

Fan Club NEWS 02/2015 – English Translation

For a copy of the fischertechnik newsletter/magazine (in German) see our webpage...

www.procontechology.com.au/newindex.htm

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Dear Fans,

Our FAN CLUB Day on 26 July was a great success with many super events and highlights, accompanied by a really big exhibition with impressive fischertechnik models. Page 3 gives you an overview of all the things that were waiting to be discovered at our company site. We also have lots of news for you in this edition! For example, page 3 tells you all about our new TV advert and how it was made. We are also introducing our latest construction sets in the ROBOTICS line. On page 5 we explain the impressive skills and special features of every single one of the five Mini Bots robots. We wish you an entertaining read and lots of fun with the new FAN CLUB News! Yours Diana

Success with fischertechnik - in competitions

This year numerous youngsters have been successful with fischertechnik models in national and international competitions. In Germany and China in particular, young researchers from all over the world demonstrated their skills in various categories and were rewarded with great results and prizes. Turn to page 4 to find out more about the various competitions. You will also find more details about the first fischertechnik robotics competition in Karlsruhe.

Lots of fun and action with the Mini Bots - new: ROBOTICS Mini Bots

Get immersed in the world of robots with fischertechnik: the five robots in the new construction set will keep you busy. You can read more about it on Page 5. Action guaranteed!

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Lots happening on YouTube: new product videos, animations and much more besides

The new products that we already introduced in the previous Fan Club NEWS are now also featured in super product videos. Whether on water with our new Solar Power or on land with the Pneumatic Power, our two film stars Jaron and Jakob had a great time at the shootings. They also demonstrated great talent in front of the camera with the product videos for the Dynamic M or for the Mini Bots construction set. Take a look at our YouTube channel fischertechnikTV where you can find all the videos with Jaron and Jakob and see for yourselves. The YouTube channel also offers other super short films and animations about and with fischertechnik as well as the product videos, together with clips sent in by fans with their impressive models.

NOW NEW: By the way, fischerTiP also has its own YouTube channel with tutorials, product test videos and much more besides. Just take a look at fischerTipTV.

Major survey with super rewards

Your opinion matters! Our aim is to constantly improve our products and service. And so we would ask you to take part in our survey, that takes about 5 to 8 minutes. By taking part in the survey, you also have an opportunity to win one of three ROBOTICS TXT Discovery Sets including the PLUS Accu Set worth €419.90 each! Use this chance! Just go to the fischertechnik homepage where you'll find all the corresponding information with a link to the survey.

Donation to DrachenEi

This year we held a big raffle at the Fan Club Day with super prizes. fischertechnik donated the amazing proceeds amounting to €1,100 to the charity DrachenEi. The organisers of the DrachenEi charity were very grateful to receive the check, which will go towards helping children from poor families.

Four awards: nominations for fischertechnik and fischerTiP

Once again this year, fischertechnik and fischer TiP have been nominated for Germany's two best known toy prizes. The PROFI Pneumatic Power construction set has been nominated in the Toy and Technology category of the Golden Rocking Horse toy competition, and our fischerTiP Farm Box XL has been nominated in the Artists and Builders category. The Golden Rocking Horse jury is made up of children, parents and toy experts who test all the nominated toys and then vote for the winner together with the readers of the familie&co magazine. Both products were also short-listed for the Top 10 Toy 2015.

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Our new TV advert: now on TV or YouTube

Following last year's successful TV advertising campaign, fischertechnik is also on television again this year. The new campaign started on 28 September! Since then, our new advert can be seen on Disney Channel, Super RTL and Nickelodeon until the end of the year. The advert tells a father-and-son story where our PROFI Dynamic L construction set helps with the physics homework. Shooting for the TV advert took place on just one day at a television studio in Cologne. We had lots of fun with the two actors Justin and Alexander. Now it's up to you: put the television on to make sure you don't miss anything! And if you can't wait, take a look at the advert straightaway on our YouTube channel!

50 YEARS FISCHERTECHNIK: one big birthday party

fischertechnik's birthday party on 26 July was a great success! More than 2,000 visitors came to Tumlingen and Salzstetten – more than ever before! Fischertechnik marked its 50th birthday this year with a really big exhibition featuring lots of impressive and in some cases pretty large fischertechnik models. More than 100 fans from Germany, Austria, Switzerland and the Netherlands presented their own models, from giant bucket wheel excavators via a large fairground model through to an original-sized pinball machine, and lots more besides! The highlight of the day for many fans was the visit from our company proprietor Prof. Klaus Fischer. He chatted to some of the visitors and exhibitors and enjoyed having a good look at the models. Besides the exhibition of fan models, fischertechnik also presented all its existing and new products, resulting in rather a lot of models altogether! We also held a video casting to find product testers to explain our construction sets on camera for our fischertechnikTV YouTube channel.

We found some really good film stars. There was even a band playing unusual music instruments to put people in a good mood. Our Salzstetten site also had plenty on offer. The historical construction set exhibition showed the construction sets that some of your parents are sure to have played with in the past. Furthermore, visitors could put together their own special fischertechnik construction set and fischerTiP bucket. Many visitors also took the opportunity of the special sales to acquire the new fischertechnik construction sets or fischerTiP products. If you were unfortunate enough not to be there, then you should take a look at some of the clips on our fischertechnik YouTube channel... www.youtube.com/user/fischertechnikTV

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Understanding technology by playing: with the new eLearning portal!

From today, the new eLearning portal by fischertechnik even helps you to learn online. Go to www.fischertechnik-elearning.com to find lots of didactic information about various construction set topics. Whether Solar Power, Pneumatic Power, Mini Bots or TXT Discovery Set, there is something for everyone! Simply enter a code that you will find on the assembly instructions to watch various videos and animations on the specific topic. You can also use the code to obtain access to the didactic activity material. Even without a specific code, you can still gain a first impression. So click into the portal and take a look.

Winning with fischertechnik: successful competitors

This year once more, youngsters from Germany and all over the world have been successful with fischertechnik in various competitions. The young researcher Paul Kutzer from Regensburger Domspatzen Gymnasium grammar school developed a robot that does Sudokus all by itself. See: www.youtube.com/watch?v=K2stQ6PMN-w. The fischertechnik Sudoku robot scans the puzzle with a camera and then finds the solution with a program written by Paul Kutzer. As soon as the robot has computed the whole Sudoku puzzle, it writes the solution down on the page. It won first place not only in the local Jugend Forscht (youth science) competition in Neumarkt but also the national finals in Ludwigshafen. The prize was presented by Joachim Gauck, the Federal President. At the end of the year Paul Kutzer will be invited to meet Federal Chancellor Angela Merkel, and will also appear on the TV farewell show for entertainer Stefan Raab. Amazing what you can do with fischertechnik!

Lars Hudalla from Heepen entered the 3D printer he made from fischertechnik to win first place in the Jugend Forscht (youth science) competition as well as the regional Schüler Experimentieren (students experiment) competition in Herford. He has also developed his own operating system. This is quite unusual because it makes the printer work not just in ink: it also produces a sweet, edible marshmallow. We say "Wow!" and congratulate Lars on his amazing success. www.gymnasiumheepen.de/?p=1271594

The robot club at Scheffel-Gymnasium grammar school in Lahr had two teams taking part successfully in the RoboCup. Their soccer robots made of fischertechnik took them through to second and fifth place in the preliminary rounds for the German championships in Vöhringen, which also means that they are qualified for the German Open in the RoboCup Junior category in Magdeburg. Keep up the good work! The first Schools Robot Cup at Bismarck-Gymnasium brought together 80 pupils from seven grammar schools in Karlsruhe and Ettlingen. For months they worked at developing, constructing and programming their robots at school. The competition was organised into two categories. In the discipline for autonomously parking cars, eleven teams with autonomous cars had to find the smallest possible parking space on a section of road measuring six meters in length, before indicating and parking the car in reverse in just two moves. Johann Fox from Karlsruhe won first place with his fischertechnik vehicle that performed the parking task at an impressive speed. Twelve teams took part in the Rescue Robot category. Their robots had to follow a trail, avoid hindrances and overcome a ramp before finding a drinks can in a room, lifting it and putting it on a stand. Here too, students with their fischertechnik models came in third and fifth place, among others. The exciting contests were rounded off with the award ceremony. fischertechnik was the main sponsor of the event so that the top three in each discipline received a complete robotics construction set as well as a certificate, a cup and a medal.

The fischertechnik teams from Croatia were very successful at the RoboCup World Championships in Heifei (China)! The team came in second place in the world ranking for the Rescue Lane Secondary category. They also won another silver medal in the Super Teams category. The team consists mainly of boys aged 15 years who have been working with fischertechnik for five years. The Rescue Line Primary team came in 7th place with its fischertechnik robot and also won the special prize Best Hardware Solution for the best robot construction.

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Small, quick and clever - new: ROBOTICS Mini Bots

Our new construction set in the ROBOTICS line lets you make and control five different mobile robots. It gives you a wonderful introduction to the world of ROBOTICS, containing everything you need to make and control various mobile robots. The mobile robot is intended as the first step. It has no sensors, and to start with it just runs around wildly. You really have to be careful that it doesn't get away! You can control the speed of the drive motors in the ROBOTICS module by turning the black knob. If both drive motors run at the same speed, then the robot moves straight on ahead. If one of the drive motors is not quite as fast, the robot is steered in a certain direction. This is how you can control your mobile robot. The Mini Bot hindrance detector has two pushbuttons on both bumpers. It moves freely through the room. When it comes up against a hindrance, it changes direction to avoid it. The trail searcher model is fitted with an infrared trail sensor that helps the robot to follow a black line. The construction set already contains an obstacle course with a black line. Simply put the trail searcher in the middle of the obstacle course and let it go. As soon as the robot detects a black trail, it takes it up and moves along the line. If you want, you can even design your own trail and get the robot to move along it. Just send it all around the room. As the name says, the hindrance detector with trail sensor is a Mini Bot with an addition to the hindrance detector that you already know. The little robot not only evades hindrances but also goes back on detecting a black line with the trail sensor. It does an evading turn and then continues to move forwards. This is just like a lawn mower robot that stays on the lawn and doesn't run away. "Teach-in" is a phrase used in robotics to describe how robots are taught something. A cable remote control lets our teach-in mobile robot move in all directions. The direction that you tell it to move in is saved as a sequence in the program. The little robot then moves automatically on its own to the positions that you have saved in the program. All movement sequences of our Mini Bots are already saved on the ROBOTICS module so that all the fun can begin as soon as you've finished assembling the robots! If you want to see all the models in action, take a look at the product video on our YouTube channel fischertechnikTV... www.youtube.com/user/fischertechnikTV

ROBOTICS Mini Bots

• from 8 years • 5 models • 140 parts • with ROBOTICS module, IR trail sensor, 2 pushbuttons, 2 XS motors and battery tray for 9V block (battery not included) • didactic activity material available free of charge online in the eLearning portal • Now available from www.procontechology.com.au/fischertechnik

Know-how: tomorrow's little helpers

Robotics is the word for the scientific discipline devoted to the construction of robots. Robots are usually intended to perform mechanical work for humans. They can be either stationary or mobile and are controlled by specific programs. At fischertechnik, this program is called ROBO Pro. Our Mini Bots are autonomous mobile robots that move of their own accord. There are also humanoid robots who are supposed to act like humans. And who knows, perhaps one day we will have robots as friends ...

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Gallery

Many thanks for continuing to send the numerous e-mails with photos of interesting and funny fischertechnik models! Here we show you a selection of models. In addition, you can visit www.fischertechnik.de/en to vote for the coolest model. Take a look! Please keep in mind that we can only consider photos that are sent via email to info@fischertechnik.de. For legal reasons, we would ask you not to include any people in the pictures of your models.

Congratulations!

Jan Ove Baum from Ilsede found the right way through the labyrinth in the 01/2015 issue. He sent in the right solution KUGEL and has won a PROFI Dynamic M. The solution for the picture puzzle was SOLARZELLE. Steffen Koch from Marbach found that out and can look forward to a PROFI Solar Power. We sincerely congratulate all winners!

Technical history - with fischertechnik

At long last, on 29 October 2015 a new fischertechnik book is being published! It tells you on 360 pages about all the things that can be made with fischertechnik. The book has been written by Dirk Fox and Thomas Püttmann and is called "Bauen, erleben, begreifen: Technikgeschichte mit fischertechnik" (constructing, experiencing and understanding technical history with fischertechnik) and has 16 chapters. It presents a whole range of technical inventions from yesteryear and from the present day, such as a steam engine or a helicopter. Photos and illustrations make it easy for you to construct these inventions with fischertechnik parts. Would you also like to have a fischertechnik book? Then use this opportunity and win one of three books together with an additional PROFI Da Vinci Machines construction set! Simply answer the following question: "How many chapters are there in the book?". Please send your solution in an e-mail with the subject "fischertechnik book" to gewinnspiel@fischertechnik.de; the closing date is 15 December 2015. Please do not forget to state your complete name, address and age together with the solution. The winner will be notified in writing. The decision is final and there can be no appeal. Good luck!

Quiz

Test your fischertechnik knowledge and win a new ROBOTICS Mini Bots construction set. You can find the answers on the previous pages. Send the solution (from top to bottom) with your complete name, address and age to gewinnspiel@fischertechnik.de stating "QUIZ"; the closing date is 15 December 2015. The decision is final and there can be no appeal. Oh and by the way, please use ue for the German letter ü. Good luck! How many mobile robots can you make with the ROBOTICS Mini Bots? In which month does the fischertechnik TV advert start on television? Which birthday did fischertechnik celebrate this year? Which town hosted the first fischertechnik competition? Which country hosted this year's RoboCup World Championship? Solution

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ASSEMBLY INSTRUCTIONS No. 47 – FAN CLUB model pneumatic road grader for your collection

Tim Rothfuss (17 years) is in his second year of training as a mechatronics designer and is currently working in the design department at fischertechnik. He has given great thought to making a super Fan Club model for you. He used the two PROFI Pneumatic Power and ADVANCED Universal 3 construction sets to design a really cool pneumatic road grader. The broad grading shovel can be moved up and down by turning the hand valve. To make this possible, the air has to be pumped manually into the air chamber first. The air then passes through the hoses to the pneumatic cylinders which are extended and retracted when you turn the hand valve. Well done Tim! Have fun constructing and playing!