



Vacuum clamping technology for CNC machine tools



## **Schmalz**

## Enthusiastic customers Excellent innovations Reliable future

Innovative vacuum clamping technology from Schmalz guarantees efficient production processes for CNC machining centres in the wood and plastics industry. Schmalz systems can be fitted as original equipment on new machines. With the Innospann systems even existing machining centres can be retrofitted at any time.

Creative ideas, expertise and closeness to our customers have made Schmalz the world's market leader in the area of vacuum clamping technology.

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#### Innospann

Vacuum clamping systems which can be retrofitted easily on any CNC machining centre. More efficient production thanks to extreme reductions in the setup times. Maximum flexibility due to a modular system. The optimum solution for one-off jobs and small lots.

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#### **Spare parts for VC-G**

Universal vacuum clamping system with hose connections for use on smooth tables. Maximum holding forces, high level of flexibility thanks to the wide range of available suction blocks, high precision and damage-free clamping of workpieces.

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Vacuum clamping systems for CNC machines with console tables. Enormous flexibility due to the rapid positioning of the suction blocks on the console and removal of unneeded blocks. Maximum precision and repeatability during machining.

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## Spare parts for clamping systems produced by other companies (VC-B and VC-S)

Suction blocks to fit the vacuum clamping systems of other manufacturers. Optimum price-performance ratio coupled with top quality and functionality for efficient production.



## The world of vacuum technology

# Excellent references High product quality First-class customer relationships

For more than ten years, Schmalz has been producing vacuum clamping technology for CNC machining centres and is today the world leader in this sector. All leading international machine manufacturers use these systems in their CNC machining centres and deliver these to their customers all over the world – from large woodworking companies to small cabinetmaker workshops.

Vacuum clamping technology from Schmalz complies with the highest quality requirements. With the aid of this technology, the machine setup times can be drastically reduced, resulting in considerable improvements in the productivity and economical operation of CNC machine tools.

A highly-qualified staff and a worldwide sales network with our own subsidiaries in many countries guarantee fast and competent support for our domestic and foreign customers.

Many awards prove the high level of ecological and social responsibility of the company.







## Schmalz vacuum clamping technology

## Leading clamping technology Efficient production processes Comprehensive services



Reduce setup times ...

Innovative ideas, system versatility and closeness to our customers have made Schmalz the world market leader in vacuum clamping technology.

Schmalz clamping technology is the intelligent answer to the continually increasing demands – today and in the future. Tailor-made systems are available for a wide range of different application areas. The systems can be fitted as original equipment or, in the case of the Innospann systems, also retrofitted on existing CNC machining centres at any time, permitting their productivity and economical operation to be improved decisively. The potential savings which result from the shorter setup times are enormous and the clamping systems pay for themselves in a very short time.

Our unbeaten expertise and our wide range of different clamping systems ensure that you can find the optimum solution for your individual application. Our specialists will gladly visit your factory and advise you in the selection of the right system. Our comprehensive service package is rounded off by a spare-part management system for both replacement suction plates and complete suction blocks.







## **Upgrading with Innospann**

## Can be retrofitted on machines of any type Modular design Decisive reductions in setup times

Any CNC machining centre can be retrofitted easily and quickly with the Innospann vacuum clamping systems.

The modular design permits individual clamping solutions for the efficient production of one-off jobs and small lots – regardless of the manufacturer and type of the CNC machining centre. The modular system ensures maximum flexibility.

For the standard table types:

- Smooth table
- Grid table
- Console table

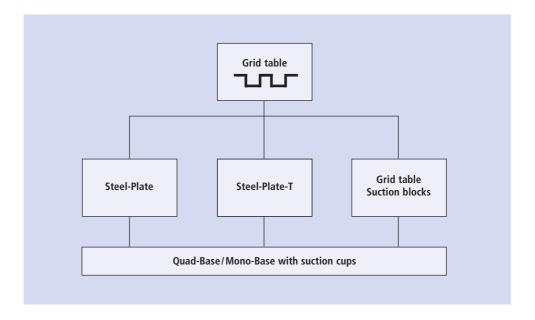
We offer four basic Innospann systems:

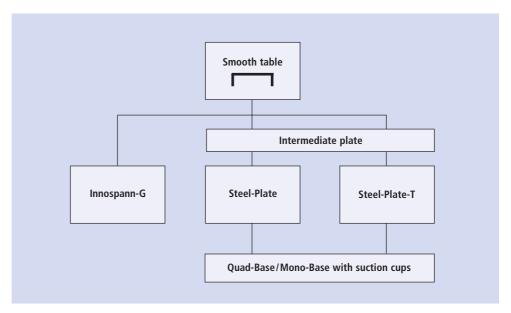
- Innospann Steel-Plate
- Innospann Steel Plate-T
- Innospann grid table suction blocks
- Innospann-G

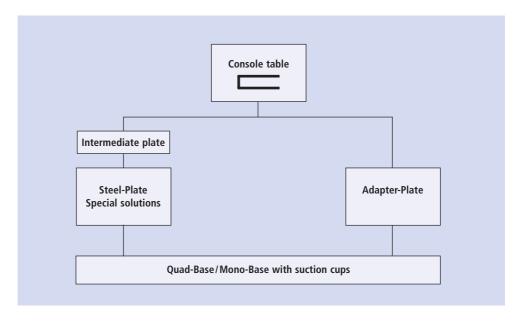
Depending on the machining task, various combinations of bases and suction cups can be positioned flexibly on these basic systems.

The use of the Innospann systems permits reductions of up to 80% in the setup times, with the corresponding positive effects on the productive working and running times of the machines.

## Innospann systems overview

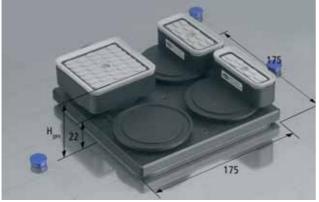








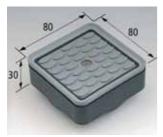
Innospann Steel-Plate



Quad-Base



Mono-Base

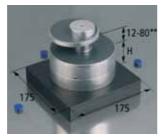


Suction cup 1



30 40

Suction cup 2



Mechanical clamp

## **Innospann Steel-Plate**

The universal solution for retrofitting on all CNC machining centres

The Steel-Plate is a 3 mm thick stainless-steel plate or, if the tolerance requirements are not so high, a galvanised steel plate (version Steel-Plate-LC). The plate is cut to size to fit on the existing machine table.

Both Quad-Bases and Mono-Bases can then be positioned freely on the Steel-Plate. Laser-etched markings are provided on the Steel-Plate (not version LC) to permit easier positioning. Unused vacuum apertures are sealed with the aid of sealing magnets, which must be ordered separately as accessories (Page 10).

The Innospann Steel-Plate is suitable for the flexible upgrading of all machines with smooth, grid or console tables. In the case of a grid table, the Steel-Plate can be mounted directly in the slots of the machine table. For smooth tables, there are two alternatives: slots can be machined directly into the wooden table or (similar to the solution for console tables) a separate intermediate plate made of wood or Phenolic can be produced to order and mounted on the existing table.

The Steel-Plate is available in two different versions:

- For Quad-Bases with valves spaced 150 mm apart (approx. 40 sealing magnets per m² required)
- For Mono-Bases with valves spaced 75 mm apart (approx. 160 sealing magnets per m² required)

Steel-Plate for Quad-Base		
Туре	Dimensions	Article No.
Steel-Plate for Quad-Base	as required	10.01.14.99999
Steel-Plate-LC for Quad-Base	as required	10.01.14.99999
Quad-Base	175x175x22 mm*	10.01.15.00001
Suction cup 1	80x80x30 mm	10.01.15.00003
Suction cup 2	80x40x30 mm	10.01.15.00004
Suction cup 3	80x28x30 mm	10.01.15.00005

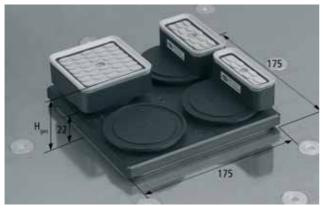
Туре	Dimensions	Article No.
Steel-Plate for Mono-Base	as required	10.01.14.99999
Steel-Plate-LC for Mono-Base	as required	10.01.14.99999
Mono-Base	80x80x22 mm*	10.01.15.00009
	80x80x42 mm*	10.01.15.00078
	80x80x67 mm*	10.01.15.00079
Suction cup 1	80x80x30 mm	10.01.15.00003
Suction cup 2	80x40x30 mm	10.01.15.00004
Suction cup 3	80x28x30 mm	10.01.15.00005

 $<sup>^{\</sup>star}$  The overall height (H $_{\rm ges}$ ) results from the 3 mm Steel-Plate + height of mounting (Mono-Base or Quad-Base) + height of cup

Additional clamping devices		
Туре	Dimensions	Article No.
Mechanical clamp	175x175xH=52 mm	10.01.15.00270
	175x175xH=72 mm	10.01.15.00140
	175x175xH=97 mm	10.01.15.00254
	**Clamping range = 1	2 – 80 mm
	Clamping force 700 N	
	Stroke 10 mm	



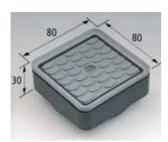
Innospann Steel-Plate-T



Quad-Base-T



Mono-Base-T

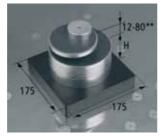


Suction cup 1





Suction cup 2



## **Innospann Steel-Plate-T**

The flexible and efficient upgrade solution for all CNC machine tools

Steel-Plate-T and Steel-Plate-T-LC are further developments of the standard Steel-Plate: the use of magnetic valves means that it is no longer necessary to seal unused vacuum apertures manually with sealing magnets. Mono-Base-T and Quad-Base-T can be placed directly on the Steel-Plate-T and positioned freely within the area equipped with the valves. The valves then automatically supply the suction devices with vacuum. The suction blocks are initially held in position by magnets, and the workpiece is gripped by the vacuum.

Just like the Steel-Plate, the Innospann Steel-Plate-T is suitable for all machines with smooth, grid or console tables and it is installed in the manner as the Innospann Steel-Plate.

Steel-Plate-T is available in two different versions:

- For Quad-Base-T with valves spaced 150 mm apart
- For Mono-Base-T with valves spaced 75 mm apart

Steel-Plate-T for Quad-Base-T		
Туре	Dimensions	Article No.
Steel-Plate-T for Quad-Base-T	as required	10.01.14.99999
Steel-Plate-T-LC for Quad-Base-T	as required	10.01.14.99999
Quad-Base-T	175x175x22 mm*	10.01.15.00153
Suction cup 1	80x80x30 mm	10.01.15.00003
Suction cup 2	80x40x30 mm	10.01.15.00004
Suction cup 3	80x28x30 mm	10.01.15.00005

Steel-Plate-T for Mono-Base-T		
Туре	Dimensions	Article No.
Steel-Plate-T for Mono-Base-T	as required	10.01.14.99999
Steel-Plate-T-LC for Mono-Base-T	as required	10.01.14.99999
Mono-Base-T	80x80x22 mm*	10.01.15.00145
	80x80x42 mm*	10.01.15.00154
	80x80x67 mm*	10.01.15.00155
Suction cup 1	80x80x30 mm	10.01.15.00003
Suction cup 2	80x40x30 mm	10.01.15.00004
Suction cup 3	80x28x30 mm	10.01.15.00005

<sup>\*</sup> The overall height (H<sub>ges</sub>) results from the 3 mm Steel-Plate + height of mounting (Mono-Base or Quad-Base) + height of cup

Additional clamping devices		
Туре	Dimensions	Article No.
Mechanical clamp	175x175xH=52 mm	10.01.15.00273
	175x175xH=72 mm	10.01.15.00272
	175x175xH=97 mm	10.01.15.00256
	**Clamping range = 12	2 – 80 mm
	Clamping force 700 N	
	Stroke 10 mm	

Suction cup 3 Mechanical clamp 7



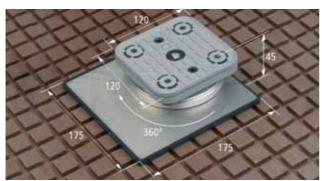
Innospann slotted table suction blocks



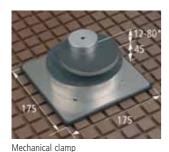
Mini-Plate-R



Quad Base-R



VC-R 120 x 120 mm



112

Pop-up Pin-R

## Innospann grid table suction blocks

The quick and flexible solution for machines with grid tables

The grid table suction blocks can be mounted very quickly. They permit differing overall heights and thus even complex machining of the edges of the workpiece.

They are suitable for use on CNC machine tools with slots spaced on a 30x30 mm grid (slot size 5x5 to 7x7 mm) and on a 50x50 mm grid (slot size 5x5 to 7x7mm). The blocks are placed directly in the existing slots and equipped with the necessary suction cups for the workpiece to be machines. Differing overall heights for complex machining of the workpiece edges can be achieved for the Mini-Plate-R and Quad-Base-R with the aid of standard spacer rings, which are available as accessories.

#### Mini-Plate-R

Flexible solution: suction blocks can be positioned freely. System consists of Mini-Plate-R, Mono-Base-8 and suction cups Overall height: 45 mm

Туре	Dimensions	Article No.
Mini-Plate-R	175x175x7 mm	10.01.15.00184
Mono-Base-8	80x80x8 mm	10.01.15.00188
Suction cup 1	80x80x30 mm	10.01.15.00003
Suction cup 2	80x40x30 mm	10.01.15.00004
Suction cup 3	80x28x30 mm	10.01.15.00005

#### Quad-Base-R

Standard solution: the suction cups are plugged in and can be turned endlessly. Overall height: 45 mm

Туре	Dimensions	Article No.
Quad-Base-R	175x175x15 mm	10.01.15.00183
Suction cup 1	80x80x30 mm	10.01.15.00003
Suction cup 2	80x40x30 mm	10.01.15.00004
Suction cup 3	80x28x30 mm	10.01.15.00005

#### VC-R 120x120 mm

Top part of block can be turned endlessly. Complete block can be turned eccentrically on the base plate. Top suction cups replaceable.

Type A with additional lift-off system.

Туре	Dimensions	Article No.
VC-R 120 x120	175x175x45 mm	10.01.12.01102
VC-R 120 x120 A	175x175x45 mm	10.01.12.01057

Mini-Plate		
Туре	Dimensions	Article No.
Grid size 50x50 mm	212x212x8 mm	10.01.14.00004
Grid size 30x30 mm	212x212x8 mm	10.01.14.00014
Grid size 27,5x27,5 mm	212x212x8 mm	10.01.14.00017
Other	Other	10.01.14.99999

Additional clamping facilities		
Туре	Dimensions	Article No.
Mechanical clamp	175x175x45 mm	10.01.15.00244
*Clamping range = 12 – 80 mm, Clamping force 700 N, Stroke 10 mm		

#### Note:

Stop systems such as the Pop-up Pin-R are shown in the accessories on Page 10.



Mono-Base-G



Mono-Base-G

## Innospann Mono-Base-G

#### For flexible positioning of workpieces

The Innospann System Mono-Base-G with hose connections is designed for universal use on all CNC machine tools with smooth tables. It ensures damage-free clamping of workpieces, high precision and maximum holding forces.

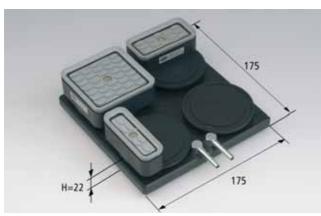
The Mono-Base-G has two vacuum connections: The vacuum applied to the first connection fixes the Mono-Base-G on the machine table to prevent it from moving during the handling of the work-piece. The vacuum applied to the second connection clamps the workpiece and the Mono-Base-G precisely and securely.

Mono-Base-G		
Туре	Dimensions	Article No.
Mono-Base-G	80x80x55 mm*	10.01.15.00128
Mono-Base-G	80x80x70 mm*	10.01.15.00156
Suction cup 1	80x80x30 mm	10.01.15.00003
Suction cup 2	80x40x30 mm	10.01.15.00004
Suction cup 3	80x28x30 mm	10.01.15.00005

<sup>\*</sup> The overall height ( $H_{ges}$ ) results from the height of the Mono-Base + the height of the cup. Hose connector Ø 6 mm



Quad-Base-G



Quad-Base-G

## Innospann Quad-Base-G

Universal clamping solution with hose connections for smooth machine tables

Just like the Mono-Base-G, this system has two vacuum connections — one to fix the Quad-Base-G and one to clamp the workpiece and the Quad-Base-G.

The Quad-Base-G can accommodate up to four standard suction cups and is delivered complete with four sealing covers. Standard suction cups and spacer rings for differing overall heights must be ordered separately. For clamping of heavy workpieces, the Quad-Base-G can also be equipped with suction cups with lift-off function (Page 10).

For precise positioning of workpieces, a special Quad-Base-G for mounting of vacuum stops is available.

Quad-Base-G		
Туре	Dimensions	Article No.
Quad-Base-G	175x175x22 mm*	10.01.15.00007
Quad-Base-G Special**	175x175x22 mm*	10.01.15.00008

 $<sup>^{\</sup>star}$  The overall height results from the height of the Quad-Base + height of the cup Hose connector Ø 6.5 mm

#### Note:

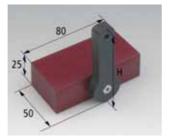
Additional suction blocks for smooth machine tables: see system VC-G, on Pages 12–13.

<sup>\*\*</sup> For vacuum stops, lift-off suction cups etc.

## **Innospann accessories**

## 030 31,5

Vacuum stop

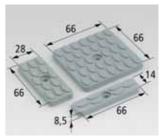


Magnetic stop

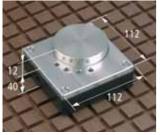


Innospann spare parts

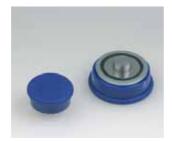
Spacer ring



Friction plate



Pop-up Pin-R



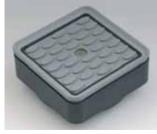
Sealing magnets



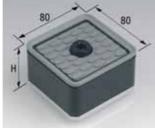
Sealing frame



Filter



Suction cup



Suction cup	Lift-off suction	n cup
Innospann stop s Type	ystem Dimensions	Article No.
Vacuum stop	-	10.01.15.00061
Magnetic stop	H=70 mm	10.01.15.00012
Magnetic sten	U_0E mm	10.01.15.00012

Vacuum stop	-	10.01.15.00061
Magnetic stop	H=70 mm	10.01.15.00012
Magnetic stop	H=95 mm	10.01.15.00013
Magnetic stop	H=120 mm	10.01.15.00014
Pop-up Pin-R 30**	H=40 mm*	10.01.15.000257
Pop-up Pin-R 50**	H=40 mm*	10.01.15.000264

#### Innospann sealing magnets

Unused vacuum apertures on the Steel-Plate must be sealed with the aid of sealing magnets.

Туре	Dimensions	Article No.
Sealing magnets	Ø 17 mm	10.01.14.00003
Sealing magnets	Ø 25 mm	10.01.14.00002

Innospann suction cups		
Туре	Dimensions	Article No.
Suction cup 1	80x80x16 mm	10.01.15.00209
Suction cup 2	80x40x16 mm	10.01.15.00210
Suction cup 3	80x28x16 mm	10.01.15.00211
Suction cup 1	80x80x30 mm	10.01.15.00003
Suction cup 2	80x40x30 mm	10.01.15.00004
Suction cup 3	80x28x30 mm	10.01.15.00005
Lift-off Suction cup	80x80x30 mm	10.01.15.00266
Lift-off Suction cup	80x80x45 mm	10.01.15.00195

Innospann spacer ring for Quad-Base		
Туре	Dimensions	Article No.
For use with Steel-Plate	H=20 mm	10.01.15.00053
and Steel-Plate-T	(with Steel-Plate+Cup=75 mm)	
(H=3 mm)	H=37 mm	10.01.15.00072
	(with Steel-Plate+Cup=100 mm)	

Innospann friction plate for suction cups		
Туре	Dimensions	Article No.
Cup 1	66x66 mm	10.01.15.00017
Cup 2	66x28 mm	10.01.15.00018
Cup 3	66x14 mm	10.01.15.00019

Innospann sealing frames for suction cups		
Туре	Dimensions	Article No.
Cup 1	81x83 mm	10.01.15.00020
Cup 2	81x43 mm	10.01.15.00021
Cup 3	81x31 mm	10.01.15.00022

Innospann filter for friction plate		
Туре	Dimensions	Article No.
Filter	Ø 10 mm	10.07.01.00085

Innospann sealing cords		
Туре	Dimensions	Article No.
For standard suction cup	10x4x1000 mm	10.01.15.00062
For bottom of Quad-Base(-G)	Ø 8x1000 mm	10.07.04.00002

<sup>\*</sup> Pin height, extended: H=52 mm \*\* Pin-R 30 for slot spacing 30x30 mm Pin-R 50 for slot spacing 50x50 mm







## Spare parts for vacuum clamping systems

## Large range of suction blocks Long operating lifetime Easy replacement of suction plates

Vacuum clamping systems from Schmalz are used in machines made by many different manufacturers. Depending on the machine type and the application, the following systems are used:

- VC-G (with hose connections for smooth tables)
- VC-T (hose-free)
- VC-K1 or VC-K2 (for Schmalz consoles with singleand dual-circuit vacuum systems)

Schmalz offers a wide range of spare parts, not only for the Schmalz vacuum clamping systems, but also for systems made by other manufacturers (VC-B and VC-S). All Schmalz products are designed – with respect to quality and functionality – for efficient production.

#### The highlights at a glance:

**Holding force:** suction forces up to 850 N and horizontal forces up to 600 N! Secure fixing – even with high cutting forces!

**Lift-off system:** an integrated lift-off system (option) permits heavy workpieces to be slid across the suction cups without damaging the sealing lips.

**Hose-free versions:** these permit rapid positioning of the suction blocks without hoses getting in the way (no risk of collisions).

**Flexibility:** wide range of suction blocks of different types and with different heights. Continual new developments, such as the Adapter-Plates.

**Dimensional accuracy:** defined mounting points guarantee a dimensional accuracy of up to +/-0.06 mm (measured under standard conditions).

**Lifetime:** high-quality, hard-wearing plastic material guarantees a long operating lifetime.

**Replacement suction plates:** the suction plates can be replaced very quickly and easily.

#### Vacuum blocks VC-G





#### **Applications**

- The proven vacuum clamping system VC-G with hose connection (Hose sleeve D = 10 mm), height h = 100  $\pm$  0.06 mm (depends on type), can be used universally on any CNC machine with a smooth table
- It guarantees damage-free clamping, highest precision and maximum holding forces
- Available as an accessory for all VC-G suction blocks: Hose set, consisting of 1.5 m hose with connection nipples, Article no.: 10.01.12.00203



#### Vacuum blocks VCBL-G 120x120

- · Vacuum block, plastic, with hose connections for smooth tables
- Top and bottom suction plates replaceable

Ordering data vacuum blocks	
Туре	Part NO.
VCBL-G 120x120x100.0	10.01.12.00053
Ordering data spare parts Vacuum block	1
Туре	Part NO.
Suction plate (top)	10.01.12.00010
Suction plate (bottom)	10.01.12.00063



#### Vacuum blocks VCBL-G 120x120 with lifting system

- Vacuum block, plastic, with hose connections for smooth tables
- Top and bottom suction plates replaceable
- The integrated lifting system simplifies positioning of the workpiece

Ordering data vacuum blocks	
Туре	Part NO.
VCBL-G 120x120x100.0 AS	10.01.12.00054
	•
Ordering data spare parts Vacuum block	
Туре	Part NO.
Suction plate (top)	10.01.12.00010
Suction plate (bottom)	10.01.12.00063



#### Vacuum blocks VCBL-G 125x75

- Vacuum block, plastic, with hose connections for smooth tables
- Top and bottom suction plates replaceable
- · For narrow workpieces

Ordering data vacuum blocks		
Туре	Part NO.	
VCBL-G 125x75x100.0	10.01.12.00056	
Ordering data spare parts Vacuum block		
Туре	Part NO.	
Suction plate (top)	10.01.12.00011	
Suction plate (bottom)	10.01.12.00063	

#### Vacuum blocks VC-G





#### Vacuum blocks VCBL-G 120x50

- Vacuum block, plastic, with hose connections for smooth tables
- Top and bottom suction plates replaceable
- · For narrow workpieces

Ordering data vacuum blocks	
Туре	Part NO.
VCBL-G 120x50x100.0	10.01.12.00055
Ordering data spare parts Vacuum block	
Туре	Part NO.
Suction plate (top)	10.01.12.00012
Suction plate (bottom)	10.01.12.00063



#### Vacuum blocks VCBL-G 130x30

- Vacuum block, plastic, with hose connections for smooth tables
- Top and bottom suction plates replaceable, top suction surface with friction plate and sealing rubber
- For narrow workpieces

Ordering data vacuum blocks	
Туре	Part NO.
VCBL-G 130x30x100.0	10.01.12.00059
Ordering data spare parts Vacuum block	
Туре	Part NO.
Type Suction plate (top)	Part NO. 10.01.12.00723
	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
Suction plate (top)	10.01.12.00723



#### Vacuum blocks VCBLS-G 140x115 for templates

- Vacuum block, plastic, with hose connection for smooth tables
- Bottom suction plate replaceable, top suction plate not replaceable
- Top suction plate divided into 2 suction areas: Suction area 1 holds the template, Suction area 2 clamps the workpiece onto the template

Ordering data vacuum blocks	
Туре	Part NO.
VCBLS-G 140x115x75.0	10.01.12.00875
	•
Ordering data spare parts Template suction pad	
Туре	Part NO.
Suction plate (bottom)	10 01 12 00063



#### Mechanical clamp VCMC-G 160x128

- Vacuum block, aluminium, with hose connections for smooth tables
- Mechanical clamp is fixed on the smooth table with the aid of a vacuum circuit
- Narrow and curved workpieces, frameworks, etc. are clamped mechanically by vacuum

#### Ordering data vacuum blocks

or morning manual random morning	
Туре	Part NO.
VCMC-G 160x128x100.0 12-80	10.01.12.00984

\*Clamping range = 12 - 80 mm, Clamping force 700 N, Stroke 10 mm, Hose diameter D = 6 mm

Vacuum blocks VC-T





#### **Applications**

- The hose-free vacuum clamping system VC-T for CNC machining centers with a smooth or grid table
- The vacuum blocks with **height h = 100**  $\pm$  0.06 **mm** (depends on type) can be positioned quickly and freely to match the workpiece
- By means of vacuum the workpiece and vacuum blocks are fixed
- Suitable to retrofit existing CNC-machines



#### Vacuum blocks VCBL-T 120x120

- Vacuum block, plastic, for hose-free clamping system VC-T
- Top suction plate and bottom sealing ring replaceable

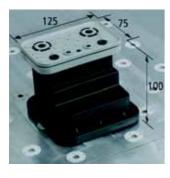
Ordering data vacuum blocks	
Туре	Part NO.
VCBL-T 120x120x100.0	10.01.12.00001
Ordering data spare parts Vacuum block	
Туре	Part NO.
Suction plate (top)	10.01.12.00010
Sealing frame (bottom)	10.01.12.00013



#### Vacuum blocks VCBL-T 120x120 with lifting system

- Vacuum block, plastic, for hose-free clamping system VC-T
- Top suction plate and bottom sealing ring replaceable
- The integrated lifting system simplifies positioning of the workpiece

Ordering data vacuum blocks		
Туре	Part NO.	
VCBL-T 120x120x100.0 AS	10.01.12.00002	
	•	
Ordering data spare parts Vacuum block		
Туре	Part NO.	
Suction plate (top)	10.01.12.00010	
Sealing frame (bottom)	10.01.12.00013	



#### Vacuum blocks VCBL-T 125x75

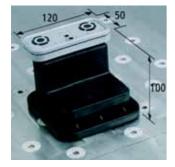
- Vacuum block, plastic, for hose-free clamping system VC-T
- $\bullet$  Top suction plate and bottom sealing ring replaceable
- For narrow workpieces

Ordering data vacuum blocks

Part NO.
10.01.12.00003
Part NO.
10.01.12.00011
10.01.12.00013

#### Vacuum blocks VC-T

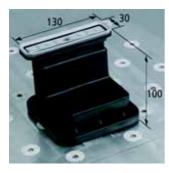




#### Vacuum blocks VCBL-T 120x50

- Vacuum block, plastic, for hose-free clamping system VC-T
- Top suction plate and bottom sealing ring replaceable
- · For narrow workpieces

Ordering data vacuum blocks	
Туре	Part NO.
VCBL-T 120x50x100.0	10.01.12.00004
Ordering data spare parts Vacuum block	
Туре	Part NO.
Suction plate (top)	10.01.12.00012
Sealing frame (bottom)	10.01.12.00013



#### Vacuum blocks VCBL-T 130x30

- Vacuum block, plastic, for hose-free clamping system VC-T
- Top suction plate and bottom sealing ring replaceable, top suction surface with friction plate and sealing rubber
- · For narrow workpieces

Ordering data vacuum blocks	
Туре	Part NO.
VCBL-T 130x30x100.0	10.01.12.00117
Ordering data spare parts Vacuum block	
Туре	Part NO.
Suction plate (top)	10.01.12.00723
Sealing frame	10.01.12.00804
Friction plate	10.01.12.00805
Sealing frame (bottom)	10.01.12.00013



#### Vacuum blocks VCBL-T 120x50 with clamping lever

- · Vacuum block, plastic, for hose-free clamping system VC-T
- Top suction plate and bottom sealing ring replaceable
- With mechanical clamping lever for additional clamping of narrow workpieces

Ordering data vacuum blocks	
Туре	Part NO.
VCBL-T 120x50x100.0 SH	10.01.12.00009
	•
Ordering data spare parts Vacuum block	
Туре	Part NO.
Suction plate (top)	10.01.12.00012
Sealing frame (bottom)	10.01.12.00013



#### Vacuum blocks VCBLS-T 140x115 for templates

- Vacuum block, plastic, for hose-free clamping system VC-T
- Bottom sealing ring replaceable, top suction plate not replaceable
- Top suction plate is divided into 2 suction areas: Suction surface 1 holds the template, Suction surface 2 clamps the workpiece onto the template

Ordering data vacuum blocks	
Туре	Part NO.
VCBLS-T 140x120x75.0	10.01.12.00005
'	
Ordering data spare parts Template suction pad	
Туре	Part NO.
Sealing frame (bottom)	10.01.12.00013

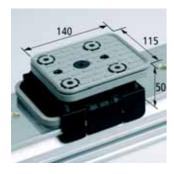
### Vacuum blocks VC-K1





#### **Applications**

- The vacuum clamping system VC-K1 for CNC machines with single-circuit-console-system
- The vacuum blocks, with the **height h** =  $50 \pm 0.06$  **mm** (depends on type), are fixed on the consoles with mechanical clamps to prevent them from moving during the handling of the workpiece
- The workpiece and the vacuum blocks are then securely and precisely clamped with the aid of a vacuum for machining



#### Vacuum blocks VCBL-K1 140x115

- · Vacuum block, plastic, with mechanical clamps for SCHMALZ single-circuit-system
- Top and bottom suction plates replaceable

Ordering data vacuum blocks		
Туре	Part NO.	
VCBL-K1 140x115x50.0	10.01.12.00210	
Ordering data spare parts Vacuum block		
Туре	Part NO.	
Suction plate (top)	10.01.12.00488	
Suction plate (bottom)	10.01.12.00228	

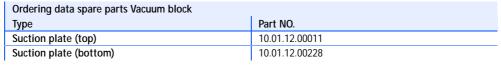


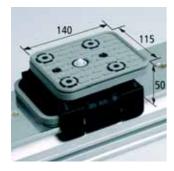
Version for longitudinal mounting (L)

#### Vacuum blocks VCBL-K1 125x75

- Vacuum block, plastic, with mechanical clamps for SCHMALZ single-circuit-system
- Top and bottom suction plates replaceable
- · For narrow workpieces

Ordering data vacuum blocks	
Туре	Part NO.
VCBL-K1 125x75x50.0 Q	10.01.12.00211
VCBL-K1 125x75x50.0 L	10.01.12.00230
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#### Vacuum blocks VCBL-K1 140x115 with sensing valve

- Top and bottom suction plates replaceable
- With integrated sensing valve so that unused vacuum blocks can be left on the aluminium profile

Ordering data vacuum blocks	
Туре	Part NO.
VCBL-K1 140x115x50.0 TV	10.01.12.00369
Ordering data spare parts Vacuum block	
Туре	Part NO.
Suction plate (top)	10.01.12.00488
Suction plate (bottom)	10.01.12.00228

#### Vacuum blocks VC-K1





Version for transverse mounting (Q)

#### Vacuum blocks VCBL-K1 125x75 with sensing valve

- · Vacuum block, plastic, with mechanical clamps for SCHMALZ single-circuit-system
- Top and bottom suction plates replaceable
- With integrated sensing valve so that unused vacuum blocks can be left on the aluminium profile
- · For narrow workpieces

Ordering data vacuum blocks		
Туре	Part NO.	
VCBL-K1 125x75x50.0 Q TV	10.01.12.00370	
VCBL-K1 125x75x50.0 L TV	10.01.12.00371	
Ordering data spare parts Vacuum block		
Туре	Part NO.	
Suction plate (top)	10.01.12.00011	
Suction plate (bottom)	10.01.12.00228	

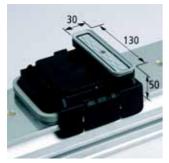


Version for longitudinal mounting (L)

#### Vacuum blocks VCBL-K1 120x50

- Vacuum block, plastic, with mechanical clamps for SCHMALZ single-circuit-system
- Top and bottom suction plates replaceable
- · For narrow workpieces

Ordering data vacuum blocks		
Туре	Part NO.	
VCBL-K1 120x50x50.0 Q	10.01.12.00770	
VCBL-K1 120x50x50.0 L	10.01.12.00769	
'		
Ordering data spare parts Vacuum block		
Туре	Part NO.	
Suction plate (top)	10.01.12.00012	
Suction plate (bottom)	10.01.12.00228	



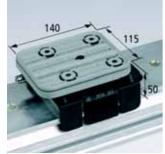
Version for transverse mounting (Q)

#### Vacuum blocks VCBL-K1 130x30

- Vacuum block, plastic, with mechanical clamps for SCHMALZ single-circuit-system
- Top and bottom suction plates replaceable, top suction surface with friction plate and sealing rubber
- For narrow workpieces

Ordering data vacuum blocks

Туре	Part NO.	
VCBL-K1 130x30x50.0 Q	10.01.12.00379	
VCBL-K1 130x30x50.0 L	10.01.12.00378	
Ordering data spare parts Vacuum block		
Туре	Part NO.	
Type Suction plate (top / bottom)	Part NO. 10.01.12.00702 / 10.01.12.00228	
71		



Hose diameter D = 6 mm

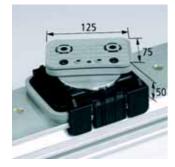
#### Vacuum blocks VCBLS-K1 140x115 for templates

- $\bullet \ \ \text{Vacuum block, plastic, with mechanical clamps for \ \ SCHMALZ \ single-circuit-system}$
- Bottom suction plate replaceable, top suction plate not replaceable
- Top suction plate divided into 2 suction areas: suction surface 1 holds the template (with separate vacuum connection), suction surface 2 clamps the workpiece onto the template

Ordering data vacuum blocks	
Туре	Part NO.
VCBLS-K1 140x115x50.0	10.01.12.00275
• • • • • • • • • • • • • • • • • • •	
Ordering data spare parts Template suction pad	
Туре	Part NO.
Suction plate (bottom)	10.01.12.00228

#### Vacuum blocks VC-K1





#### Vacuum blocks VCBL-K1 125x75 with rotating top 360°

- Vacuum block, plastic, with mechanical clamps for SCHMALZ single-circuit-system
- Top and bottom suction plates replaceable
- Top suction plate can be rotated through 360°

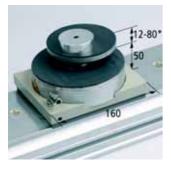
Ordering data vacuum blocks		
Part NO.		
10.01.12.00497		
Ordering data spare parts Vacuum block		
Part NO.		
10.01.12.00011		
10.01.12.00228		



#### Vacuum blocks VCBL-K1 120x50 with rotating top 360°

- Vacuum block, plastic, with mechanical clamps for SCHMALZ single-circuit-system
- Top and bottom suction plates replaceable
- Top suction plate can be rotated through 360°

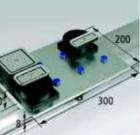
Ordering data vacuum blocks	
Туре	Part NO.
VCBL-K1 120x50x50.0 D-360	10.01.12.00825
	'
Ordering data spare parts Vacuum block	
Туре	Part NO.
Suction plate (top)	10.01.12.00012
Suction plate (bottom)	10.01.12.00228
	· ·



#### Mechanical clamp VCMC-K1 160x128

- Vacuum block, aluminium, with mechanical clamps for SCHMALZ profiles with single-circuit-system
- Mechanical clamp is fixed on the console with the aid of a separate vacum connection
- Narrow and curved workpieces, frameworks, etc. are clamped mechanically by vacuum

Ordering data vacuum blocks	
Туре	Part NO.
VCMC-K1 160x128x50.0 12-80	10.01.12.00781
*Clamping range = 12 - 80 mm, Clamping Force 700 N, Stroke 10 mm, Hose diameter D = 6 mm	



#### Adapter-Plate ISAP-K1 300x200

Ordering data Adapter-Plates

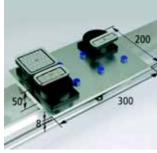
Type

• The Adapter-Plate is used for mounting Quad-Base or Mono-Base and can be mounted directly on SCHMALZ consoles with one-circuit-system

Part NO.

- It is particularly suitable for a careful clamping of narrow and curved workpieces
- Can be used together with standard vacuum blocks

ISAP-K1 300x200x8.0	10.01.14.00025
Ordering accessories data Adapter plate	
Туре	Part NO.
ISMB 80x80x26.0	10.01.15.00214
ISCUP Cup 1 80x80x16.0	10.01.15.00209
ISCUP Cup 2 80x40x16.0	10.01.15.00210
ISCUP Cup 3 80x28x16.0	10.01.15.00211



Vacuum blocks VC-K2 (height 50 mm)





#### **Applications**

- The vacuum clamping system VC-K2 for CNC machines with **two-circuit-console-system**
- The vacuum blocks, with the **height h** =  $50 \pm 0.06$  **mm** (depends on type), are fixed on the consoles by means of vacuum in order to prevent them from moving during the handling of the work-piece
- A second vacuum circuit then clamps the workpiece and the vacuum blocks securely and precisely on the consoles



#### Vacuum blocks VCBL-K2 140x115

- · Vacuum block, plastic, for SCHMALZ profiles with two-circuit-system
- Top and bottom suction plates replaceable

Ordering data vacuum blocks		
Туре	Part NO.	
VCBL-K2 140x115x50.0	10.01.12.00626	
Ordering data spare parts Vacuum block		
Туре	Part NO.	
Suction plate (top)	10.01.12.00488	
Suction plate (bottom)	10.01.12.00798	
	•	



Version for transverse mounting (Q)

#### Vacuum blocks VCBL-K2 125x75

- Vacuum block, plastic, for SCHMALZ profiles with two-circuit-system
- Top and bottom suction plates replaceable
- · For narrow workpieces

Ordering data vacuum blocks		
Туре	Part NO.	
VCBL-K2 125x75x50.0 Q	10.01.12.00644	
VCBL-K2 125x75x50.0 L	10.01.12.00628	
	'	
Ordering data spare parts Vacuum block		
Туре	Part NO.	
Suction plate (top)	10.01.12.00011	
Suction plate (bottom)	10.01.12.00798	



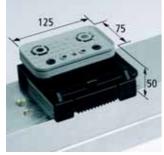
#### Vacuum blocks VCBL-K2 140x115 with sensing valve

- $\bullet$  Vacuum block, plastic, for SCHMALZ profiles with two-circuit-system
- Top and bottom suction plates replaceable
- With integrated sensing valve so that unused vacuum blocks can be left on the console

0	
Ordering data vacuum blocks	
Туре	Part NO.
VCBL-K2 140x115x50.0 TV	10.01.12.00627
Ordering data spare parts Vacuum block	
Туре	Part NO.
Suction plate (top)	10.01.12.00488
Suction plate (bottom)	10.01.12.00798

### Vacuum blocks VC-K2 (height 50 mm)





Version for longitudinal mounting (L)

#### Vacuum blocks VCBL-K1 125x75 with sensing valve

- Vacuum block, plastic, for SCHMALZ profiles with two-circuit-system
- Top and bottom suction plates replaceable
- With integrated sensing valve so that unused vacuum blocks can be left on the console
- · For narrow workpieces

Ordering data vacuum blocks		
Туре	Part NO.	
VCBL-K2 125x75x50.0 Q TV	10.01.12.00645	
VCBL-K2 125x75x50.0 L TV	10.01.12.00637	
Ordering data spare parts Vacuum block		
Туре	Part NO.	
Suction plate (top)	10.01.12.00011	
Suction plate (bottom)	10.01.12.00798	

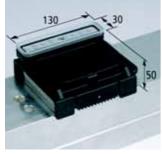


Version for transverse mounting (Q)

#### Vacuum blocks VCBL-K2 120x50

- Vacuum block, plastic, for SCHMALZ profiles with two-circuit-system
- Top and bottom suction plates replaceable
- · For narrow workpieces

Ordering data vacuum blocks		
Туре	Part NO.	
VCBL-K2 120x50x50.0 L	10.01.12.00771	
VCBL-K2 120x50x50.0 Q	10.01.12.00772	
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Ordering data spare parts Vacuum block		
Туре	Part NO.	
Suction plate (top)	10.01.12.00012	
Suction plate (bottom)	10.01.12.00798	



Version for longitudinal mounting (L)

#### Vacuum blocks VCBL-K2 130x30

- Vacuum block, plastic, for SCHMALZ profiles with two-circuit-system
- Top and bottom suction plates replaceable, top suction surface with friction plate and sealing rubber
- For narrow workpieces

Ordering data vacuum blocks		
Туре	Part NO.	
VCBL-K2 130x30x50.0 Q	10.01.12.00646	
VCBL-K2 130x30x50.0 L	10.01.12.00647	
Ordering data spare parts Vacuum block		
Туре	Part NO.	
Suction plate (top / bottom)	10.01.12.00702 / 10.01.12.00798	
Sealing frame	10.01.12.00804	
Friction plate	10.01.12.00805	



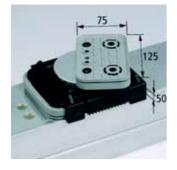
#### Vacuum blocks VCBLS-K2 140x115 for templates

- Vacuum block, plastic, for SCHMALZ profiles with two-circuit-system
- Bottom suction plate replaceable, top suction plate not replaceable
- Top suction plate divided into 2 suction areas: Suction area 1 holds the template, Suction area 2 clamps the workpiece onto the template

Ordering data vacuum blocks	
Туре	Part NO.
VCBLS-K2 140x115x50.0	10.01.12.00636
Ordering data spare parts Template suction pad	
Туре	Part NO.
Suction plate (bottom)	10.01.12.00798

Vacuum blocks VC-K2 (height 50 mm)





#### Vacuum blocks VCBL-K2 125x75 with rotating top 360°

- Vacuum block, plastic, for SCHMALZ profiles with two-circuit-system
- Top and bottom suction plate replaceable
- Top suction plate can be rotated through 360°

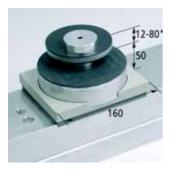
Ordering data vacuum blocks		
Туре	Part NO.	
VCBL-K2 125x75x50.0 D-360	10.01.12.00629	
Ordering data spare parts Vacuum block		
Туре	Part NO.	
Suction plate (top)	10.01.12.00011	
Suction plate (bottom)	10.01.12.00798	



#### Vacuum blocks VCBL-K2 120x50 with rotating top 360°

- Vacuum block, plastic, for SCHMALZ profiles with two-circuit-system
- Top and bottom suction plate replaceable
- Top suction plate can be rotated through 360°

Ordering data vacuum blocks		
Туре	Part NO.	
VCBL-K2 120x50x50.0 D-360	10.01.12.00874	
Ordering data spare parts Vacuum block		
Туре	Part NO.	
Suction plate (top)	10.01.12.00012	
Suction plate (bottom)	10.01.12.00798	

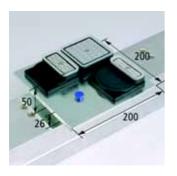


#### Mechanical clamp VCMC-K2 160x128

- Vacuum block, aluminium, for Schmalz profiles with two-circuit system
- Mechanical clamp is fixed on the console by vacuum
- Narrow and curved workpieces, frame parts, etc. are clamped mechanically by vacuum

Ordering data vacuum blocks	
Туре	Part NO.
VCMC-K2 160x128x50.0 12-80	10.01.12.00737
*Clamping range 12, 90 mm Clamping force 700 N Strake 10 mm	

<sup>\*</sup>Clamping range = 12 - 80 mm, Clamping force 700 N, Stroke 10 mm



#### Adapter-Plate ISAP-K2 200x200

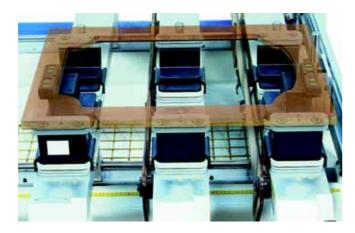
- The Adapter-Plate is used for mounting Quad-Base or Mono-Base and can be mounted directly on SCHMALZ consoles with two-circuit-system
- It is particularly suitable for a careful clamping of narrow and curved workpieces
- Can be used together with standard vacuum blocks

Ordering data Adapter-Plates	
Туре	Part NO.
ISAP-K2 200x200x26.0	10.01.14.00117

Ordering accessories data Adapter plate	
Туре	Part NO.
ISMB 80x80x8.0	10.01.15.00188
ISCUP Cup 1 80x80x16.0	10.01.15.00209
ISCUP Cup 2 80x40x16.0	10.01.15.00210
ISCUP Cup 3 80x28x16.0	10.01.15.00211

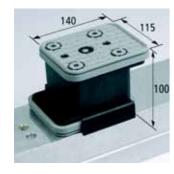
Vacuum blocks VC-K2 (height 100 mm)





#### **Applications**

- The vacuum clamping system VC-K2 for CNC machines with **two-circuit-console-system**
- The vacuum blocks, with the **height h** =  $100 \pm 0.06$  mm (depends on type), are fixed on the consoles by means of vacuum in order to prevent them from moving during the handling of the workpiece
- A second vacuum circuit then clamps the workpiece and the vacuum blocks securely and precisely on the consoles



#### Vacuum blocks VCBL-K2 140x115 / VCBL-K2 140x115 with lifting system (AS)

- Vacuum block, plastic, for SCHMALZ profiles with two-circuit-system
- Top and bottom suction plates replaceable
- The integrated lifting system (in version AS) simplifies positioning of the workpieces

Ordering data vacuum blocks	
Туре	Part NO.
VCBL-K2 140x115x100.0	10.01.12.00445
VCBL-K2 140x115x100.0 AS (with lifting system)	10.01.12.00446

Ordering data spare parts Vacuum block	
Туре	Part NO.
Suction plate (top)	10.01.12.00488
Suction plate (bottom)	10.01.12.00798



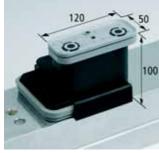
Version for transverse mounting (Q)

#### Vacuum blocks VCBL-K2 125x75

- Vacuum block, plastic, for SCHMALZ profiles with two-circuit-system
- Top and bottom suction plates replaceable
- For narrow workpieces

Ordering data vacuum blocks	
Туре	Part NO.
VCBL-K2 125x75x100.0 Q	10.01.12.00447
VCBL-K2 125x75x100.0 L	10.01.12.00506

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Version for longitudinal mounting (L)

#### Vacuum blocks VCBL-K2 120x50

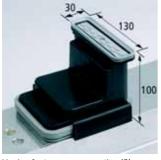
- · Vacuum block, plastic, for SCHMALZ profiles with two-circuit-system
- Top and bottom suction plates replaceable
- For narrow workpieces

Ordering data vacuum blocks	
Туре	Part NO.
VCBL-K2 120x50x100.0 Q	10.01.12.00126
VCBL-K2 120x50x100.0 L	10.01.12.00853

Ordering data spare parts Vacuum block	
Туре	Part NO.
Suction plate (top)	10.01.12.00012
Suction plate (bottom)	10.01.12.00798

Vacuum blocks VC-K2 (height 100 mm)





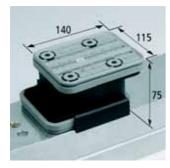
Version for transverse mounting (Q)

#### Vacuum blocks VCBL-K2 130x30

- Vacuum block, plastic, for SCHMALZ profiles with two-circuit-system
- Top and bottom suction plates replaceable, top suction surface with friction plate and sealing rubber
- For narrow workpieces

Ordering data vacuum blocks	
Туре	Part NO.
VCBL-K2 130x30x100.0 Q	10.01.12.00854
VCBL-K2 130x30x100.0 L	10.01.12.00855

Ordering data spare parts Vacuum block	
Туре	Part NO.
Suction plate (top / bottom)	10.01.12.00723 / 10.01.12.00798
Sealing frame	10.01.12.00804
Friction plate	10.01.12.00805



#### Vacuum blocks VCBLS-K2 140x115 for templates

- Vacuum block, plastic, for SCHMALZ profiles with two-circuit-system
- Bottom suction plate replaceable, top suction plate not replaceable
- Top suction plate divided into 2 suction areas: Suction area 1 holds the template, Suction area 2 clamps the workpiece onto the template

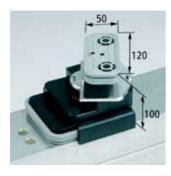
Ordering data vacuum blocks	
Туре	Part NO.
VCBLS-K2 140x115x75.0	10.01.12.00856
	'
Ordering data spare parts Template suction pad	
Туре	Part NO.
Suction plate (bottom)	10.01.12.00798



#### Vacuum blocks VCBL-K2 125x75 with rotating top 90°

- · Vacuum block, plastic, for SCHMALZ profiles with two-circuit-system
- Top and bottom suction plates replaceable
- Top of vacuum block can be rotated through 90°, +/- 45°

Ordering data vacuum blocks	
Туре	Part NO.
VCBL-K2 125x75x100.0 D-90	10.01.12.00851
Ordering data spare parts Vacuum block	
Туре	Part NO.
Suction plate (top)	10.01.12.00011
Suction plate (bottom)	10.01.12.00798



#### Vacuum blocks VCBL-K2 120x50 with rotating top 90°

- Vacuum block, plastic, for SCHMALZ profiles with two-circuit-system
- Top and bottom suction plates replaceable
- Top of vacuum block can be rotated through 90°. +/- 45

• Top of vacuum block can be rotated through 90°, +/- 45°		
Ordering data vacuum blocks		
Туре	Part NO.	
VCBL-K2 120x50x100.0 D-90	10.01.12.00994	
· ·		
Ordering data spare parts Vacuum block		
Туре	Part NO.	
Suction plate (top)	10.01.12.00012	
Suction plate (bottom)	10.01.12.00798	

Vacuum blocks VC-K2 (height 100 mm)





#### Vacuum blocks VCBL-K2 125x75 with rotating top 360°

- Vacuum block, plastic, for SCHMALZ profiles with two-circuit-system
- Top and bottom suction plates replaceable
- Top of vacuum block can be rotated through 360°

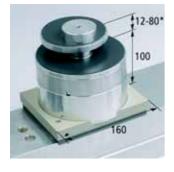
Ordering data vacuum blocks		
Туре	Part NO.	
VCBL-K2 125x75x100.0 D-360	10.01.12.01079	
Ordering data spare parts Vacuum block		
Туре	Part NO.	
Suction plate (top)	10.01.12.00011	
Suction plate (bottom)	10.01.12.00798	



#### Vacuum blocks VCBL-K2 120x50 with rotating top 360°

- · Vacuum block, plastic, for SCHMALZ profiles with two-circuit-system
- Top and bottom suction plates replaceable
- Top of vacuum block can be rotated through 360°

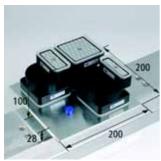
Ordering data vacuum blocks	
Туре	Part NO.
VCBL-K2 120x50x100.0 D-360	10.01.12.01020
	'
Ordering data spare parts Vacuum block	
Туре	Part NO.
Suction plate (top)	10.01.12.00012
Suction plate (bottom)	10.01.12.00798
to the second of	•



#### Mechanical clamp VCMC-K2 160x128

- Vacuum block, aluminium, for Schmalz profiles with two-circuit system
- Mechanical clamp is fixed on the console by vacuum
- $\bullet$  Narrow and curved workpieces, frame parts, etc. are clamped mechanically by vacuum

Ordering data vacuum blocks	
Туре	Part NO.
VCMC-K2 160x128x100.0 12-80	10.01.12.00861
*Clamping range = 12 - 80 mm, Clamping Force 700 N, Stroke 10 mm	



#### Adapter-Plate ISAP-K2 200x200

Ordering data Adapter-Plates

• The Adapter-Plate is used for mounting Quad-Base or Mono-Base and can be mounted directly on SCHMALZ consoles with two-circuit-system

Part NO.

- It is particularly suitable for a careful clamping of narrow and curved workpieces
- Can be used together with standard vacuum blocks

ISAP-K2 200x200x28.0	10.01.14.00029
Ordering accessories data Adapter plate	
Туре	Part NO.
ISMB 80x80x42.0	10.01.15.00078
ISCUP Cup 1 80x80x30.0	10.01.15.00003
ISCUP Cup 2 80x40x30.0	10.01.15.00004
ISCUP Cup 3 80x28x30.0	10.01.15.00005

### Vacuum blocks VC-B

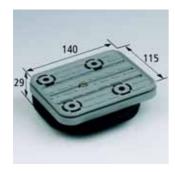
#### Vacuum blocks VC-B





#### **Applications**

- The vacuum clamping system VC-B can be mounted in the suction-pad mountings of CNC machines made by an Italian manufacturer
- The suction blocks with a **height h = 29**  $\pm$  0.1 **mm** (depends on type) are pre-fixed in order to prevent them from moving during handling of the workpiece
- The workpiece and the suction blocks are clamped securely and precisely by the vacuum



#### Vacuum blocks VCBL-B 140x115 with sensing valve

- Plastic vacuum block for the suction-pad mountings of an Italian machine manufacturer
- The upper suction plate is replaceable
- With integrated sensing valve so that unused suction blocks can be left in the mounted position

Ordering data vacuum blocks		
Туре	Part NO.	
VCBL-B 140x115x29.0 TV	10.01.12.01136	
Ordering data spare parts Vacuum block		
Туре	Part NO.	
Suction plate (top)	10.01.12.00228	



#### Vacuum blocks VCBL-B 125x75 with sensing valve

- Plastic vacuum block for the suction-pad mountings of an Italian machine manufacturer
- The upper suction plate is replaceable
- With integrated sensing valve so that unused suction blocks can be left in the mounted position

Ordering data vacuum blocks	
Туре	Part NO.
VCBL-B 125x75x29.0 TV	10.01.12.01152
Ordering data spare parts Vacuum block	
Туре	Part NO.
Suction plate (top)	10.01.12.00011



#### Vacuum blocks VCBL-B 120x50 with sensing valve

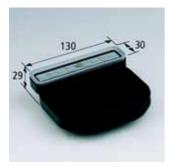
- $\bullet$  Plastic vacuum block for the suction-pad mountings of an Italian machine manufacturer
- The upper suction plate is replaceable
- With integrated sensing valve so that unused suction blocks can be left in the mounted position

	·	
Ordering data vacuum blocks		
Туре	Part NO.	
VCBL-B 120x50x29.0 TV	10.01.12.01151	
Ordering data spare parts Vacuum block		
Туре	Part NO.	
Suction plate (top)	10.01.12.00012	

## Vacuum blocks VC-B

#### Vacuum blocks VC-B

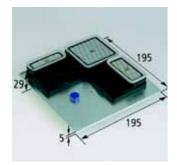




#### Vacuum blocks VCBL-B 130x30 with sensing valve

- Plastic vacuum block for the suction-pad mountings of an Italian machine manufacturer
- The upper suction plate is replaceable, top suction surface with friction plate and sealing rubber
- With integrated sensing valve so that unused suction blocks can be left in the mounted position

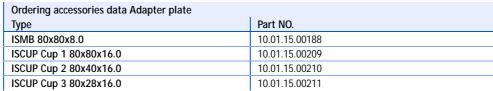
Ordering data vacuum blocks		
Туре	Part NO.	
VCBL-B 130x30x29.0 TV	10.01.12.01149	
Ordering data spare parts Vacuum block		
Туре	Part NO.	
Sealing frame	10.01.12.00804	
Friction plate	10.01.12.00805	



#### Adapter-Plate ISAP-B 195x195

- The adapter plate can accommodate up to four Mono-Bases and be mounted directly in the suction-pad mountings of an Italian machine manufacturer
- The plate is particularly suitable for clamping of narrow and curved workpieces
- Can be used together with standard vacuum blocks

Ordering data Adapter-Plates	
Туре	Part NO.
ISAP-B 195x195x5.0	10.01.14.00109
Ordering accessories data Adapter plate	
T	D+ NO

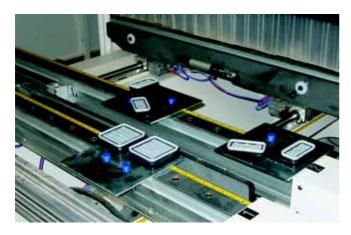




Can be inserted in these adapters

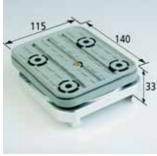
Vacuum blocks VC-S





#### **Applications**

- The vacuum clamping system VC-S can be mounted on the consoles of CNC machines made by an Italian manufacturer
- The suction blocks are pre-fixed with the aid of the consoles in order to prevent them from moving during handling of the workpiece
- The workpiece and the suction blocks are clamped securely and precisely by the vacuum



Bottom view - see ISAP-S1 (page 28)

#### Vacuum blocks VCBL-S1 140x115 with sensing valve

- Turnable (360°) plastic vacuum block for the consoles of the TV system
- The upper suction plate is replaceable
- With integrated sensing valve so that unused suction blocks can be left in the mounted position

Ordering data vacuum blocks	
Part NO.	
10.01.12.01299	
Ordering data spare parts Vacuum block	
Part NO.	
10.01.12.00228	



#### Vacuum blocks VCBL-S1 125x75 / VCBL-S1 120x50 both with sensing valve

- Turnable (360°) plastic suction block for the consoles of the TV system
- The upper suction plate is replaceable

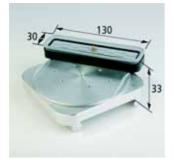
Ordering data vacuum blocks

Suction plate (top) 120x50

• With integrated sensing valve so that unused suction blocks can be left in the mounted position

Туре	Part NO.
VCBL-S1 125x75x33.0 TV	10.01.12.01302
VCBL-S1 120x50x33.0 TV	10.01.12.01301
Ordering data spare parts Vacuum block	
Туре	Part NO.
Suction plate (top) 125x75	10.01.12.00011

10.01.12.00012



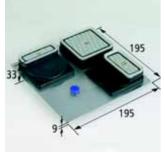
#### Vacuum blocks VCBL-S1 130x30 with sensing valve

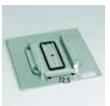
- Turnable (360°) plastic vacuum block for the consoles of the TV system
- The upper suction plate is replaceable, top suction surface with friction plate and sealing rubber
- With integrated sensing valve so that unused suction blocks can be left in the mounted position

with integrated sensing valve so that diased saction blocks can be left in the mounted position	
Ordering data vacuum blocks	
Туре	Part NO.
VCBL-S1 130x30x33.0 TV	10.01.12.01300
Ordering data spare parts Vacuum block	
Туре	Part NO.
Sealing frame	10.01.12.00804
Friction plate	10.01.12.00805

#### Vacuum blocks VC-S







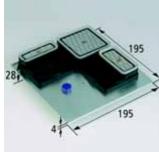
Bottom view ISAP-S1

#### Adapter-Plate ISAP-S1 / ISAP-S4 195x195

- The adapter plate can accommodate up to four Mono-Bases and can be mounted directly on the consoles of the TV systems of an Italian machine manufacturer
- It is particularly suitable for clamping narrow and curved workpieces
- It can be used together with standard suction pads

Ordering data Adapter-Plates		
	Туре	Part NO.
	ISAP-S1 195x195x9.0, width: 72.5 mm	10.01.14.00123
Γ	ISAP-S4 195x195x11.0, width: 109 mm	10.01.14.00231

Ordering accessories data Adapter plate	
Туре	Part NO.
ISMB 80x80x8.0	10.01.15.00188
ISCUP Cup 1 80x80x16.0	10.01.15.00209
ISCUP Cup 2 80x40x16.0	10.01.15.00210
ISCUP Cup 3 80x28x16.0	10.01.15.00211



#### Adapter-Plate ISAP-S2 195x195

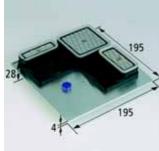
- The adapter plate can accommodate up to four Mono-Bases and can be mounted directly on the mounting studs (stud spacing = 135 mm) for the standard suction pads of an Italian machine manufacturer
- The workpiece and the adapter plate are clamped securely and precisely by the vacuum
- The plate is particularly suitable for clamping of narrow and curved workpieces



Can be inserted in this system

Ordering data Adapter-Plates	
Туре	Part NO.
ISAP-S2 195x195x4.0	10.01.14.00173

Ordering accessories data Adapter plate	
Туре	Part NO.
ISMB 80x80x8.0	10.01.15.00188
ISCUP Cup 1 80x80x16.0	10.01.15.00209
ISCUP Cup 2 80x40x16.0	10.01.15.00210
ISCUP Cup 3 80x28x16.0	10.01.15.00211



Can be inserted in this system

#### Adapter-Plate ISAP-S3 195x195

Ordering data Adapter-Plates

ISCUP Cup 3 80x28x16.0

- The adapter plate can accommodate up to four Mono Bases and can be mounted directly on the rotary suction pads of an Italian machine manufacturer
- The workpiece and the adapter plate are clamped securely and precisely by the vacuum
- The plate is particularly suitable for clamping of narrow, curved workpieces

Туре	Part NO.
ISAP-S3 195x195x4.0	10.01.14.00176
Ordering accessories data Adapter plate	
,	
Туре	Part NO.
Type ISMB 80x80x8.0	Part NO. 10.01.15.00188
- J1	1 41 7 1 7 1

10.01.15.00211

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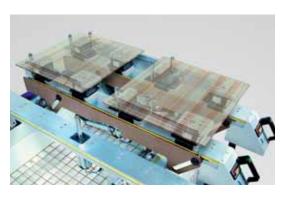


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