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Hello fischertechnik fans,

Perhaps the first few flakes of snow have already fallen, outside it's getting dark much earlier, and inside it's time to make things nice and cosy. Just the right time in fact for the Fan Club NEWS. This latest edition is once again packed full of interesting fischertechnik news. Page 5 presents the highlight of the year: the COMPUTING ROBO TX Training Lab construction set. We also explain how you can make environment-friendly electricity in your own room using the PROFI Oeco Tech and Hydro Cell Kit construction sets. You will also find first-hand information about the Fan Club Day and about the fischertechnik stock sales. All of us here on the fischertechnik team wish you and your families a happy holiday season, and say goodbye for now until next year! We wish you lots of fun with this new edition of the Fan Club NEWS!

The new starter set: ROBO TX Training Lab

The ROBO TX Training Lab is the new complete construction set for an easy start in the COMPUTING world. The construction set contains not only lots of sensors but also the new XS motor and the new XM encoder motor. The key element is the new efficient ROBO TX Controller. Turn to page 5 for more details.

Impressed President: Horst Köhler learns with fischertechnik

German President Horst Köhler (on the right) visited the fischer group and was most impressed. Trainees explained the fischer process system to German's senior statesman using a fischertechnik construction set.

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Profiles

Name: Stephanie Prutschke, age: 37 years, favourite construction set: Universal II, profession: industrial clerk, job at fischertechnik: Stephanie is responsible for processing the orders from our key account customers. She supports the sales staff and assists our customers when there are any complaints. She also deals with customers that cannot pay their invoices on time and tries to find a solution.

Name: Tobias Brezing, age: 28 years, favourite construction set: Oeco Tech, profession: business administrator, job at fischertechnik: Tobias is responsible for marketing. He organises the company's presentations at trade-fairs and shows and is on site during the events themselves. He is responsible for ensuring that packaging materials, brochures, the Fan Club NEWS and other printed matter is produced on time. Updating the website and organisation of the Fan Club also fall within his remit. As training manager, he works together with other colleagues at fischertechnik to pass his know-how on to the trainees.

VIP visitor: Rapper Samy Deluxe

Even right up north in Hamburg, they also know how good the training is at fischer. Rapper Sammy Deluxe therefore recently brought 5 youngsters from the Crossover organisation to visit fischer at company headquarters in Waldachtal. The visit included discussions with company owner Klaus Fischer about chances and opportunities available to youngsters today, an autograph session and naturally also the presentation of a fischertechnik construction set.

"Young Researchers": young scientists appreciate fischertechnik

There's a sign on the door to Frank Hermann's room saying "Inventor's Workshop". The twelve-year old from Römerberg near Speyer has used fischertechnik to invent a new vehicle steering system. This not only won the state contest "Young Researchers: school students experiment" 2009 in Rhineland Palatinate: he has even applied to patent the steering system. We also congratulate the many others who used fischertechnik components for their successful entries in these contests. Frank Hermann won the state contest "Young Researchers: school students experiment" 2009 in Rhineland Palatinate.

Construction competition on children's television: super models, lots of prizes

Attractive prizes were to be won in the construction competition held by fischertechnik and the children's television programme "Willi will's wissen". You've all really deserved them for the many super models. The first prize, a PROFI Pneumatic II construction set, went to Simon from Duisburg, who had designed an egg painting machine. Congratulations!

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Film premiere with a large audience: 1,000 visitors at the Fan Club Day

In spite of the bad weather, long queues of fischertechnik fans gathered already in the early morning outside the entrance to the fischer works premises in Waldachtal-Tumlingen. Altogether more than 1,000 visitors came. The fans saw the premiere of the new fischertechnik film. They also crowded around the tables presenting the models in the foyer of the Klaus Fischer Customer Centre. These included a car wash, a wood processing plant and a toilet roll unrolling device, among others. Visitors showed great interest in the workshops on the new ROBO TX controller. Groups formed every hour for a guided tour of the production facilities and for an opportunity to put together their own construction sets. And of course many fischertechnik fans also used the chance to find bargains in the sale. The new ADVANCED Big Bulldozer construction set was launched for sale, punctually on the Fan Club Day. 924: this was the day's lucky number and the total quantity of parts in a transparent container. Coletta from Bad Waldsee guessed the number exactly. And with a bit of luck, the young visitors were able to win prizes while digging in the sand. And those who were less interested in fischertechnik passed their time quite happily at the fischer TiP tables or in the rawlplug workshop.

Club Dag in Ridderkerk

Many fischertechnik fans came together on 9 May for the Fan Club Day in Ridderkerk (Netherlands). Aircraft models, a ball path, a piano-playing robot, locomotives: the exhibitors were most inventive. Many are meanwhile real professionals and have been constructing models with fischertechnik for decades. The friendly family atmosphere also brought many visitors from Germany to Ridderkerk. Organisers, exhibitors and visitors all agreed: the Fan Club Dag was a great success.

"... AAAND ACTION!": new fischertechnik film

"... aaand action!". Time and again these words can be heard during shooting. The cameraman is in position and ready for the next scene. Playing on command – not so easy, as Louis (6 years) and his friends well know. But after a few minutes they have forgotten the cameras and continue playing as ever. In next to no time, the living room had been turned into the "set". That's what they call the area where shooting is taking place. The cameraman lies on the ground and turns slowly. The scene with the Super Truck still isn't "in the can" and they're shooting it a second time. The outside shoot in the garden is disrupted by a thunderstorm: everyone hurries to bring the valuable equipment safely under cover. Various different locations were used: in the garden, in Louis's room, in the furniture store, at school, in the training workshop, in the production facility at fischer and of course also in the studio – more than 5 days. It then took 7 night shifts for the editors to turn 54 hours of film material into 6 minutes of film. The fischertechnik film is being sent to the fischertechnik partners at home and abroad. It shows which possibilities fischertechnik offers, which products are available and how fischertechnik helps children and youngsters at school and during their vocational training. Perhaps you'll see the new film when you visit your fischertechnik dealer or at the up-and-coming trade-fairs.

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Making your own solar electricity! New: PROFI Oeco Tech

How does sunlight turn into electricity? How can wind be used to generate power? These and other questions are answered by fischertechnik's new PROFI Oeco Tech construction set and the add-on set PROFI Hydro Cell Kit. Using the activity booklets, you can learn about the basic principles of regenerative energy generation. The construction set contains a powerful photovoltaic module, a solar motor, a double layer capacitor, a Goldcap as energy store and 320 fischertechnik parts for making ten models: your own solar power station to drive a Ferris wheel, or a wind power station that makes an LED light up. The powerful photovoltaic module reacts already to small amounts of sunshine or light and converts light into electricity for the solar motor. This works already with a low electric voltage and runs with a small current. The windmill principle is used today by most wind power stations: a horizontal rotor axis with three blades warrants uniform mass distribution. In the fischertechnik wind power station, the wind force (simulated by a desktop ventilator or a hairdryer) drives a generator. In turn, this makes an LED lamp light up, for example. PROFI Oeco Tech • Age: from 9 years • Price: 99.95 Euro.

Golden Rocking Horse: PROFI Oeco Tech category winner

The fischertechnik PROFI Oeco Tech construction set has one the "Play and Technology" category in the "Golden Rocking Horse 2009" contest. This is deemed to be Germany's most important consumer award for toys. Last year the fischertechnik PROFI da Vinci Machines construction set was already nominated for the "Golden Rocking Horse 2008". In 2007, readers of the Familie&Co magazine and an independent jury had awarded the "Golden Rocking Horse" to the fischer TiP Princess Box.

Fascinating fuel cell! New: PROFI Hydro Cell Kit

The principle of the fuel cell was discovered over 170 years ago. The author and scientist Jules Verne said in 1870: "Water is the coal of the future". Oxygen and hydrogen react to form water in a fuel cell. Both gases are separated by a so-called electrolyte and exchange ions only through an electric conductor. This flow of electrons turns the fuel cell into a power source. But the heat which is generated in the process can also be used. The reaction product is clean water, an effect which makes the fuel cell very environmentally friendly. The reversible fuel cell in the fischertechnik PROFI Hydro Cell Kit can be used to power all solar-driven models of the PROFI Oeco Tech kit. The parts in the construction set can also be used to make six other models: a fuel cell car with solar charging station or a solar vehicle with two photovoltaic modules. The second photovoltaic module contained in the PROFI Hydro Cell Kit can also be used to make a pump, a barrier, a saw and also a solar tracking system. The reversible fuel cell can also be operated as an electrolyser and produces water again from oxygen and hydrogen, with the solar modules supplying the necessary electricity. PROFI Hydro Cell Kit • Age: from 9 years • Price: 119.95 Euro

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Start in the world of COMPUTING! New: ROBO TX Training Lab

The ROBO TX controller has been on the market already since May and is now joined by the ROBO TX Training Lab construction set. A 32-bit processor controller, XM encoder motors for precise programming and the new version of the ROBO Pro software bring high-tech into children's rooms.

You can make eleven different models from 310 parts. The activity booklet and the interactive help feature of the ROBO Pro software explain functions and give you programming tips. This makes it much easier to join the fischertechnik COMPUTING world and you'll get lots of programming fun right from the start. Together with the 310 fischertechnik parts, the ROBO TX controller, the ROBO Pro software, two encoder motors and an XS motor, the construction set also contains many sensors. The precise encoder motors permit positioning with millimetre accuracy. The two tactile sensors in the bumper let the robot detect and move around hindrances. The photo transistor can be used to fit a light barrier, and the NTC resistor measures the temperature. The infrared sensor lets the robot differ between light and dark and move along a drawn line. The key component in the construction set is the ROBO TX controller. It comes with a Bluetooth radio interface, efficient 32-bit processor with 200 megahertz, new universal inputs for digital and analogue sensors, inputs for fast counting pulses and motor outputs for converting control commands and processing incoming sensor signals in real time. Thanks to the typical fischertechnik grooves fitted on five sides and the compact dimensions of only 90 x 90 x 15 millimetres, the 92 gram lightweight ROBO RX controller can be fitted economically in the fischertechnik systems and models. COMPUTING ROBO TX

Features	Facts	Advantages
Large memory capacity	8 MB RAM, 2 MB flash memory	Saves several programs on the interface
8 universal inputs	Adjustable to: digital, analogue 0-9 V, analogue 0-5 kΩ, analogue for ultrasonic distance sensor	Permits flexible use of the inputs for the required sensors
4 fast counting inputs	Digital, frequency to 1 kHz	Counts fast counting pulses from optical encoders so that motors can be positioned with great precision.
4 motor outputs	9 V, 250 mA max., left/right fully variable speed, short-circuit resistant, alternatively 8 individual outputs	All actuators needed to drive the models can be connected to these outputs. For example 4 motors for moving forwards and backwards with fully variable speed, or for 8 lamps or electromagnets.
Display	128 x 64 Pixel, monochrome	For handling the interface: selection and start of programs in the memory, output of text and graphics, input of values while the program is running.
Bluetooth	2.4 GHz Bluetooth, range approx. 10 m	Radio interface to the PC for cordless download of programs or cordless online control of mobile models. Can be connected to other Bluetooth devices. Up to 8 controllers can communicate with each other.
Variable power supply	Either 9V power adapter or fischertechnik Accu Pack 8.4 V/1500 mAh with fischertechnik bushings	Provides the right power supply for every application: power adapter for stationary models, Accu Pack for mobile models.

Training Lab • requires: Accu Set • Add-on: ROBO PneuVac and Industry Robots II • Age: from 10 years • Price: 299.95 Euro

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Gallery, gallery, gallery, gallery

The last issue presented all four winning models for 2008. You have chosen the "Model of the Year 2008"! 45.6 percent of you opted for Severin's 6-axis robot. He was thrilled to receive an ADVANCED Super Cranes construction set. Congratulations! Second place went to Jérôme with 33.4 percent of the votes (remote-controlled forklift truck) and third place to Constantin with 14 percent (2-cylinder motor). Yet again, you've sent in lots of letters and e-mails with photos of interesting, cool fischertechnik models – many thanks indeed! Please note once more that we can only post digital pictures in the gallery on www.fischertechnik.de. Please send your pictures to info@fischertechnik.de (re: gallery). Votes are cast four times a year. Simply take a look at www.fischertechnik.de.

Model of the year 2008 "6-axis robot" by Severin (16 years), winner January-March 2009 "3D printer" by Andreas, winner April-June 2009 "Fully automatic ball path" by Lukas (9 years), winner July-September 2009 "Robot arm" by Andreas (13 years)

Energy Quiz: test your knowledge and win a double construction set!

Test your knowledge in the fischertechnik EQ Energy Quiz! If you know the right answers, note the letters and you'll soon have the solution. We wish you lots of fun with the tricky questions and of course lots of luck in the competition. The first prize consists of the fischertechnik energy package PROFI Oeco Tech and PROFI Hydro Cell Kit worth 220 Euro. Please send us a postcard or e-mail stating "Competition" to: fischertechnik GmbH, Weinhalde 14-18, 72178 Waldachtal or info@fischertechnik.de. The closing date is 31 January 2010. The judges' decision is final. Congratulations to the winners of the competition in issue 01/09: they are Maximilian from Munich, Michael from Mannheim, Sarah from Augen. They have each won a package consisting of the BASIC Karts and BASIC Bikes construction sets.

1. What is the unit of measurement used to measure energy and work? R: Joule; S: July; T: Watt
2. What is the unit of energy called on the electricity bill? P: Volt; O: Ampere; N: Kilowatt hour
3. Which gas is produced when burning coal and oil? K: Oxygen; M: Nitrogen; N: Carbon dioxide
4. CO₂ is the abbreviation for... Q: Double portion of coke; R: Two Easter eggs packed in cellophane; S: Carbon dioxide
5. What is the advantage of renewable energy sources (water, wind and sun)? C: They guarantee a nice holiday; D: They bring good weather; E: They don't get used up and can be reused all the time.
6. Which form of energy is used in hydroelectric power stations? K: Flowing energy; I: Stored energy; J: Evaporating energy
7. Where is the best site for a wind power station to produce as much electricity as possible? O: In the sea; P: On top of hills; Q: In the forest
8. What are photovoltaic cells made of? L: Silicon; M: Nylon; N: Solarium
9. What are the elements in a fuel cell? M: Ethanol and hydrogen; N: Hydrogen and oxygen; O: Fuel and oxygen
10. Which symbol stands for environment-friendly products? C: "Red Boy"; B: "Green Stamp"; A: "Blue Angel"

Mirror, mirror ...

... which of the three pictures of a solar wheel from the new PROFI Oeco Tech construction set corresponds to the real model? Simply compare the pictures! Have fun

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Robo Butler:

The Robo Butler is always at your service. He hands around snacks or sweets at your birthday party. His tray can be lifted and lowered simply by turning the crank. His head swivels through 360° so he always has everything under control. His chain drive brings him quickly and flexibly to wherever he is needed. And he always has a smile on his face. What a luxury!