed force keeps the workpiece effectively in position during thread cutting. When the set thread length has been reached, the die head opens, the workpiece is automatically retracted and the vice opens.

OK 5 H

H stands for Hydraulics



The OK 5 is designed for cutting threads in coarser materials, and even 80 mm steel reinforcement rod is kept effectively in position during thread cutting thanks to this hydraulic system. Twin pistons and angled jaws mean that the material is not centred until it has been firmly clamped in the vice. When cutting is complete, the die head and vice are opened automatically by the hydraulics system, which is positioned not to hamper the work of the operator.

Conversion of Older Machines
In our workshops we also convert, service and modernize earlier versions of the OK 3 and OK 5, and fit them with hydraulic equipment. This can be a profitable investment for owners, upgrading machine status and reducing labour.

H M V
Machines

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Design alteration compared to our leaflets

The saddle on our OK tread machines runs onto hardened bars and sliding carriages with ball bearings.

This results in substantial improvements:

- The saddle runs very easily. Therefore, it is possible to cut more threads by inch.
- The material in the guiding bars is hardened and makes them last longer. This will of course, improve the production economy.

