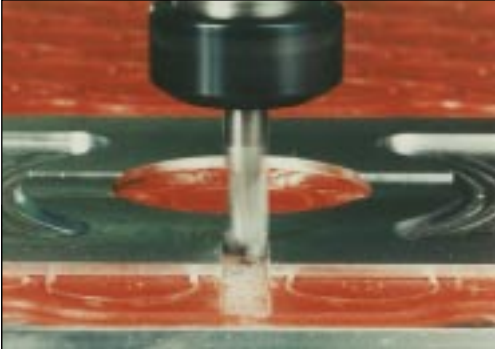


Witte VAC-MAT™ The vacuum system you can cut right into!



All vacuum chucks have a common factor. In order to maintain their clamping function, air leaks must be avoided at all cost.

With VAC-MAT™ it's different.

VAC-MAT™'s properties allow the operator to cut or drill right through the mat and machine contours, without losing vacuum.

To clamp simply place the mat on the special VAC-MAT™ chuck and press the workpiece onto the mat.



No seals are required, no covering over with foil, no suction bores to block off, all these procedures are not applicable when using VAC-MAT™. VAC-MAT™ allows cutting or drilling right through as well as contour milling of workpieces through to their base.

Certain workpiece sizes can even be machined on 5-sides in one clamping procedure, thereby considerably reducing idle times compared to conventional clamping methods.

Height adjustable stops available as an optional extra

VAC-MAT™ Application

What is VAC-MAT™?

It is a thin soft polymer mat with many spaced out vacuum points, suckers in different sizes with a fine hole in each centre and a raised lip. On the underside there are six lugs which locate in the special VAC-MAT™ chuck. Further there are grid shaped grooves which distribute the vacuum to each of the small holes. A lip right around the outside edge ensures no leakage.

What size is VAC-MAT™?

All VAC-MATs are 2,5x200x 300 mm. The tolerance lies at +/- 0,02mm. To increase the size of the working area, the modular VAC-MAT™ chucks are connected to one another and VAC-MAT™ s are simply placed on as described.

Is VAC-MAT™ reusable?

The working life of a VAC-MAT™ depends on the number and size of cuts made into the mat during machining.

What kinds of VAC-MAT™ are available?

There are 4 types of mat available:

- Blue mats, standard for normal machining
- Green mats, slightly harder in consistency for heavier machining
- Red mats, only to be used once
- Black mats, are used to seal the areas not required on the VAC-MAT™ chucks during machining.

VAC-MAT™ allows fast and economical machining with only one clamping procedure. Not only is clamping very fast but break-outs, deburring and hand finishing become a thing of the past.

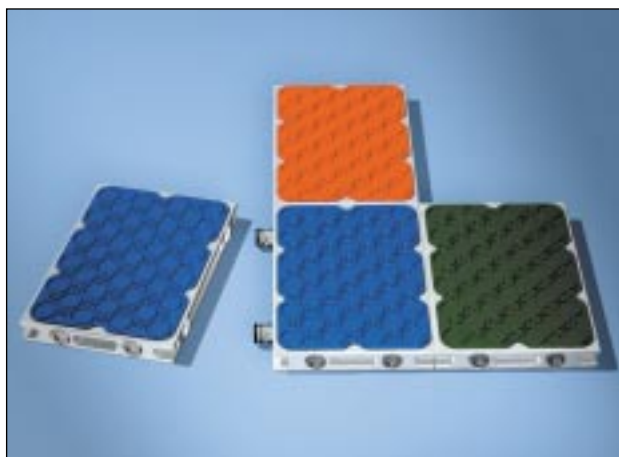
The modular concept allows connection of several vacuum chucks. The vacuum supply to each chuck continues through the connection elements.

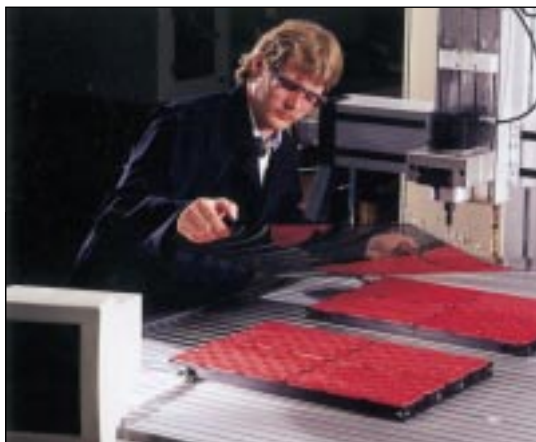


The lugs underneath the mat guarantee fast and accurate positioning of the VAC-MAT™ on the special modular vacuum chuck

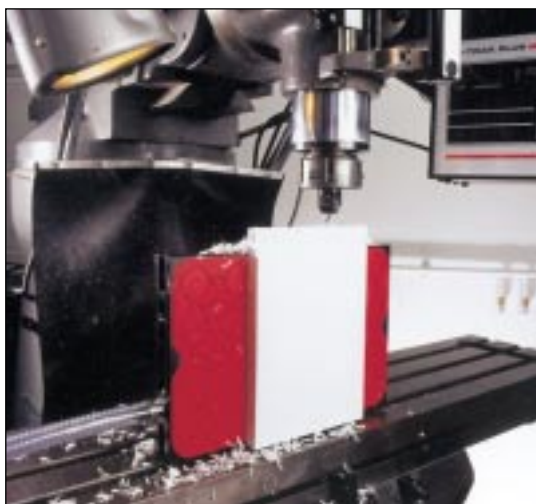
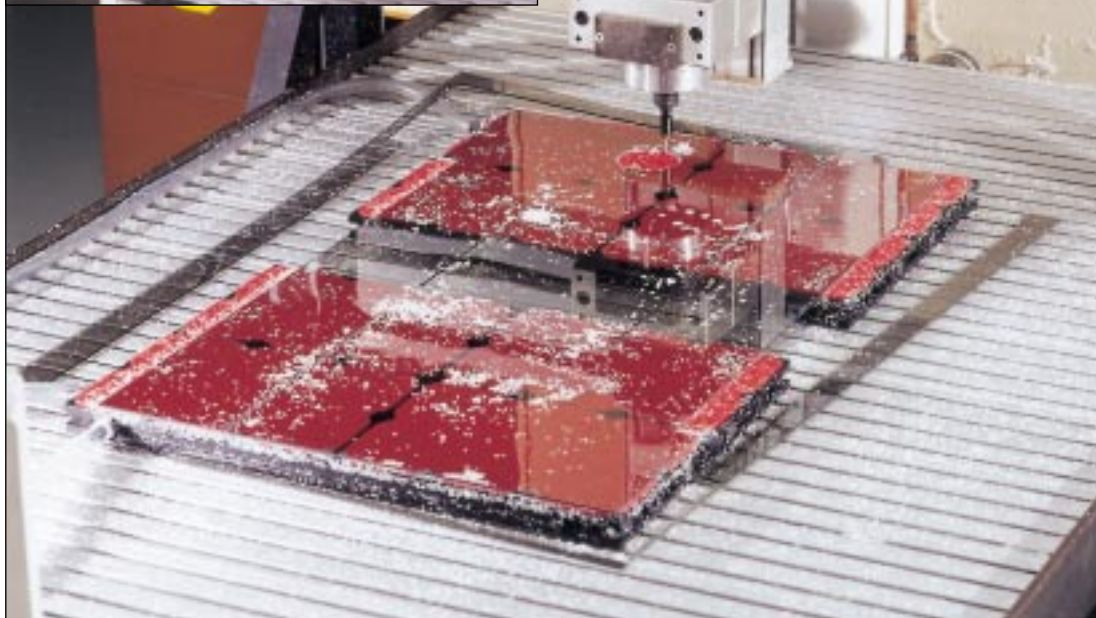


5 sided-milling an aperture on a VAC-MAT™ clamping system





Thin workpieces can also be clamped and machined securely but gently using VAC-MAT™



Vertical clamping can also be carried out reliably with VAC-MAT™



Witte VAC-MAT™ in use;

Above:

Direct milling through a work-piece on a modular plate 400x600 mm.

Right:

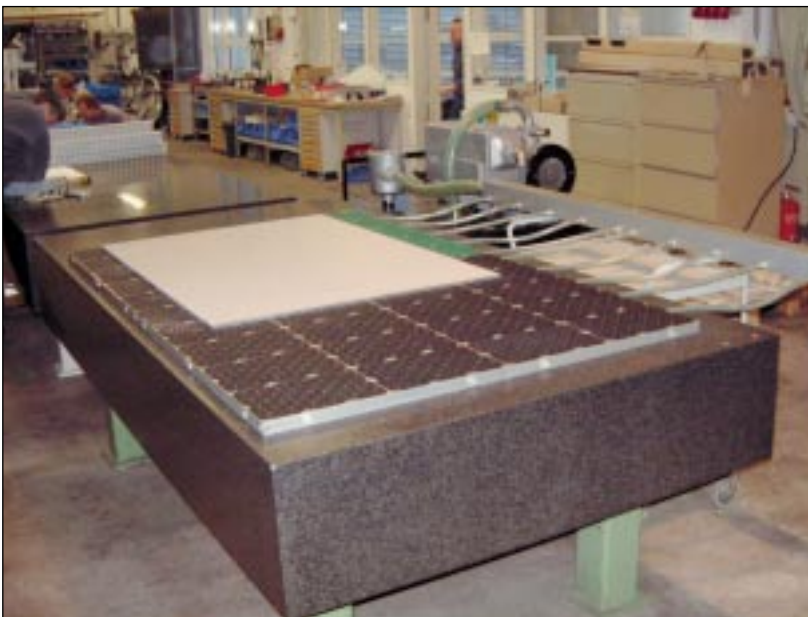
Fast handling, short clamping times of the workpiece all in one step.



Above:

Witte VAC-MAT™- modular plates can be joined according to required size, the vacuum is maintained by the connection elements.





Combined special clamping system made out of Witte VAC-MAT™ and FLIP-POD™

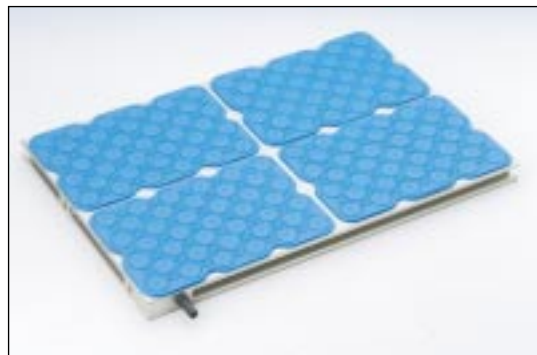
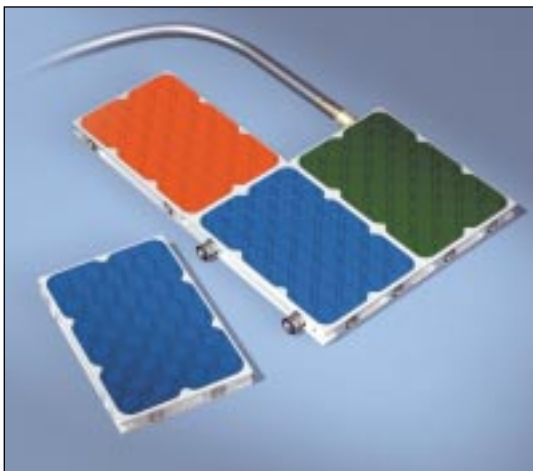
Left:
Modular-built Witte VAC-MAT™- chuck 1600x 1200 mm

Starter-Sets

These starter sets are designed to give the operator a complete solution to set up and start machining immediately. All plates are modular and can be extended with a simple connector at any time.



Modular VAC-MAT™ plates are made of high-tensile aluminium. Steel versions are available on request.



	No.	Description	lxwxh	kg
I	81759	VAC-MAT™ Modular plate	300x200x30	5
II	82837	VAC-MAT™ Modular plate	300x400x30	10
III	82825	VAC-MAT™ Modular plate	600x400x30	20

Supply includes:

1 x tail end, 1 x coupling, 7 x blind plug, 10 x O-ring
 8 x crosspieces, 10 x VAC-MAT™ blue
 1m vacuum suction hose with wire spiral 18/12



Additional, height adjustable end stops are also available. For fixing end stops, threaded holes have to be made in the plate by the customer.

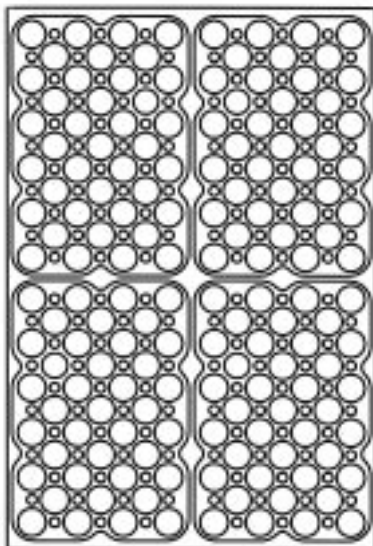
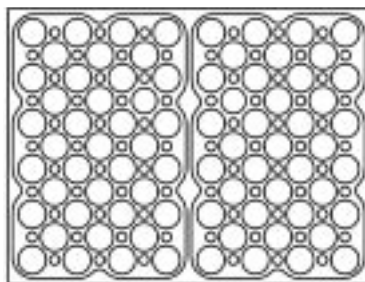
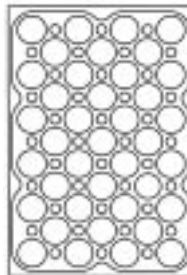
Height adjustable end stops in form of eccentric washers

No.	pcs.	ø mm	height of plate mm	knurled nut/ grub screw
85405	6	20	32,5	M5
85409	9	27	38,0	M6
85410	12	30	48,0	M6

The delivery includes:

Sketch with dimension for threaded holes, suitable knurled nuts and grub screws. The threaded holes must be made by the customer.

Special dimensions are available on request!



Modular VAC-MAT™ plates are made of high-tensile aluminium. Steel versions are available on request.

Accessories

VAC-MAT™s

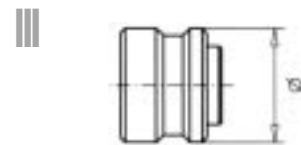
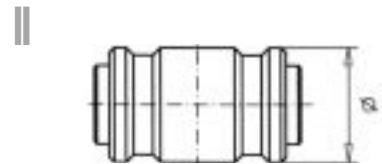
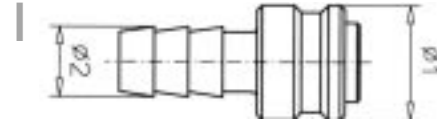


No.	Name	lxwxh
11030	VAC-MAT™/ blue , normal machining	300x200x2,5
11053	VAC-MAT™/ green , heavier machining	300x200x2,5
11548	VAC-MAT™/ red , only used once	300x200x2,5
11029	VAC-MAT™/ black , for covering areas not required during machining	300x200x2,5

Accessories

VAC-MAT™ chuck accessories

	No.	Name	Dimension
I	81761	Hose connector incl. O-Ring	$\varnothing 1 = 23$ $\varnothing 2 = 14$
II	81762	Vacuum chuck adapter incl. O-Ring	$\varnothing 1 = 23$
III	81774	Plug incl. O-Ring	$\varnothing 1 = 23$
	11032	O-Ring	$\varnothing 16 \times 2,5$
IV	28331	Tool for setting up	$\varnothing 15 \times 120$
V	89092	VAC-MAT™ - Video	VHS



IV



V **Demonstration VAC-MAT™ video available. Please ask.**

