



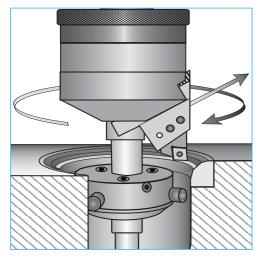
## Valve Seat Refacing Machine for Valve Seat Diameter Range 35 - 140mm



Make the right choice. HANDY MACHINE for use on board and in the workshop Tested and specified by leading engine manufacturers.

# VD2.5HD





**Working Principle** 



**Exchangeable Refacing Head** 

## HANDLING

#### Setup is fast and easy.

First, lock the pilot with mounted supporting spider in the valve guide.

Then, lower the machine over the pilot and position the cutting tool in front of the inner edge of the valve seat.

Turn micrometer downfeed to set the desired depth of cut.

#### Refacing is automatic.

Pressing one button is enough to start the refacing pass.

Two to three passes will restore the valve seat to the original condition.

## WORKING PRINCIPLE

The valve seat is refaced to the preset depth by the simultaneous application of both a rotary and a transverse feed motion to the cutting tool fitted with an indexable cutting insert.

While the cutting insert rotates in a circle around the valve seat, a feed gear mechanism ensures a continuous outward transverse feed motion under the proper seat angle.

This angle is defined by an inclined slideway provided for the tool slide in the seat refacing head.

The seat refacing head with the built-in slideway for cutting tool travel is exchangable mounted to the feed gear unit to ensure a precise seat angle eliminating faulty setting operations.

The VD2.5HD is aligned and guided by a pilot which is locked in the valve guide bore and stabilized by a supporting spider just below the valve seat.

The lathe-type refacing action provides a flawless concentric seating surface texture for a perfect valve seal.

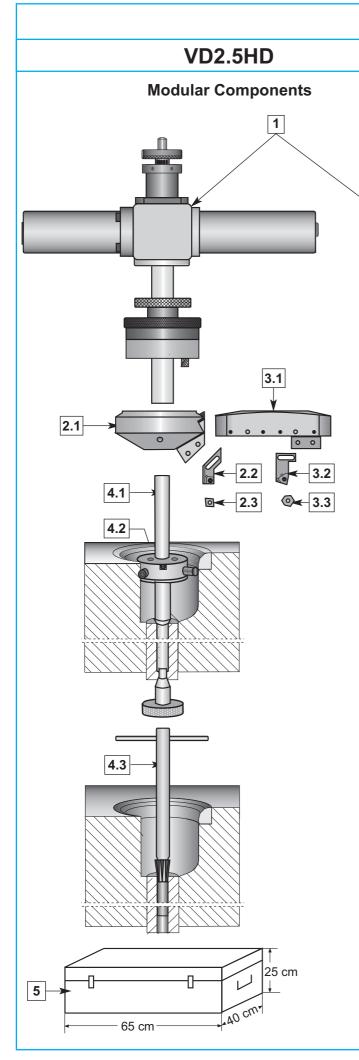
Roundness, concentricity and surface finish of the refaced valve seat are within manufacturers' specifications or even better.

## **KEY FEATURES**

- No abrasive dust.
- A fast clean cut.
- Compact and handy design.
- Powered by an universal SELV (Safety Extra Low Voltage) power supply unit to avoid risk of electrical shock.
- Fast set-up time.
- Easy to use
- The economical solution for both on site and workshop use.

## **SPECIFICATIONS**

Capacities	
Seat diameter range	35 - 140 mm
Seat angle range	0° - 45°
Machining motions	
Rotary speed range	200 - 360 rpm
Transverse feed rate	0,05 mm/rev.
Electrics	
Operating voltage of	machine max. 50 VDC
Universal Power Sup	ply Unit
Supply voltage rang	ge 100 - 300 VAC
(1ph.50/60Hz)	
Power Requirement	0,5 kW
Dimensions	
Length	410 mm
Width	125 mm
Height	310 mm
Weight	
Net weight	approx. 9 kg



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*	250 200 360 50 trmn	HUNGER	
Ite	m Description		,

HUNGER

Item	Description			P/N		
1.	VDS2.5HD Basic Machine		247 05 500			
	including Universal Power Su wired for input voltage range	247 00 000				
2.	Accessories for refacing valve					
2.1	Valve Seat Refacing Heads	Angle	Diam.Range			
2.1.1	D5/45° Seat Refacing Head	45°	35-140 mm	247 11 545		
2.1.2	D5/40° Seat Refacing Head	40°	35-140 mm	247 16 540		
2.1.3	D5/30° Seat Refacing Head	30°	35-140 mm	247 12 530		
2.1.4	D5/20° Seat Refacing Head	20°	35-140 mm	247 17 520		
2.1.5	D3/35° Seat Refacing Head	35°	35-120 mm	247 14 335		
2.1.6	D3/25° Seat Refacing Head	25°	35-120 mm	247 15 325		
2.2	Insert Holders for Refacing Va	ats				
2.2.1	SD00 Insert Holder for seat of	247 65 108				
2.2.2	SC01 Insert Holder for seat of	diam. 4	6-120 mm	247 65 103		
2.2.3	SC02 Insert Holder for seat of	diam. 6	5-140 mm	247 65 104		
2.3	Cutting Inserts for Refacing V					
2.3.1	Insert Type C0604CB for SD			862 20 021		
	Application: General purpose					
2.3.2	<b>Insert Type C0602HB</b> for SD Application: Very hard seats	862 20 016				
2.3.3	<b>Insert Type C0908CU</b> for SC Application: General purpose	862 20 007				
2.3.4	<b>Insert Type C0908HU</b> for SC Application: Super alloys	Holder	862 20 009			
2.3.5	<b>Insert Type C0904CB</b> for SC Application: Hard seats	862 20 010				
2.3.6	<b>Insert Type C0904HB</b> for SC Application: Cr & Ni alloys	862 20 013				
2.3.7	<b>Insert Type C0904HU</b> for SC Application: Very hard seats	862 20 015				
2.3.8	Insert Type C0904CBN for S Application: Extremely hard so	862 20 022				
3.	Accessories for face turning					
3.1	D5/0° Face Turning Head for	247 19 500				
3.2	Insert Holders for face turning					
3.1.1	SW1-0° Insert Holder for dia	247 65 061				
3.1.2	SW2-0° Insert Holder for dia	247 65 112				
3.3	Cutting Inserts for Face Turning					
3.3.1	Insert W0602HB for cast iron	862 20 005				
3.3.2	Insert W0608HL for tough an	247 20 005				
4.	Accessories for alignment					
4.1	Pilots	on request				
4,1.1	Universal Pilot Kit	tailored to the respective engine model Universal Pilot Kit				
	Universal Pilot Kit247 70 100für Ventilführungen mit Ø 16-27 mm					
4.2	Supporting Spiders	on				
4.0	for supporting pilot shaft just t	request				
4.3	Chamfering Tools for cleaning the valve guide b	on request				
5.	Storage Case	247 90 038				
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