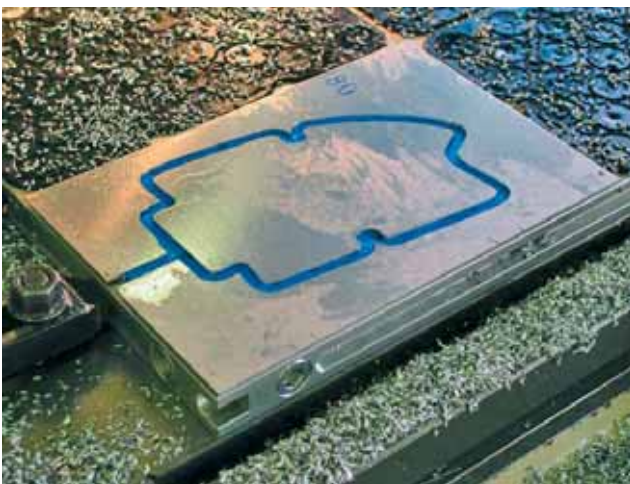


Witte VAC-MAT™

The vacuum system
you can cut right into!



Application

Wide spectrum of different
workpiece forms can be clamped

- Grinding
- Milling
- Drilling
- Five sided treatment including milling
into the Vac-Mat

Advantages

- Strong hold down force
- Clamping surface with a high friction value
- Milling through of outer and inner contours
- Precise and exact cut outs due to the fact that
the workpiece can be milled through into the
VacMat leaving a clean cut edge

Handling

- Set up time reduced to seconds as fitting
of single rubber seals become obsolete
- Surface friendly material which avoids
scratching of workpiece surface area
- No extra clamping fixture needed

Witte 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. On the mat under surface 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-MAT™s are 2,5 x 200 x 300 mm. The tolerance lies at +/- 0,04mm and concave upto 0,1mm. 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?

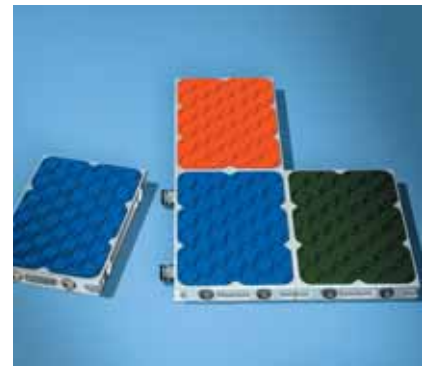
The working life of a VAC-MAT™ depends on the number and size of cuts made into the mat during machining.

Operating temperature for VAC-MAT™

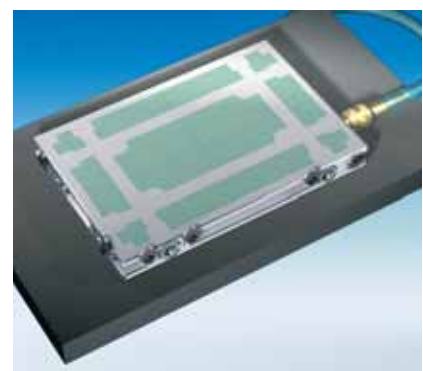
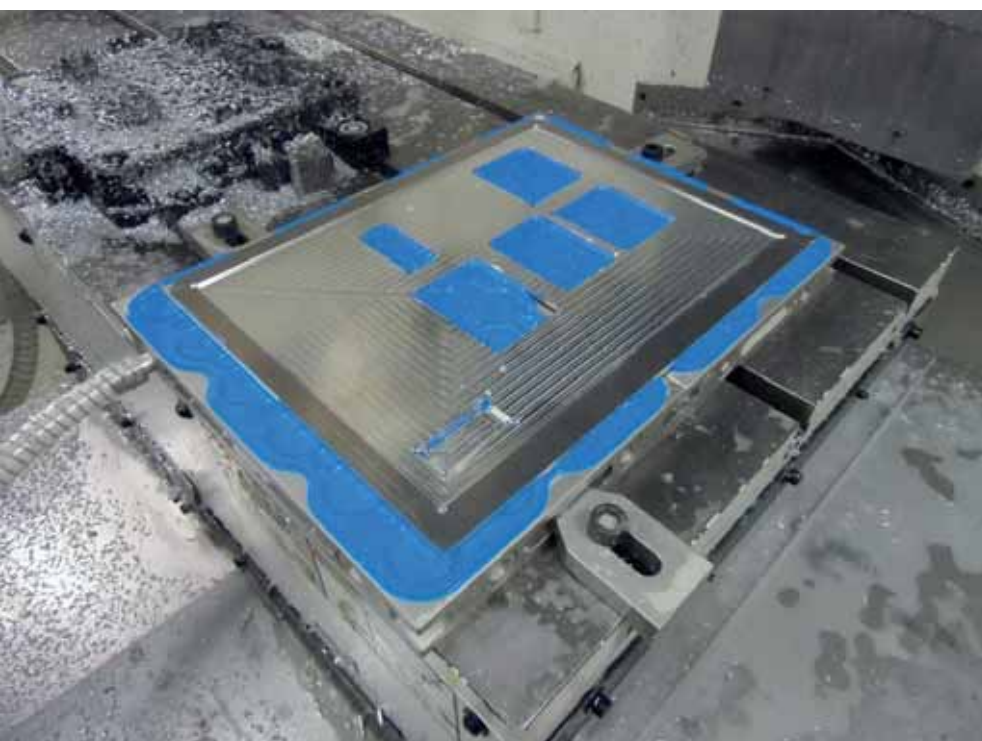
Vac-Mat™, available in RED, BLUE and GREEN versions can be used at 40°C without any limitations



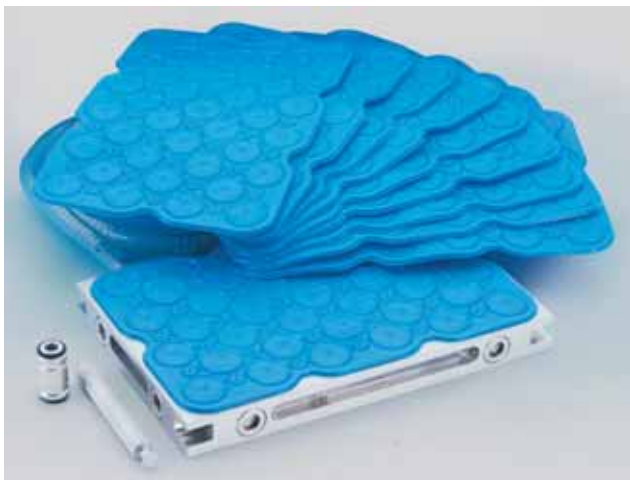
The lugs underneath the mat guarantee fast and accurate positioning of the VAC-MAT™ on the special modular vacuum chuck



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



In modular chucks additional holes can be drilled in the green areas to allow insertion of pins for positioning. Further information on page 114.



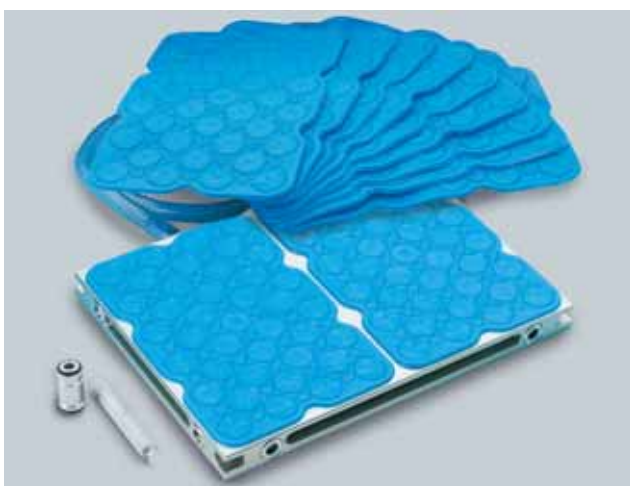
VAC-MAT™ Starter Set

single, 6,4kg

Nr.	Pcs	Name
81759	1	Modul chuck 300x200

Supply includes:

- 10 VAC-MAT/blue
- Vacuum chuck adapter plate
- Vacuum suction hose 1m incl. connector
- 2 clamps for mounting chuck
- Assembly tool



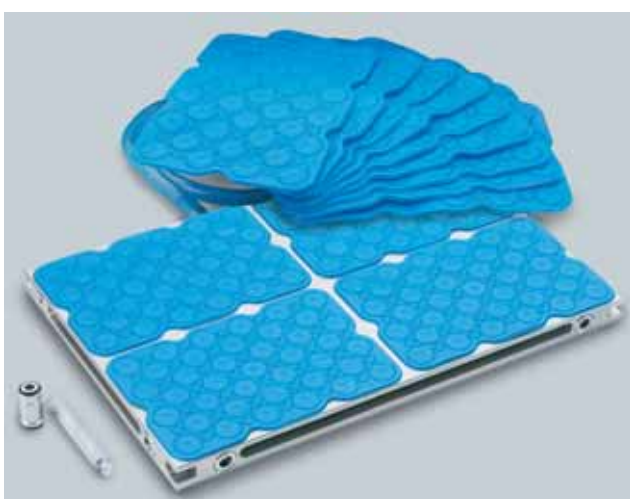
82837 VAC-MAT™ Starter Set

double, 10,8kg

Nr.	Pcs	Name
82837	1	Modular chuck 300x400

Supply includes:

- 10 VAC-MAT/blue
- Vacuum chuck adapter plate
- Vacuum suction hose 1m incl. connector
- 2 clamps for mounting chuck
- Assembly tool



82825 VAC-MAT™ Starter Set

four times, 20kg

Nr.	Pcs	Name
82825	1	Modular chuck 600x400

Supply includes:

- 10 VAC-MAT/blue
- Vacuum chuck adapter plate
- Vacuum suction hose 1m incl. connector
- 2 clamps for mounting chuck
- Assembly tool

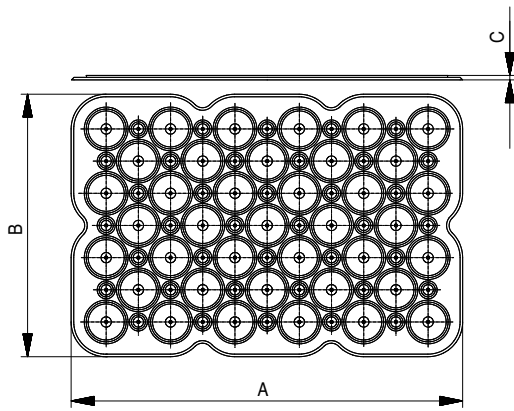
Other dimensions on request.

Dedicated chucks are also available but Vac-Mats™ are 200x300 mm, any larger surface area must be a multiple of 200x300 mm.

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



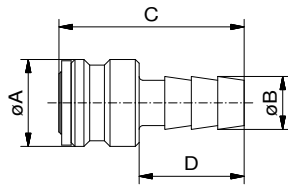
Machine table (3,3x11 meters) supplied with VAC-MAT™ Vacuum clamping. The photo shows the fixture at a aircraft manufacturer, where pockets are milled into a surface area covered with 468 Mats.



Witte VAC-MAT™

in different versions

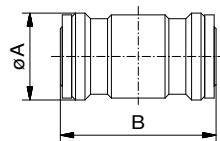
Nr.	Color	A	B	C	
11030	blue, normal machining	300	200	2,5	102
11053	green, heavier machining	300	200	2,5	102
11548	red, only used once	300	200	2,5	102
11029	black, for covering areas not required during machining	300	200	2,5	102



Hose connector

incl. O-Ring

Nr.	A	B	C	D	for hose ϕ	
81761	23	14	49	31	$\phi 18/12$	20



Vacuum chuck adapter

incl. O-Ring

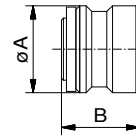
Nr.	A	B	
81762	23	41,6	32



Plug

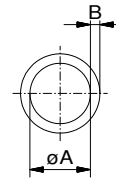
incl. O-Ring

Nr.	A	B	
81774	22,3	20,7	18



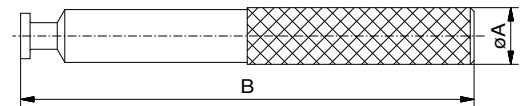
Sealing

Nr.	A	B	
34798	16	2,5	1



Tool for setting up

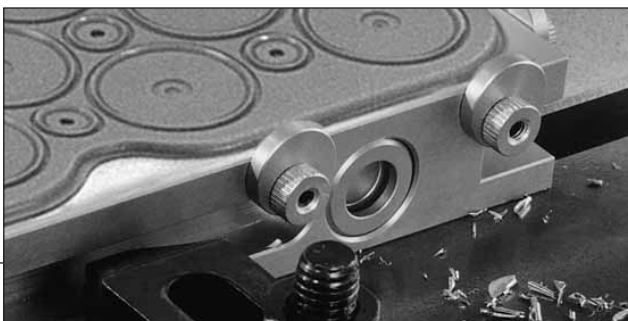
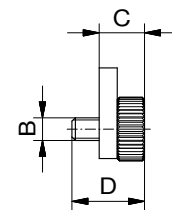
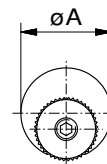
Nr.	A	B	
28331	15	120	60



Height adjustable end stops

in form of excentric washers:

Nr.	for height of plate	A	B	C	D	Pcs	
85405	32,5	20	M5	9	16	6	38
85409	38,0	27	M6	11	20	9	90
85410	48,0	30	M6	12	20	12	132



For fixing end stops, threaded holes have to be drilled into the plate by the customer.