

## Contents

Vacuum board	1
Editorial	2
Milling workshop	3
Customer projects	4

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## Precise Mounting

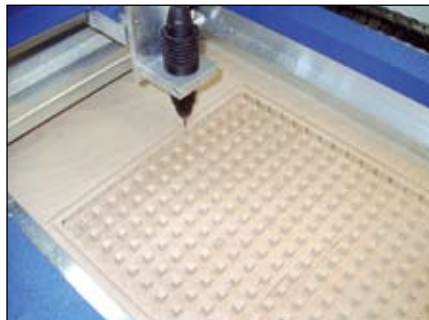
# The STEP-FOUR Vacuum Board

**A great idea led to a prototype can now be produced in series. Read about the history of our vacuum board, which will soon be available.**

For many years now customers have kept asking us to sell a suitable, reasonably priced vacuum board to be mounted on our milling machines.

The fact that we looked everywhere for such a product and were unable to include it in our product range is due to the price of such vacuum systems: a high-quality system is simply too expensive for the average STEP-FOUR user. However, we did not give up so easily, as we owe it to our customers to find an economical solution, and at last we have come up with a practical solution.

The system we were looking had to meet the following criterion: it had to work without the need for an expensive vacuum pump costing several hundred euros. We are of the opinion that a good vacuum cleaner, such as the industrial hoover by the well-known manufacturer Nilfisk, should also be able to do the trick. And costing no more than around € 300. By the way, as we have had excellent results with the GM80 vacuum cleaner at many



■ The interior of the vacuum board and air conduction system.



■ The vacuum-effective layer.

trade fairs and in our own workshop, it has now been included in our product range. Of course, we could have simply adapted a commonly available vacuum board to our systems. We did in fact experiment with one or two, but found the costs to be astronomical, so that solution had to be ruled out.

## Customer Information



[www.step-four.at](http://www.step-four.at)

# STEP FOUR

## Editorial



### At STEP-FOUR Spring is in the air

■ Ernst Ramberger After a very long winter we are looking forward to spring and taking part in the two large trade fairs at Sinsheim and Dortmund in Germany. (Please look at the Trade Fair Calendar for further details.) There we will present the **Xpert** milling system run under Windows to the public. The **Xpert** system consists of **XpertMILL** und **XpertCNC** and has become quite a hit in the last five months. So much interest has been shown that this has led to delays in delivery, for which we apologize and which should be history by the time this issue appears in print. We would like to thank you for your patience and understanding.

Furthermore, we are continuously working on new products, such as a vacuum table for our milling machines and the handset for the **Xpert** system. These prototypes will also be exhibited at the Sinsheim and Dortmund trade fairs.

Our know-how in hot-wire cutting machines has turned us into a competent business partner in the wind power industry, which led to a large order in India. After all, quality and customer satisfaction knows no limits nor borders!



■ STEP-FOUR is continually developing new solutions.

### Own design

It takes time for good ideas to mature, and so it took us quite a while to think up our own design, but we are pleased with the result. Our design team worked together with our highly experienced production team and came up with a well functioning vacuum table for the Basic 540 and Precise 760 models to start with. The prototype has now been manufactured and will make its first public appearance at the FASZINATION MODELLBAU fair in Sinsheim and at the INTER-MODELLBAU in Dortmund. After these trade fairs, the public's response will be evaluated, final modifications will be made and finally we will start producing the vacuum board in series. As for the retail price, we are aiming at between €350 and €400 for the Basic 540 vacuum board. This should enable hobby users to work with a satisfactory vacuum device.

### How does a vacuum table work?

Due to negative pressure, i.e. a difference in pressure between the interior of the vacuum table and the air in the environment, the workpiece is pressed against the board. To what extent the workpiece can be moved depends on the structure of its surface, the difference in pressure and the vacuum mounting layer available under the workpiece.

### Advantages

- Workpieces are mounted smoothly and quickly for milling and engraving
- Suitable for nearly every type of material (aluminium, plastics, GRP, CRP, films, front panels, etc.)
- Uninterrupted milling, as no mounting elements are in the way.
- Mounted smoothly over entire workpiece surface, thereby avoiding warping and buckling.
- Very thin boards can now be mounted.
- Several parts can be mounted simultaneously for series manufacture.
- Very easy to position workpiece.

## In-House Fair

On Saturday, October 14, 2006, the popular STEP-FOUR in-house fair will take place from 10.00 a.m. to 5.00 p.m. for the third time running. Please note the date in your diaries. We look forward to seeing you at our fair.

## Under the Top 5

The well-known business daily "Wirtschaftsblatt" has ranked STEP-FOUR as one of the top companies in Salzburg in the category SME enterprises. We are very proud of this achievement and it means a lot to our "small" enterprise. The complete ranking is listed under [www.wirtschaftsblatt/alc](http://www.wirtschaftsblatt/alc).

## Workshop: Milling and Modelbuilding

# From the Drawing to the Finished Workpiece

Due to last year's huge success we are planning to hold another workshop on the topic of milling and modelbuilding. We have set two dates for this. For modelbuilders who are interested but have as yet no experience in CNC milling and are thinking about starting, STEP-FOUR is offering a Beginners' Workshop. The aim is to understand the basics of milling technology.

- **WORKSHOP I:**  
Friday, July 7, 2006. Please register by June 15, 2006.
- **Workshop II:**  
Friday October 13, 2006, Please register by September 25, 2006
- **Participation fee: € 210.**  
Max. number of participants per session: 6 persons.  
For further information and to register, please contact STEP-FOUR directly.

## Trade Fair Calendar

Once again we are taking part in the large modelbuilding trade fairs in Germany. Come and see us!

March 9 to 12, 2006

**FASZINATION MODELLBAU**  
Sinsheim, Hall 6, booth 6024



April 5 to 9, 2006

**INTERMODELLBAU**  
Dortmund,  
hall 4, booth 4116



## The new Xpert Handset

This remote control for the Xpert CNC controller makes positioning whilst setting the zero point a lot easier and provides the functions: "Start milling", "Pause" and "Abort". The spindle speed and advance feed can also be optimized during the milling process. The Xpert H box with the top quality aluminium CRP cabinet has an ergonomical shape. Rubber rings protect the edges and provide grip on slippery surfaces. Available from May 2006.



## News at STEP-FOUR

### Technician in Jordan

The head of our support department, Franz Tuschka, spent a week in Jordan in February training employees of the company JORDAN AEROSPACE INDUSTRIES ([www.jai.jo](http://www.jai.jo)) how to operate a Precise 1600 milling machine and a PC-CUT 1000 cutting machine. As a letter from the Jordanian company shows, this was a great success: "Franz did a great job with fixing the equipment and training, it was worth the money." This manufacturer of man-carrying sports planes has great confidence in STEP-FOUR's high-quality development and production.

### New Turkish Business Partner

We have started to do business with the ARION company in Istanbul and hope to launch our products on the Turkish market. Many STEP-FOUR machines have already been sold to Turkey and we look forward to cooperating closely with our business partner now that Turkey is set to join the EU in the not too distant future.

### Training Finished

Our third apprentice, Michael Schmalzer, has completed his training at our company and is due to take his final exam at the beginning of April. The entire team at STEP-FOUR wishes him all the best for his future career.

## Customer Projects



■ The Andrascho workshop in Linz used S4CUT to program and manufacture a huge polystyrene sculpture for the Vienna Museum for Applied Arts. This involved processing approx. 150 m<sup>3</sup> of polystyrene.



■ Our longstanding customers, Wolfgang Fuchs and Christian Bauer, minutiously built a model Eiffel Tower with the aid of STEP-FOUR technology. Yet another example showing you can take off with us.



■ Another three large-scale PC-CUT 2500 cutting machines were delivered to India between December and February. And as the generation of wind power is becoming more and more popular, we can look forward to increasing sales.

### Precise 1000 KU Xpert

Valid until April 30, 2006.

The top-speed milling machine for 3D precision processing.

The top machine with ball-screw spindles and guide supports. Incl. AC current spindle system.

#### Comprises:

- Precise 1000 KU milling mechanism, 1000 x 600 x 16 mm travel range, support base, protective cabinet, emergency off switch, Xpert CNC control, standard version of Xpert MILL milling software.
- Module: Xpert [Draw] and Xpert [CAM]
- AC current spindle with converter, 3 – 4 – 6 mm collet chuck
- 24 months warranty, 12 months free telephone and e-mail support

#### Special Offer

EUR 11 690,- excl. VAT

SAVE € 1 500,-

### STEP-FOUR PC-Cut 1000

Valid until April 30, 2006.

The hot-wire cutting machine for professional users, including those in advertising technology.

Includes electronic wire tensioning device and rotary table for bodies such as columns, bottles, and many more.

#### Comprises:

- 2 mounted X/Y portals, 1000 (W) x 1000 (H) x 300-1400 (wire length)
- Drive electronics, cutting transformer, machine base, V4 professional cutting software, rotary table with special software
- On-site installation and competent training in-house (in Germany and Austria)
- 24 months warranty, 12 months free telephone and e-mail support

#### Special Offer

EUR 12 980,- excl. VAT

Save € 2 700,-

## Advertisements

Advertise free of charge in the STEP-FOUR newsletter. Send us your ad by email as a text file (not more than 1 column, 4 lines). We reserve the right to publish and edit your ad.

Please do not hesitate to send us your questions, requests, hints or complaints. Send us photos of workpieces produced with STEP-FOUR machinery.

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