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**Hello fischertechnik Fans**, here's to the new fischertechnik year! Our new products this year are really something! In COMPUTING we have developed a new building set and a new control, the ROBO TX Controller. Smaller, faster, with greater memory capacity and a Bluetooth interface as standard feature. Turn to page 4 for more details. The new modules in the PLUS line, Motor Set XS and Motor Set XM, also offer many different construction possibilities. And you're sure to have lots of fun with the new ADVANCED Big Bulldozer building set. The four robust models are simply ideal for combining with the new motors. The BASIC Carts and BASIC Bikes building sets are great fun and the perfect way to join the fischertechnik world. Have lots of fun, and enjoy reading the new NEWS! Your Tobias

**Constructive idea: building set for the Chancellor.** Politicians also use fischertechnik: Günther H. Oettinger, Minister President of Baden-Württemberg, gave Chancellor Angela Merkel the PROFI Oeco Power building set during the recent CDU party conference.

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### Profile

Name: Andrea Ben Kahla. Age: 33 years, favourite building set: fischer TIP Princess Box. Profession: industrial clerk, job at fischertechnik: Andrea registers the orders from our customers and acts as contact partner for retailers with queries about prices, availability and delivery deadlines. She deals with the e-mail address [info@fischertechnik.de](mailto:info@fischertechnik.de) and also answers your questions. As management PA, she also organises the Managing Director's diary and helps him to deal with letters and e-mails.

Name: Hartmut Knecht. Age: 40 years, favourite building set: Robo TX Training Lab. Profession: graduate engineer, job at fischertechnik: Hartmut is the Head of Production and Development, researching new fischertechnik topics for you with his team. In production he is responsible for smooth workflows and for the quality of the building sets. He makes sure that new products are sent out on time.

### Fan Club Dag with jubilee: 17 years Fan Club Netherlands

The fischertechnikclub Nederland has lots to celebrate on 1 November 2008: it was exactly 17 years since the Fan Club was founded! Today it has 300 members. With nearly 800 visitors, the traditional Fan Club Dag was once again well attended.

This year's motto was "Who makes the best Eiffel Tower?" Dear fischertechnikclub Nederland, many congratulations on your jubilee! We look forward to the next 17 years with you – many thanks!

### Model show in school: super fischertechnik models and lots of fun in Münster

In November, the Davertschule in Münster was the backdrop for a major fischertechnik model show. Attracted by fascinating fischertechnik models such as Ferris wheels, transport aircraft or palletizing systems, more than 1,000 visitors made their way to the school. Children had an opportunity not only to admire the models but also to try out their own ideas at various play tables. Two slot machines (caterpillar game with automatic grab) promised sweets to the winners. Prizes in the corresponding raffle also included fischertechnik building sets. The regional media showed great interest with many subsequent reports on the event.

### Pützmunter Show on Tour: amazing physics with fischertechnik

Does physics always have to be dry and boring? No! The nationwide Physics Pützmunter Tour presented by Jean Pütz shows intriguing experiments to be admired and imitated. The former presenter of the WDR Hobbythek uses fischertechnik models such as the PROFI Pneumatic Digger and models from the ROBO PneuVac building set to explain about pneumatics. For more information on the Physics Pützmunter Tour go to [www.jean-puetz.net](http://www.jean-puetz.net).

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### Making a building set from red granules: looking behind the scenes at fischertechnik

Leo Kugel, aged 9 from Rottweil, had a special wish: to look behind the scenes at fischertechnik in Tumlingen. The newspaper "Schwarzwälder Bote" and fischertechnik fulfilled the fischertechnik fan's wish to visit the company. And because many children and parents write to us asking how and where fischertechnik building sets are made, we invite you to come along with us now as we join Leo on his tour of discovery. And off we go. Click: and another black cogwheel falls into the aluminium container. The big machines are all standing in line and spit out the fischertechnik elements in the set cycle. It is difficult to see how this works just looking through the pane of the machine. The granules of red, black, blue and yellow plastic are injected into a metal mould at a temperature of 260 °C and pressure of 1,400 bar, where they cool for three seconds – and that's all it takes, a new part is "born". The parts are brought in large green and blue folding boxes to the "supermarket". That's what we call the stockroom in a large building. All structural elements are made in Germany. Only components for the motors or electronic units are bought in from suppliers. This brings many advantages for you: when shops have sold out of all the fischertechnik building sets just before Christmas, we can quickly step up production again and get them out on the road in just a few days. Leo was amazed as he stood there in the stockroom with all the boxes full of fischertechnik parts. The production lines are put together as required for each specific building set. This is quickly done, and after just half an hour's adjustment, the next building set comes off the production line. Busy hands pack the parts quickly on the boards and in the bags. Then the instructions, brochure, timetable and checklist are added – and the building set is ready. In a process that is much faster and makes fewer mistakes than a robot. Every year, more than 37.5 million construction parts are packed in building sets. And if you want to know exactly how this happens, why don't you come to the fischertechnik Fan Club Day, then you can produce your own building set.

### Connect Four: intelligent gaming robots

fischertechnik fan Jan Käberich (aged 16) has made an intelligent robot using fischertechnik for playing the strategy game Connect Four. The robot plays with the black counters and the player with the white ones. Two lamps on the counter magazine show which colour comes next. If it's the player's turn, the robot gets a counter out of the machine. The player turns and presses a wheel to select the column for the counter. No predefined sequence has been programmed into the robot, who reacts autonomously to different situations with different moves. First the robot always tries to position his counters so that he wins. If this is not possible, he tries to prevent the player winning. If the player also can't win in the next move, the robot looks for two of the player's counters that are in a row and places a counter next to them, to prevent the player from catching him in a pincer move. If he can't find any rows of two counters, he chooses a column at random.

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### Strong and swift: ROBO TX Controller

The new fischertechnik ROBO TX Controller was presented for the first time at the Toy Fair in February: now it is on sale. You can look forward to a high-powered 32-bit processor with 200 megahertz, Bluetooth interface, display and extremely compact housing (90 x 90 x 15 millimetres) with practical fischertechnik grooves. The eight universal inputs are suitable for analog and digital connections. The four fast counting inputs and the four motor outputs open up even more possibilities for drive and control functions. The ROBO TX Controller is compatible with the known software ROBO Pro. All you need is the latest update, which you will be able to download from our website [www.fischertechnik.de](http://www.fischertechnik.de) in April. The new controller is the heart of the new building set ROBO TX Training Lab which will be launched in the autumn and featured in the next issue.

#### ROBO TX Controller

- Bluetooth radio interface (2.4 MHz/range approx. 10 m)
- 4 fast counting inputs: digital, frequency to 1 kHz
- Can be programmed with ROBO Pro or C-Compiler (not included)
- 8 universal inputs: digital/analog 0-9 VDC, analog 0-5 kΩ
- USB port: USB 2.0 (1.1 compatible), max. 12 Mbit, incl. mini USB jack
- Incl. USB lead

• Power supply: Power Set or Accu Set, two I<sup>2</sup>C and RS 485 extension connections, display with 128 x 64 pixels, 32-bit ARM 9 processor (200 MHz), memory: 8 MB RAM, 2 MB Flash, weight: only 90 g, 8 universal inputs, many possible add-ons, mini USB jack

#### **Fun Code**

Lots of levers and buttons and then all that noise: driving a bulldozer is not as easy as you may think. But you can learn all about it with the models of the building set **ADVANCED Big Bulldozer** in your own room. This time we're also offering a caterpillar driving licence, just for fischertechnik FAN CLUB members. Use your fischertechnik Fun Code to find the driving licence on the internet at [www.fischertechnik.de](http://www.fischertechnik.de) and simply print it out. Here's your fischertechnik Fun Code:10LS04TT

#### **Compact power packs: Plus Motor Set XS and Plus Motor Set XM**

Compacter design with just as much power: that's what the new fischertechnik motors will be offering, available from the summer. Together with axles, parts, gear components and cogwheels, the new Plus Motor Set XS also contains a new safety battery holder with an integrated commutator. This commutator can be used to change the direction of rotation of the motor. For example, the motor can be used to drive a cable winch or live ring for a crane structure. The Plus Motor Set SM has been developed as a powerful motor for driving wheels and caterpillar chains. Together with its compact design (30 x 30 x 60 millimetre), the motor unit will soon convince you with its many add-on possibilities and extensive accessories.

#### **PLUS Motor Set XS**

• 40 parts • Voltage 9 V–...; max. power 1.0 W at 5000 rpm • Power supply: 9V block battery.

#### **PLUS Motor Set XM**

• 30 parts • Voltage 9 V–...; max. power 1.8 W • Power supply: Power Set or Accu Set.

#### **PLUS Power Set**

Power set and fully variable control unit: power supply from the mains for all fischertechnik models. • Voltage 9 V–.../1000 mA

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#### **Construction site in your bedroom: ADVANCED big bulldozer**

When huge boulders lie in the way, when four wheels are no longer capable of moving forwards or when alpine ski slopes have to be prepared for the next race, that's when caterpillar vehicles come into their own. From this autumn, the four models from the new building set **ADVANCED Big Bulldozer** will be hard at work in all off-road settings. The functions and details of the models are the same as their role models. The bulldozer blade can be raised and lowered, the cable winch takes other vehicles on its hook and the caterpillar chain runs on three cogwheels. Simply use the spotlights, flashing lights and engine noises from the building set **PLUS Sound + Lights**, the remote control from the **PLUS Control Set** and the new **PLUS Motor Set XM** to provide the models with the best possible equipment to cope with that construction site in your bedroom!

#### **ADVANCED Big Bulldozer:**

- 600 parts
- 4 models
- Additions: Motor Set XS, Motor Set XM, Sound + Lights, Control Set, Accu Set

#### **Assemble the parts and off you go: building sets BASIC Bikes and BASIC Carts**

Assemble the parts, hold tight and off you go! The new starter sets **BASIC Bikes** and **BASIC Carts** let you do this even within your pocket money budget. The building set **BASIC Bikes** can be used to make three different motorbikes: a cool chopper with extra-wide tyres, an elegant motorcycle-sidecar combination or an enduro bike for off-road fun. The three models in the building set **BASIC Carts** each have four big wheels. The practical articulated model can take small loads piggy-back, or you can head for the off-road course with the **ATV (All Terrain Vehicle)** and the **Quad**.

#### **Smile please: photographers and journalists at the Toy Fair**

Smile please: time and again, Julian smiles at the camera and moves the blade of the fischertechnik bulldozer up and down. TV cameramen, sound engineers and journalists throng round the small stand. German TV crews from ARD, Bayerischer Rundfunk and ZDF have come to see what fischertechnik has to offer at the Toy Fair. They are particularly interested in our new building kits **ROBO TX Training Lab** and **PROFI Oeco Tech**, together with our environment-friendly **Hydro Cell** building set. One day before the Toy Fair Nürnberg opens officially, many manufacturers hold a mini-show to present their new products to the press. With fischertechnik at the heart of it all. After two-and-a-half hours the show is over and Julian has time for a bite to eat, while the journalists start typing their reports into their laptops and the photographers send off the pictures to their editors offices.

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#### **Gallery, gallery, gallery, gallery**

You've sent in lots of letters and emails with photos of interesting, cool fischertechnik models – many thanks indeed! If you have made even more unusual fischertechnik models, please send the pictures to [info@fischertechnik.de](mailto:info@fischertechnik.de). This issue shows all the gallery winners in 2008. You can now choose the "model of the year" from all the winning models. The winner will receive a building set of his own choice from the **ADVANCED** series! You can vote on [www.fischertechnik.de](http://www.fischertechnik.de) under Fan Club/Gallery. Good luck!

Winner January-March 2008 "6-axle robot" by Severin (aged 15).

Winner April-June 2008 "Radar" by Constantin.

Winner July-September 2008 "Remote-controlled forklift truck" by Jérôme (aged 6).

Winner July-September "Two-cylinder engine" by Constantin.

#### **Competition**

Send us the answer on a stamped addressed postcard to reach us by 31 August 2009, address: fischertechnik GmbH, Weinhalde 14-18, 72178 Waldachtal/Germany or send an e-mail to [info@fischertechnik.de](mailto:info@fischertechnik.de). Please state "Lösungswort 01/09" (answer 01/09) as subject. All entries will come into the draw for three packages with the building sets **BASIC Bikes** and **BASIC Carts**. Good luck!

#### **Looking for master builders: construction competition with "Willi wills wissen"**

Watch out, fischertechnik fans! The magazine "Willi wills wissen" and fischertechnik are looking for the master builder 2009. If you're full of bright ideas, then let your imagination run riot and send us a photo of your latest fischertechnik creation to reach us by 1 June 2009, address: Verlags GmbH, Willi wills wissen, fischertechnik 0509, 70165 Stuttgart/Germany or by e-mail to [willierfinder@panini.de](mailto:willierfinder@panini.de). It goes without saying that you cannot submit photos of models that have already been published in the Gallery. The first prize is a **PROFI Pneumatic II**, with an **ADVANCED Ships +More** as second prize and an **ADVANCED Universal II** as third prize, and also 10 **BASIC Aircraft**. We wish you all good luck. The winners will be informed by the editorial office.

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#### **Instruction booklet**

No. 34 – Fan club model for your collection: trike with trailer. This trike with trailer is ideal for expeditions and tours of discovery. The necessary equipment or other loads can be simply and safely stowed in the one-axle trailer. The trike itself is even more manoeuvrable without the trailer, and can get over practically ever hindrance with its off-road tyres.

You need the two building sets **BASIC Carts** and **BASIC Bikes**. Have fun making the model!