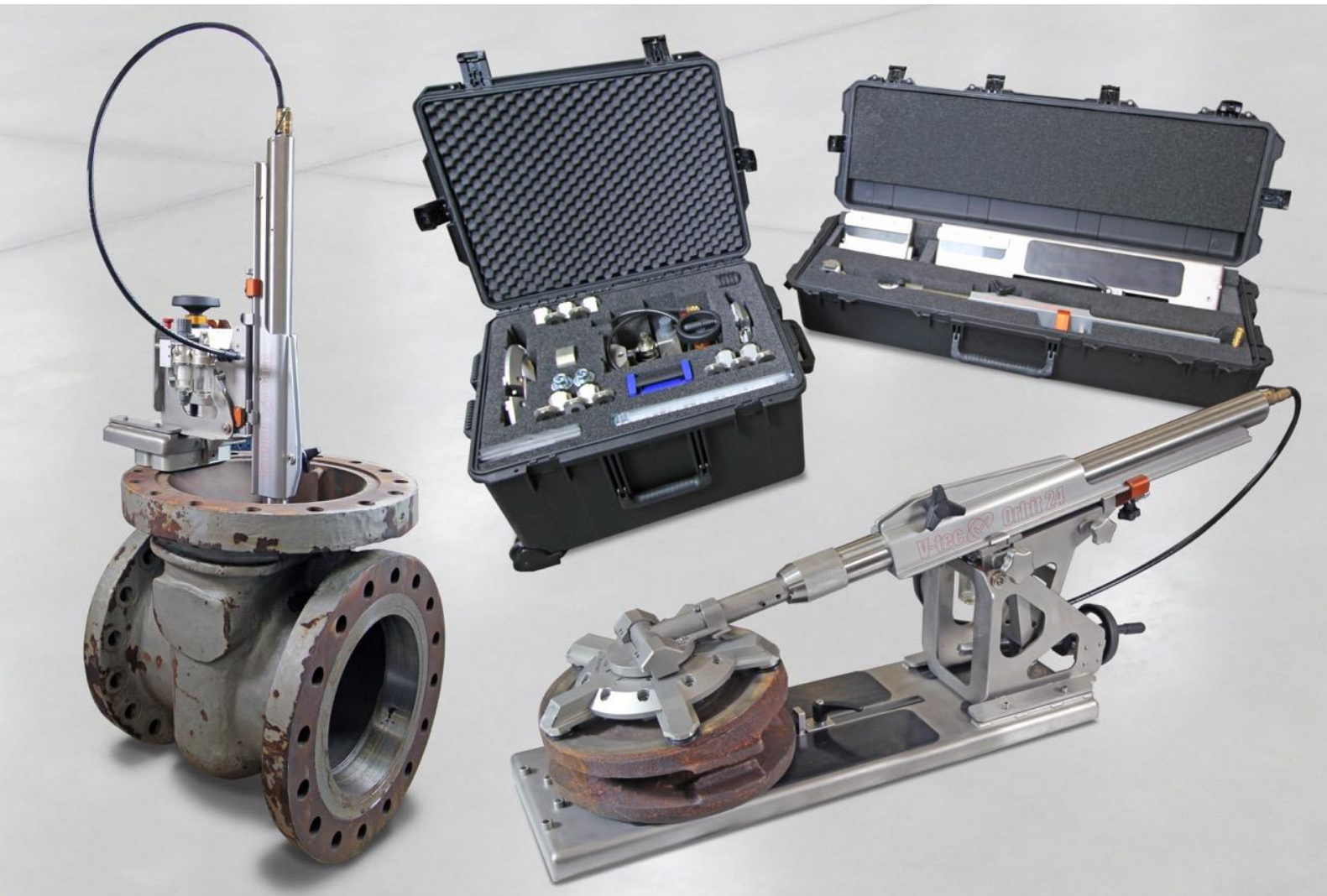


## VALVE GRINDING & LAPPING EQUIPMENT



**MODEL: ORBIT 40**  
**RANGE: 6 – 40" / DN150 – 1000 mm.**

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## Orbit 40 Valve grinder

The ORBIT 40 is a robust, but light weight grinding and lapping machine for 'in-situ' or 'in-shop' repair of damaged valve seats. The unique set up and construction makes the versatile ORBIT 40 suitable for all sorts of vertical seats (Gate-, Parallel slide-, Check Valves) and horizontal mounted seats (Globe- and Safety valves) in the range 6-40".

The ORBIT 40 is suitable and equipped for grinding and lapping the faces on both the Gate valve seats and wedge. Both seats inside the valve body are quickly machined in one setting of the mounting bracket. The standard included Gate valve wedge bracket allows you to accurately machine both faces of the wedge.

Within seconds the ORBIT 40 is prepared for machining the flat seats of both Gate-, Parallel Slide, Globe and Safety valves. The ball joint construction in the arm ensures a very easy alignment and accurate control of the force. The unique orbital, - mechanical driven grinding head results in a very high material removal rate and extreme flatness accuracy.



The ORBIT 40 is equipped with two different grinding heads and three sets of different lengths of grinding arms to cover the whole range. The grinding heads are mechanically driven by an internal gearing system that rotates the wheels at the same speed producing the perfect cross hatch machining pattern. This orbital lapping design assures the highest material removal rate with the highest flatness accuracy.

Absolute flat grinding is guaranteed by the mechanical drive having the same speed on the inside and outside of the seat. The standard delivery includes different grit sizes of self-adhesive 3M foil suitable for any type of finish on all common seat materials. Permanent impregnated diamond grinding-heads are available on request.

The light weight, stainless steel mounting bracket can be clamped on various bonnet types and sizes.

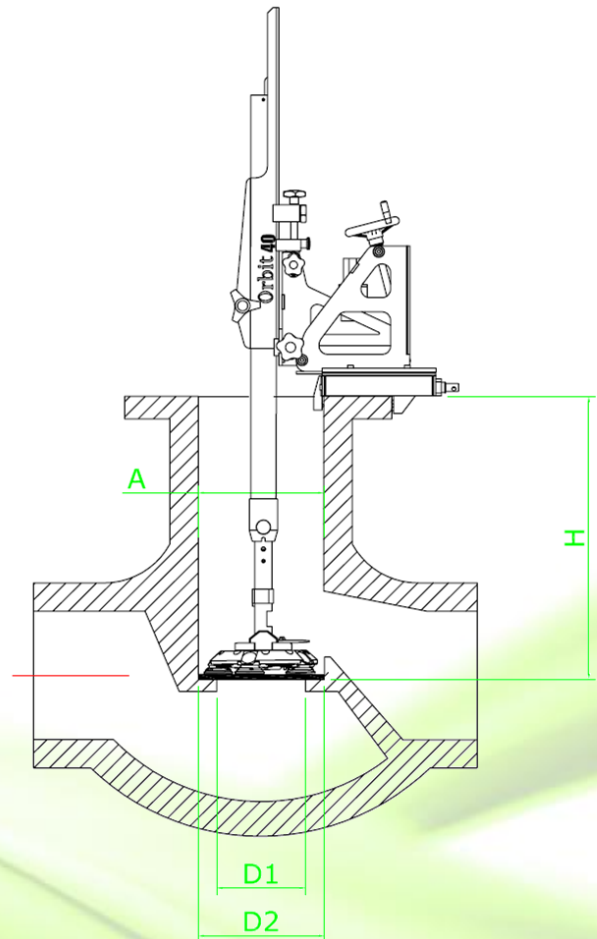
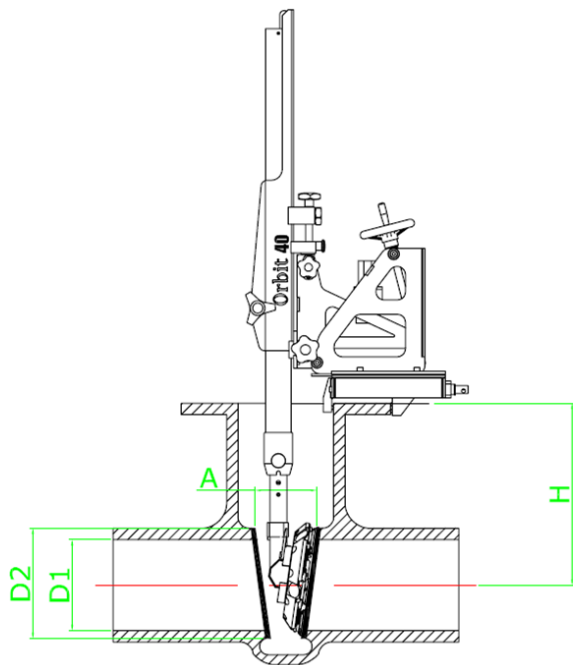
The ORBIT 40 is designed and equipped for the tough life on-site. The machine is built from stainless steel and high quality aluminum parts and components. All parts, components, tools and materials are packed in a robust, watertight, crush- and dustproof trolley case. The case is compartmentalized to assist with the organization of the machine parts for inventory control.



## Orbit 40 Standard Scope of Supply

Universal Mounting Bracket
Air Control Set (regulator, block valve, low pressure hose).
Machine arm, telescopic adjustable for submerging depth up to 1000 mm / 40" with integrated air drive.
Machine arm, telescopic adjustable for submerging depth up to 1500 mm / 60"
(3) Orbital, gear driven head for use from 6"- 40".
(5) extendable grinding arms for drive head I & II
(7) extendable grinding arms for drive head III
set of 7 pcs extension plates 50mm / 2" for wider seats .
Wedge bracket for machining Gate valve wedges.
Extended set of self-adhesive Aluminum Oxide grinding foil rings (consumables)
100 pcs. - Ø35 mm. / 1.4" - P 500 -30 mł - for accurate and fine finish.
100 pcs. - Ø50 mm. / 2.0" - P 500 -30 mł - for accurate and fine finish.
100 pcs. - Ø35 mm. / 1.4" - P240 - 60 mł - for pre-finishing.
100 pcs. - Ø50 mm. / 2.0" - P240 - 60 mł - for pre-finishing.
100 pcs. - Ø35 mm. / 1.4" - P150 - 100 mł - high material removal rate.
100 pcs. - Ø50 mm. / 2.0" - P150 - 100 mł - high material removal rate.
Set hand tools for machine handling, adjustment and set-up.
Flashlight. (LED)
Measuring tape for measuring the pre-set adjustments.
Operating manual in English.
Light weight, but robust carrying case (trolley) for the machine and all accessories.

## Drawings



### Gate Valve Set up

A	72 mm / 2.8"	(Minimum)
D1	ø125 / 4.9"	(Minimum)
D2	ø1100 / 43.3"	(Maximum)
H	165 mm / 6.49"	(Minimum)
	1500 mm / 59.0"	(Maximum)

### Globe Valve Set up

A	190 mm / 7.48"	(Minimum)
D1	ø 125 mm / 4.9"	(Minimum)
D2	ø 1100 mm / 43.3"	(Maximum)
H	180 mm / 7.0"	(Minimum)
	1500 mm / 59.0"	(Maximum)