

Valve Seat Refacing Machine for Valve Seat Diameter Range 35 - 120mm



Make the right choice.

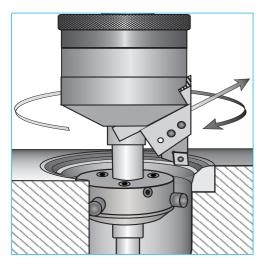
HANDY MACHINE

for use on board and in the workshop

Tested and specified by leading engine manufacturers.

VDS2.3E





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 VDS2.3E 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 eliminate the 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 - 120 mm Seat angle range 15° - 45°

Machining Motione

Rotation Speed 270 and 360 rpm Cross Feed per Revolution 0.05 mm

Electrics

Operating voltage max. 42 VDC Power Supply

Input voltage: 230±10% VAC (1ph.50/60Hz) or 120±10% VAC or 277±10% VAC

Power input 0,3 kW

Dimensions

Length410 mmWidth125 mmHeight360 mm

Weight

Net weight approx. 9 kg

HUNGER (VDS2.3E **Modular Components** 1 Description P/N Item **VDS2.3 Basic Machine** 247 05 300 including Power Supply Unit wired for single-phase input voltage 230V, optional also 120V & 277V 2. Accessories for refacing valve seats Valve Seat Refacing Heads 2.1.1 D3/45° Seat Refacing Head for 45° seats 247 11 345 2.1.2 D3/40° Seat Refacing Head for 40° seats 247 16 340 D3/35° Seat Refacing Head for 35° seats 247 14 335 2.1 2.1.4 D3/30° Seat Refacing Head for 30° seats 247 12 330 2.1.4 D3/25° Seat Refacing Head for 25° seats 247 15 325 D3/20° Seat Refacing Head for 20° seats 247 17 320 2.2 Insert Holders for Refacing Valve Seats 247 65 108 2.2.1 **SD00 Insert Holder** for seat diam. 60-60 mm 2.2.2 **SC01 Insert Holder** for seat diam. 46-120 mm 247 65 103 4.2 2.2.3 **SC02 Insert Holder** for seat diam. 65-140 mm 247 65 104 Cutting Inserts for Refacing Valve Seats 2.3.1 Insert Type C0604CB for SD00 Holder 862 20 021 Application: General purpose 2.3.2 Insert Type C0602HB for SD00 Holder 862 20 016 Application: Very hard seats 2.3.3 Insert Type C0908CU for SC01/02 Holder 862 20 007 Application: General purpose 862 20 009 2.3.4 Insert Type C0908HU for SC01/02 Holder Application: Super alloys 2.3.5 Insert Type C0904CB for SC01/02 Holder 862 20 010 Application: Hard seats 862 20 013 2.3.6 Insert Type C0904HB for SC01/02 Holder Application: Cr & Ni alloys Insert Type C0904HU for SC01/02 Holder 862 20 015 2.3.7 Application: Very hard seats 4.3 2.3.8 Insert Type C0904CBN for SC01/02 Holder 862 20 022 Application: Extremely hard seats 3. Accessories for face turning D5/0° Face Turning Head for diam. 46-140mm 247 19 500 3.1 3.2 Insert Holders for face turning 3.1.1 SW1-0° Insert Holder for diam. range 35-60 mm 247 65 061 3.1.2 **SW2-0° Insert Holder** for diam. range 46-120 mm 247 65 112 3.3 **Cutting Inserts for Face Turning** 862 20 005 3.3.1 Insert W0602HB for cast iron 3.3.2 Insert W0608HL for tough and hard material 247 20 005 Accessories for alignment Pilots tailored to the respective engine model on request **UP2 Universal Pilot Kit** 247 70 100 for valve guide diameter range 16-27 mm 4.2 **Supporting Spiders** on 5 for supporting pilot shaft just below the valve seat request 4.3 **Chamfering Tools** 65 cm for cleaning the valve guide bore request 5. 247 90 038 **Storage Case** Page 3 of 3