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**November 2005**  
**Issue No. 16**

## Exhibition

October 15 was a beautifully sunny day for our annual exhibition at STEP-FOUR, and we were delighted to receive so many visitors. In a relaxed atmosphere Ernst Ramberger and his team presented STEP-FOUR's current product range and everyone enjoyed an informative day.



■ Visitors enjoying refreshments.



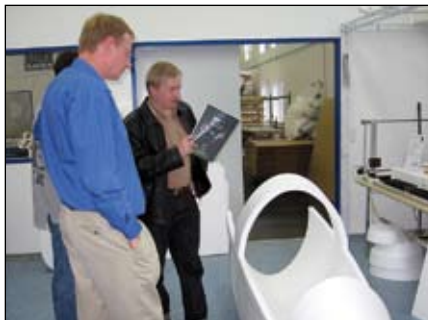
■ There was fun for young and old at STEP-FOUR.



■ Plenty of laughs at the bar...



■ Roman Tutschka showing his skills.



■ Dieter König and the hot-wire cutting miracle.



■ Exhibitions make you thirsty.



■ Franz Tutschka doing a good job pouring the beers.

**Customer  
Information**

# STEP FOUR



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

## Editorial



■ Ernst Ramberger

Autumn is back again. Although the summer was very short and relatively cool, the team at STEP FOUR got rather "hot under the collar" when the new Windows version of the milling software, the Xpert system, was introduced. Fortunately, the thunderstorms we had anticipated did not occur. In fact, the start of sales has been highly successful.

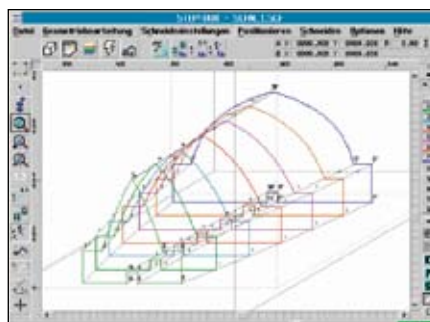
I would like to take this opportunity to thank you, dear customers, for your loyalty. Of course, I would also like to praise all our employees for their tremendous cooperation in getting the new Xpert system launched. Thank you!

As you can see from the content of this newsletter, we do not rest on our laurels, but have several ongoing projects, including Version 4 of the professional cutting software. I hope you enjoy reading the article about it in this issue.

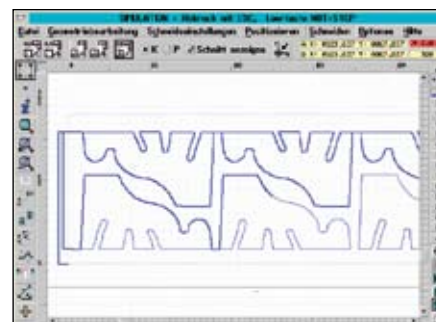
## Company Outing

At the end of August the STEP-FOUR team set off for a wild-water canoeing tour on the river Salzach. Unfortunately (or perhaps Thank God!) the photos of this adventure did not come out. Or would you really like to see us in tight wetsuits, lifejackets and helmets? Wild-water canoeing may make participants look silly, but it is such fun!

# S4CUT V4 Cutting Software



■ simulation



■ segments of 3D-forms

Use the STEP-FOUR's inexhaustible CNC hot-wire cutting options to fulfil your dreams. The software has just what you need and allows you to get good results with a minimum of effort.

### Versatile

Two-axis operation: For manufacturing simple molded parts and letters. Four-axis operation: For producing precise construction parts for segmented prototypes in virtually any size or for making effective 3D objects. Five-axis operation: With the additional fifth axle the options of the two- and four-axle systems are extended even further. Now parts can be processed from several sides simultaneously, thus enabling threaded workpieces to be made.

### Compatible

The STEP-FOUR software is compatible with all modern graphic and CAD programs. Data is exchanged by way of the commonly available HPGL and/or DXF file formats.

### Powerful

The software provides you with a wide range of tools and aids for the purpose of cutting parts. To facilitate batch production it includes the functions copy, rotate, move or mirror, which allow the parts to be placed in a large block of polystyrene with a minimum of cutting waste.

Special tools that define the cutting procedure interactively also support you. On the other hand, if you have complex 3D molds made up of individual segments that have to match perfectly, it is no trouble with the STEP-FOUR system. In this case each cutting part is unique with its own contour. With the STEP-FOUR software you simply allocate the contours by clicking on the mouse. Whatever the shape of the two objects. Only the mechanical removal of the part from the mold has its natural limits. To make sure that the ready cut object corresponds to the one on display, you click on the required material type, and the software uses the predefined parameters to correct the cutting

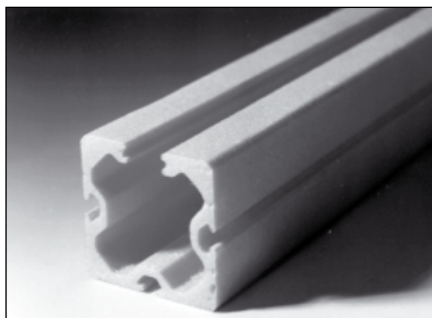
procedure automatically with the aid of a preset burn groove.

### Professional

For over ten years STEP-FOUR hot-wire cutting systems have been produced in series. Numerous ideas and suggestions for improvement have been coming in from the large community of STEP-FOUR users, from model plane builders, advertising technology, the construction industry and many other professions. This input is extremely valuable to us and is taken into account when our engineers design hardware and software products. Another valuable source of experience are the numerous special units. Again, they inspire us to think of applications in series production. Version 4 of the professional STEP-FOUR cutting software is the result of just such a development, and guarantees maximum user friendliness.

**Of course there is an economical upgrade available for Version 3 users. Please refer to the price chart shown here.**

**20% introductory discount  
on the complete system!  
Valid until  
November 30, 2005.**



■ Profile



■ Letter sign



■ Fuselage segments



■ Turntable for displays

Product	VAT not included	Austria inkl. 20% VAT.	Germany inkl. 16% VAT.
Upgrade from V3.0 to V4.0 PROFi	100.00	120.00	116.00
V4.0 LT	295.00	354.00	342.20
Upgrade from V4.0 LT to V4.0 PROFi	490.00	588.00	568.40
V4.0 PROFi	753.00	903.60	873.48
Extension module 1 "Drawing and Object Manipulation"	90.00	108.00	104.40
Extension module 2 "Rotating Axis Control"	370.00	444.00	429.20
Software-protection connector to prepare data on second PC	30.00	36.00	34.80
Dongle to control external systems (only available with software licence)	50.00	60.00	58.00
Interface zur Steuerung von Fremdanlagen, wenn auch Stromabsenkung gewünscht (nur mit Software-Lizenz erhältlich)	136.00	163.20	157.76

All prices are in euros



# Results of our Survey

Many thanks to all those of you who participated in our survey. Your terrific response has given us a great deal of invaluable information so that we can improve our customer service. We will now briefly outline the most important results.

96.5 % said in the survey that they had already visited our website [www.step-four.at](http://www.step-four.at). 32 % said they knew us from the press and technical literature, 26 % had met us at trade fairs, 26 % knew us from the Internet and 15 % had heard about us from friends.

## Many Applications

The participants in the survey use almost 30 different CAD programs. Most people expressed the desire to work with software that runs under Windows, but 3D milling is also very popular. Naming all the application areas is not possible here: there were more than 40.

We are very pleased with the response and will do our best to draw the right conclusions from the survey.



■ In the CNC forum you can find out more about milling, hot-wire cutting and our products. Simply click on "Step 4 CNC forum" under [www.step-four.at](http://www.step-four.at).

## The Winners

Vouchers worth € 750, € 500 and € 250 were awarded to the following prize winners:

■ **1<sup>st</sup> prize** Andreas KONHEISER from Morschen (unfortunately no photo available)



■ **2<sup>nd</sup> prize:** Andreas ULRICH from Eppingen-Mühlbach



■ **3<sup>rd</sup> prize:** Thomas MENZL from Felsberg

## 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 edit and publish your ad.

Please do not hesitate to send us your queries, requests, ideas or complaints. Send us photographs of your workpieces produced with STEP-FOUR machines.

## Internet Project

We are in the middle of revising our STEP-FOUR website in order to provide you with a better service and information on our internet platform. As a result, we hope the [www.step-four.at](http://www.step-four.at) site will soon become one of your favorites.

## CRM System

Quality and reliability are vital ingredients of working together with customers, and cooperation means communication.

In order to improve our internal and external communications thereby making procedures more efficient, we have decided to buy a CRM (Customer Relationship Management) system. An important investment in customer relations and in the future.

## WingDesigner

Wings are best constructed with the WingDesigner of STEP-FOUR. You will be surprised how quickly your wings are constructed with the aid of this program. In spite of its enormous potential and range of options, the software is easy to use even for those who are not professional CAD users. In this program you work in the usual manner, except that the drawing board and pencil are replaced by a screen and mouse.

## World Championship for Soccer Robots



■ The parts were manufactured on a STEP-FOUR milling machine.

At the world championship for soccer robots in Osaka/Japan, the robots “Jupp”, “Sepp” and “Max” from the Nimbro team at the university of Freiburg (South Germany) were highly successful. In the “Humanoid Kid Size League” the robots “Jupp” and “Sepp” came second, and in the “penalty kick competition of the Humanoid Medium Size League” the robot “Max” actually won first prize.

### Autonomous Robots

The autonomous robots are made of complex aluminium and steel milling components and are driven by (modelbuilding) servos. The components were produced on a STEP-FOUR milling machine by Markus and Michael Achtelek from Stockdorf (near Munich). You may remember Michael from issue no. 11 of our newsletter, in which we introduced him as the winner of the “Jugend forscht” compe-

tition in Germany. The trickiest part of making all the individual components was especially having to process the aluminium profiles from four sides and adjusting the components in the machine.

For further information and pictures of the robots go to [www.nimbro.de](http://www.nimbro.de).



■ RoboCup



■ An F16-Jet

## Maiden Flight

Mr Euteneier from Ottobrun (Germany) builds fantastic jets. He has sent us a mail about his maiden flight: “Everything went smoothly, even though the canopy of the plane flew off during the flight.”

## Workshop Premiere

On October 14, the first workshop for milling beginners took place at STEP-FOUR. Due to the positive experience and to help improve relations between users and the manufacturer, we are planning several workshops that will focus on various aspects of milling and hot-wire cutting.



■ The participants learnt many tricks of the trade.

## PC-CUT 6000 Goes To India



■ The PC-CUT 6000 is more than 6 metres long.

Our longstanding cooperation with the largest manufacturer of wind turbines in Asia, SUZLON Energy Ltd. ([www.suzlon.com](http://www.suzlon.com)) has led to the delivery of another PC-CUT 6000 hot-wire system to India. SUZLON appreciates the quality and workmanship of STEP-FOUR units.

And we are also very proud that this was the largest airfreight job that the forwarding company Weiss in Salzburg had ever handled!



■ Ready for shipment.

## STEP-FOUR Trade Fair Calendar

November 18 - 20, 2005

### MODELLBAU BODENSEE

In Friedrichshafen, Lake Constance  
Hall A3, booth 3534

This trade fair has become very promising.



Nov. 20 – Dec. 3, 2005

### EUROMOLD in Frankfurt

Hall 90, booth F06

Features molding and prototyping.



## Imprint

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November  
30, only



## STEP FOUR Basic 540 Fall Offer

consisting of:

- + Basic 540 milling unit kit, new
- + SF-C2 stepper motor controller, 2<sup>nd</sup> hand and checked
- + S4PRO V4 LT milling software, new
- + Proxxon 22OE milling motor, new
- + Set of routers, new
- + 24 months warranty
- + 12 months free support by telephone and email

Special Offer for

**EUR 2290.-**

*Save more than  
600 euros!*

OFFER

Price incl. VAT, excl. shipment costs.