

## FLIP-POD™ Vacuum system

### ALU FLIP-POD FLIP-POD



#### Where to use this technology

- For mechanical milling or grinding
- Drilling
- Making threaded bores
- Mainly for large workpieces made out of wood
- Plastic, Glass or cast metals.
- Suitable for sawn or raw surfaces.

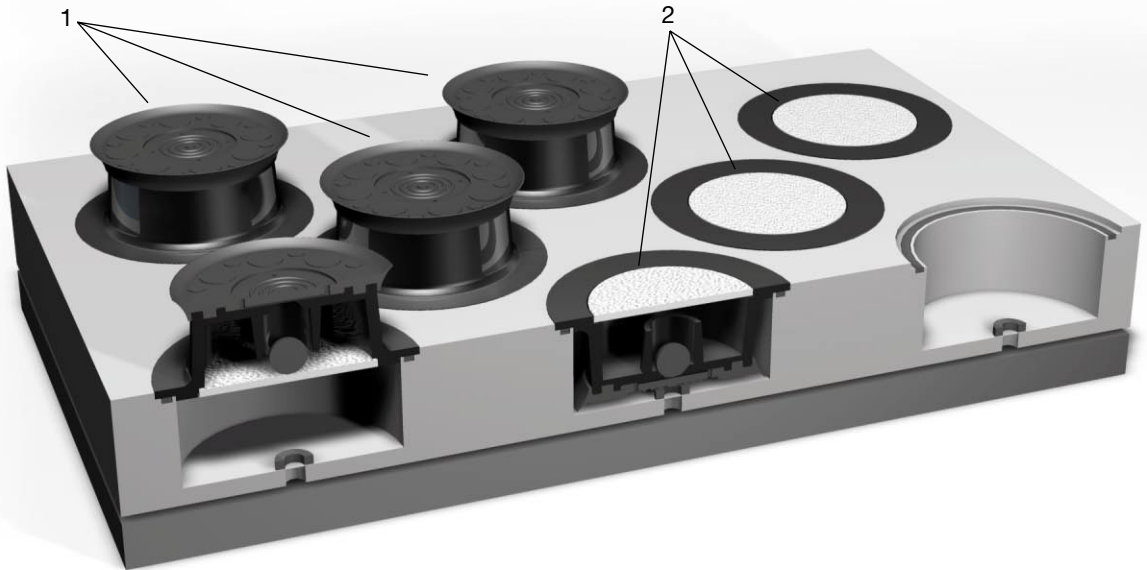
#### Advantages

- Strong hold down forces enable the use of large machines.
- Bevels, contours and radii can be performed on the upper and lower Workpiece surfaces.
- Clamping dimensions can be changed within seconds to conform to new workpiece Sizes
- Can be used on most machinetables.

#### Handling

- Pods are the contact surfaces for the workpiece
- Simply activate or deactivate the pods by turning them around.
- To clamp a workpiece effectively 6-8 pods are advised.
- This modular system can be extended for larger clamping surfaces.

## FLIP-POD™ Vacuum system



### Function

The round polymer pods (1) protrude out of the pod plate when in use. The pods not required lie in a recess cavity (2) of the pod plate. Simply flipping them over activates or deactivates the pods. The valve ball which stops the vacuum supply when the pod is resting, opens the valve and the vacuum system is activated. All active pods stand 27mm above the pod plate surface, allowing contour milling and recess cutting on the outer contours.



The crosssection shows

- FP Sucker
- FP Unit
- FP Polymer ball
- and
- FP Filter

In the pod plate you will find

- FP Large gasket
- FP Center hole gasket

## FLIP-POD™ Vacuum system



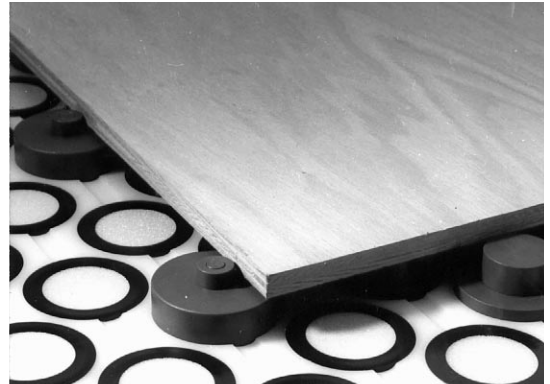
Application demonstratng active and inactive FLIP-POD™s

### Fixed and retractable locator pods

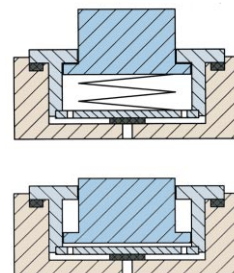
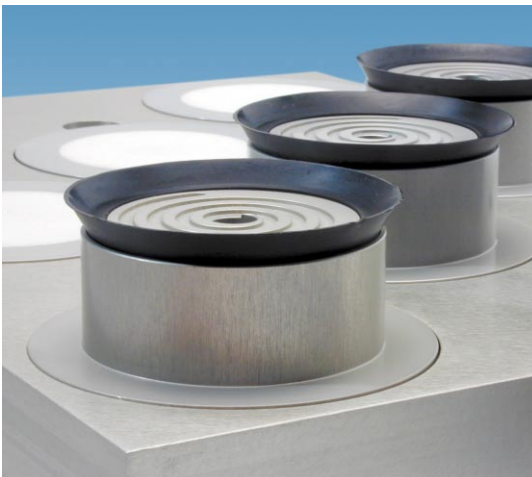
ensure high accuracy. Locator pods are available in both fixed and retractable versions, either of which fit in any pod cavity.

After positioning the workpiece the retractable pods are drawn back into the pod plate as soon as vacuum is switched on, allowing a free path for the cutting tool.

**Alu FLIP-POD™** has an accurate, defined work-piece surface. Height tolerance is only 50µ. They are suitable for face machining on both surfaces, especially of metallic workpieces.



Retractable and fixed locator pods



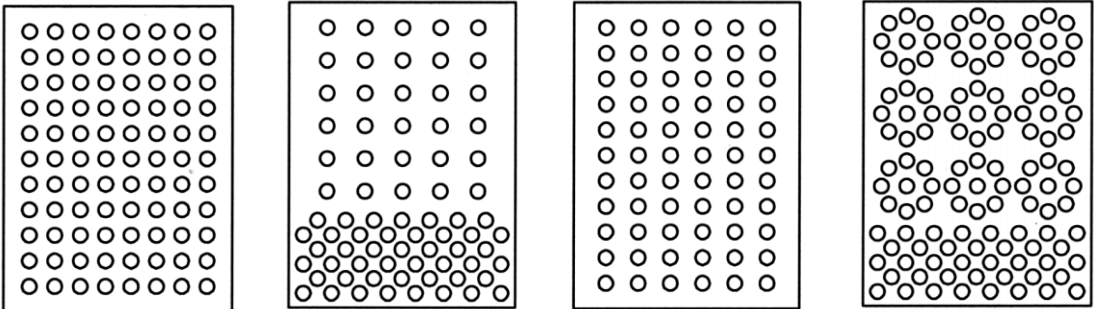
Cross section  
of retractable Pod

## ALU FLIP-POD™ Vacuum system



Pod -Plate, ready for use, with ALU FLIP-POD™'s

The sketches show a range of possible pod panel designs.



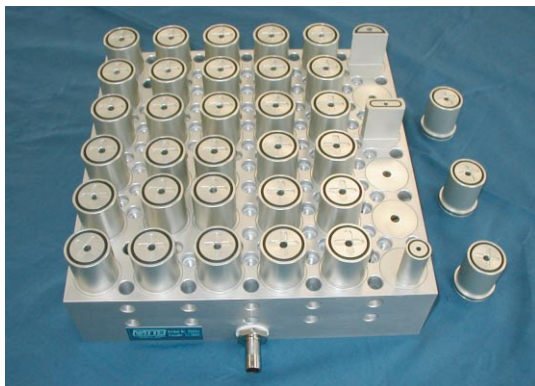
The user can choose a panel design that best suits the parts being machined. The pod panel can be laid out in almost any design and combination.

## ALU FLIP-POD™ Accessories and spare parts

	No.	Name
I	84408	FP Complete with seal, filter element and ball (11394 and 11395 order seperately)
II	30584	FP Seal for Alu-Pod
III	12124	FP Polymer Ball ø15,8mm
IV	12125	FP Filter ø61x3mm
V	11395	FP Large Seal for Pod Plate ø88x4,5mm
VI	11394	FP Center hole gasket for pod cavity ø38x6mm

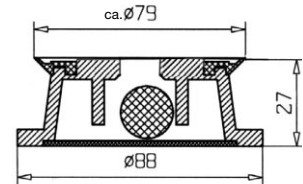


Witte ALU-FLIP-POD™ in its basic state without seals



Custom built Flip Pod Chuck with alu base plate

I



II



III



IV



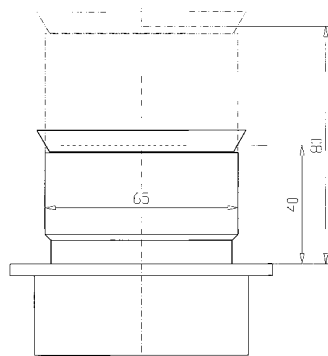
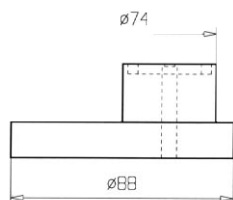
V



VI



## ALU FLIP-POD™ Vacuum system



	No.	Name
I	85328	FP Alu Half-Pod incl. 1m seal $\varnothing 5\text{mm}$
II	90860	Height adjustable ALU Flip-Pod
III	90628	Height adjustable ALU Flip-Pod (special shape)



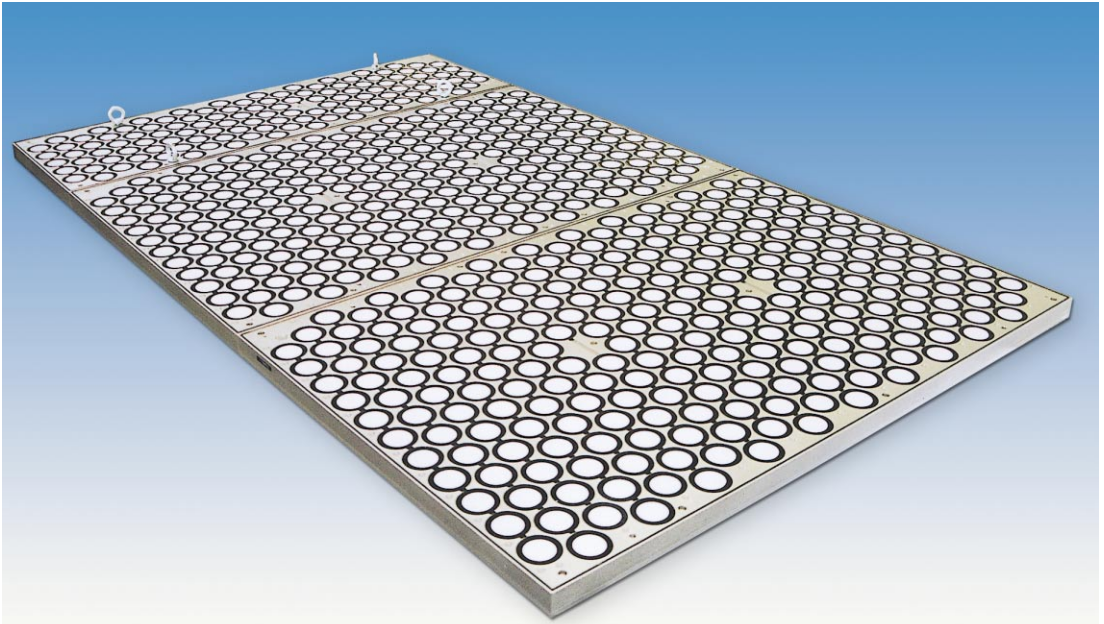
ALU FLIP-POD™



FLIP-POD™-clamping system for a CNC deburring machine, used on aeroplane parts



## FLIP-POD™ Vacuum system



FLIP-POD™ vacuum chuck 6m long made up of three segments

### FLIP-POD™ Sets, polymer version

No.	Description	Area/Grid	PODS
<b>83100</b>	FLIP-POD™ Set 100	1m <sup>2</sup> /100mm	100
<b>83200</b>	FLIP-POD™ Set 200	2m <sup>2</sup> /100mm	200
<b>83300</b>	FLIP-POD™ Set 300	3m <sup>2</sup> /100mm	300
<b>83400</b>	FLIP-POD™ Set 400	4m <sup>2</sup> /100mm	400

### Supply FLIP-POD™ Set 100 includes

No.	Name	Pcs
<b>11392</b>	FP Unit	100
<b>11393</b>	FP Sucker	100
<b>11394</b>	FP Center gasket	100
<b>11395</b>	FP Large gasket	100
<b>82136</b>	Retract. loc. pods	3
<b>82137</b>	Fixed loc. pods	3

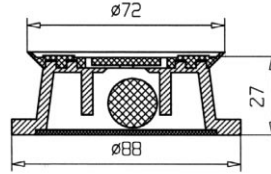
FLIP-POD™ with sucker



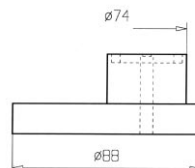
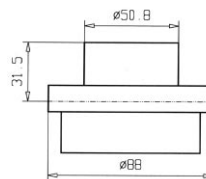
FLIP-POD™ alternative version



## FLIP-POD™ Accessories and spare parts



	No.	Description
I	11393	FP Sucker, which is mounted onto the unit
II	11392	FP Unit complete with filter element and ball
III	11395	FP Large seal for the upper seal slot
IV	11394	FP Center hole seal for the pod cavity
V	82136	FP Retractable locator pod automatically retract when vacuum is applied
VI	82138	FP Polymer-Half-Pod (1/2)



## FLIP-POD™ Accessories and spare parts

	Best.-Nr.	Bezeichnung
I	11396	FP Lift ring 1/2"
II	85662	FP Transfer Pod For easy positioning of large workpieces over the Flip-Pods
III	13422	Center-Line-FLIP-POD™- short
IV	13423	Center-Line-FLIP-POD™- long
V	82137	FP Fixed locator pods incl. unit, pins and spacer disks
VI	89093	FLIP-POD™-Video on CD-ROM

