

# **VDF Universal Turning Machines**

**E560/M670/  
V800.**

**Swing over bed: from 24 to 39<sup>3/8</sup>".**

**Driving power: from 25 to 40 hp.**

**Speed range: 200:1.**

**24 spindle speeds.**

**Progression ratio: 1.25.**

**Thread leads for all thread types: 227.**

**Turning length: up to 400" (and more).**

**Torque: up to 3320 ft·lbf.**

***VDF***

**BOEHRINGER**  
*Advanced Technology.*

**VDF-Precision  
Turning Machines  
from BOEHRINGER.**

**For small lots,  
and large batch  
production.**

**In all details:  
massive, rigid,  
stiff, and robust.**

**Anatomically  
correct operating  
elements.**

**Working area of  
ergonomically  
exemplary design.**

**Additional  
equipment for  
universal application.**

A logical, complementary series of universal turning machines, incorporating the BOEHRINGER building block system applied to many thousands of VDF machines. With common features as to equipment, operation, service, spare parts, and tooling. The machines differ in size to answer the requirements of practical use but are absolutely identical in their basic concept and general design.

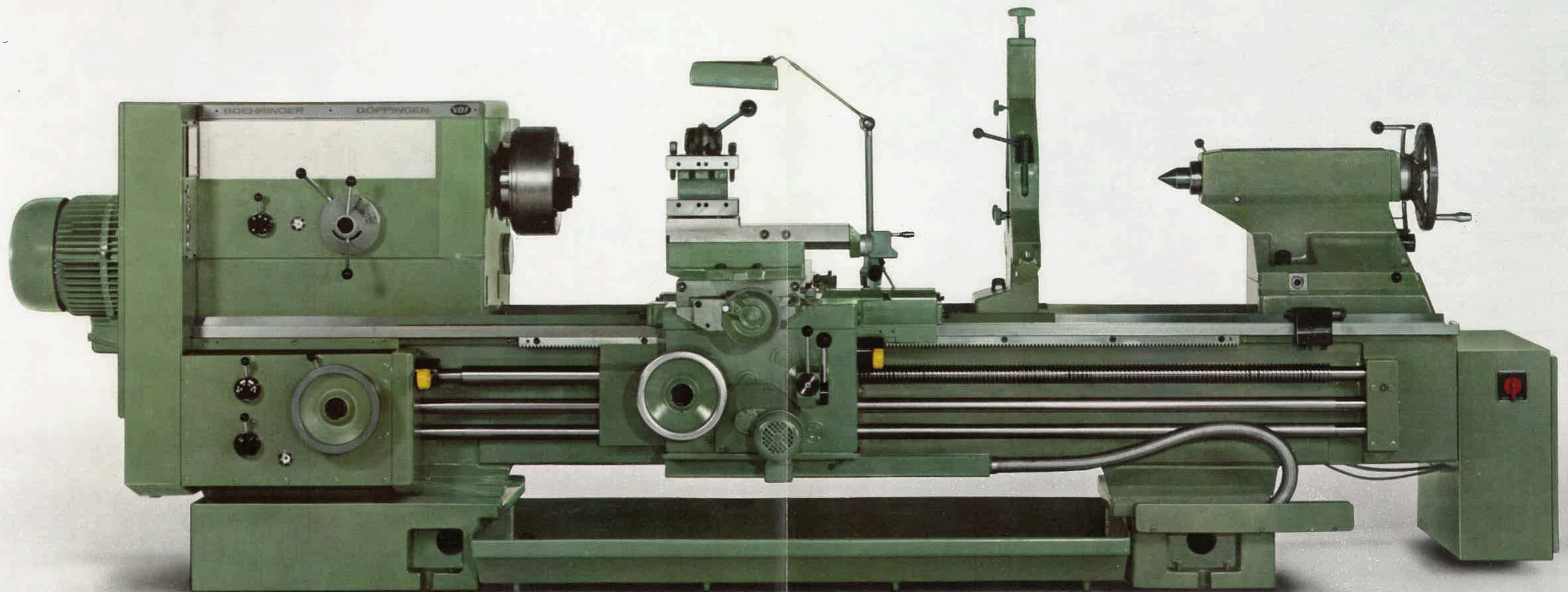
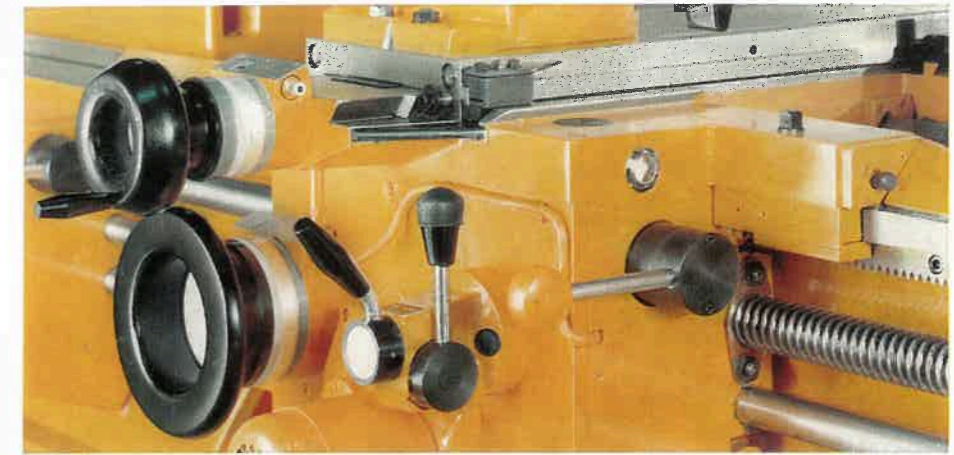
Of outstanding suitability as precision turning machines (with toolroom accuracy) for small lots,

and large batches — to assist in prototype engineering, and for use in production. With additional equipment for automation, and versatile applications. On request with D.C. main drive, automatic feeds, powered rapid traverse, power-operated chucking fixtures, and others — an assortment of additions for the convenience of the operator. Not to forget the ergonomically exemplary design: with an optimum relation between swing over bed and carriage, and width of bed. Handles of all shapes

for ease of operation (instead of the usual ball knob levers). Clearly arranged control elements, and a central directional lever (for all feed motions), as well as a three-lever visual control at the headstock for the selection of spindle speeds.

Details of design: a heavy, rigid bed (of high-quality Meehanite cast iron) with excellent fall of chips. Ample dimensioned guideways (double Vees) for a favourable distribution of the load. A sturdy carriage (for high chip removal

rates, and superior accuracies and surface qualities). Massive, rigid tailstock and stable quill (power-operated if desired); headstock with a wide base to the bed, and balanced thermal behaviour under all working conditions (induction hardened, and precision ground spur gears, electro-mechanical brake requiring no maintenance, high-precision double-row cylindrical roller bearings for the computer-optimized main spindle, central lubrication . . .).



# Technical Main Data.

For detailed information on the  
VDF Universal Turning Machines E, M, V  
please, refer to brochure Boe 173

## Working Range

Changes in technical specifications reserved

Type		E 560	M 670	V 800	
				size I	size II
Swing over bed	in	24	27 <sup>3</sup> / <sub>16</sub>	32 <sup>1</sup> / <sub>4</sub>	39 <sup>3</sup> / <sub>8</sub>
Swing over long cross slide	in	12	16 <sup>3</sup> / <sub>8</sub>	20 <sup>1</sup> / <sub>4</sub>	27
Height of centres over flatway	in	11 1/2	13 <sup>3</sup> / <sub>16</sub>	15 <sup>3</sup> / <sub>4</sub>	19 11/16
Width of bed	in	19 <sup>3</sup> / <sub>4</sub>		22	
Spindle nose to DIN 55022 or Camlock ASA B 5.9	size No.	8 8	11 11		
Spindle bore diameter	in	3 1/4	5		
Centre, M.T.	No.	6			
O. D. of tailstock quill	in	3 <sup>15</sup> / <sub>16</sub>	5		
Stroke of quill	in	11			

## Main Drive

Driving power	hp	25	30	30 (40)
24 main spindle speeds through gears	rpm	9-1800	7.1-1400	
Torque at main spindle	ft · lbf	3320		

## Feeds and Thread Leads

Feeds on selector drum: 32 longitudinal feeds	ipr	.0031-.110
32 transverse feeds	ipr	.0016-.055
Total feeds: 68 longitudinal feeds	ipr	.002-4.4
68 transverse feeds	ipr	.001-2.205
66 metric threads	in	.0045-22.0
60 Whitworth threads	tpi	80-1/16
60 module threads *	module	0.1-50
40 diametral pitch threads *	t/π''	160-0.5

## Dimensions

Total width	in	55	60
Total length plus turning length	in	110	120
Turning lengths up to	in	236	
* extra equipment			

# VDF

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# BOEHRINGER

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