

Building Blocks For Life

fischertechnik 

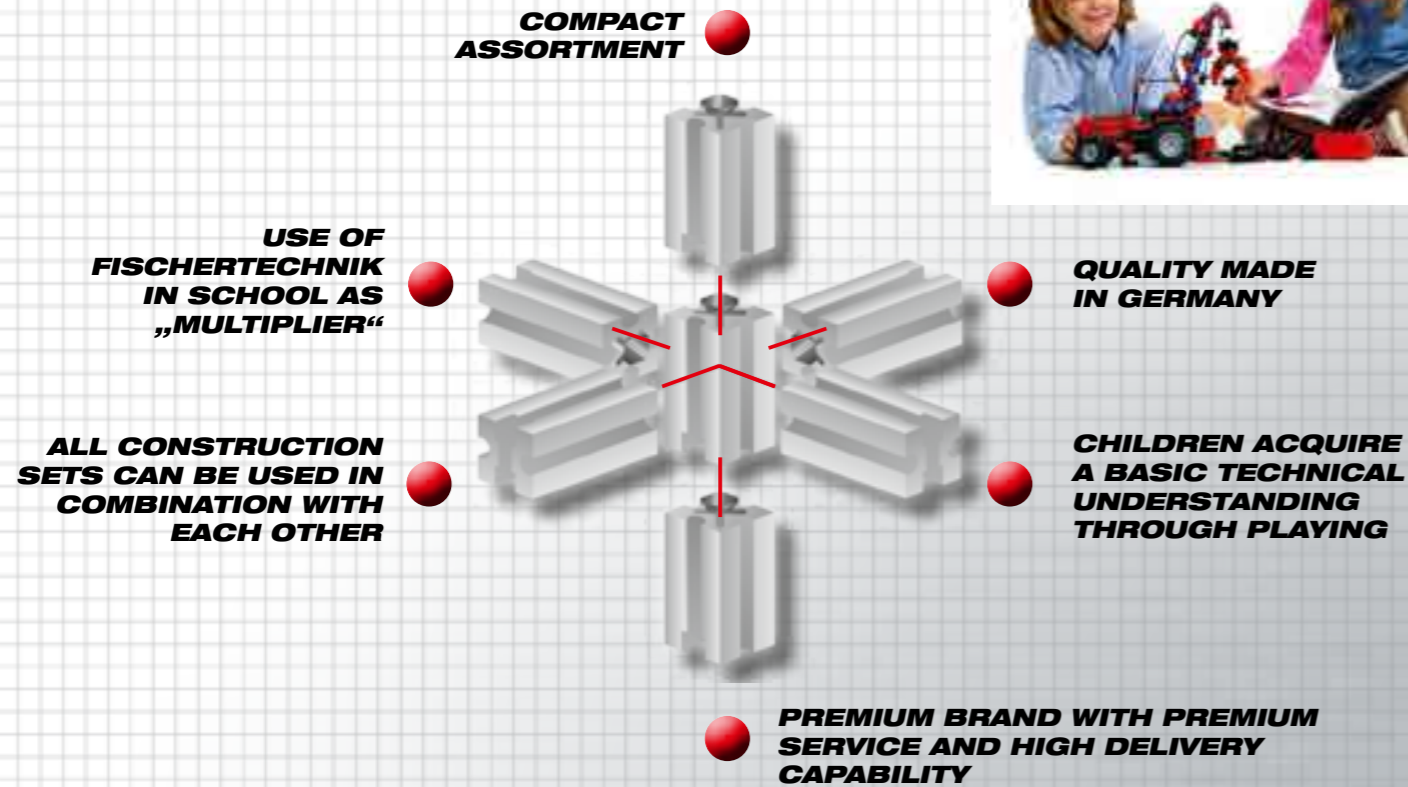


The fun and creative way to explore technology

2013



YOUR ADVANTAGE



THE IDEA

The fischertechnik basic building block can be built on all six sides. This „many-sided“ building block forms the basis for all fischertechnik construction sets, which are put together according to age and capabilities of the children. These sets allow you to experience the real technology and learn it by playing.

for building block. It doesn't matter how demanding the models become because you can always return to the components from other fischertechnik sets. To help you with the construction and discovery of the fascinating fischertechnik world, there is a comprehensive and easy to understand set of assembly instructions. For all of those who want to know more, there are the instructional activity booklets in the profi and computing construction sets with lots of background information, tasks and solutions or you can just browse through them.

Entry into the four different product lines is possible at any time. All of this taken together forms a logical concept where one fits with the other. Building block

Scan me!



... FOUR LINES ... FOR EVERY AGE

JUNIOR



from page 06

The fun of playing starts at the age of five with fischertechnik. The red junior line provides the first experience with technology and the way it functions. The motto is learning by playing and building with fast success.



BASIC & ADVANCED



from page 07

Seven-year olds develop their knowledge and capabilities with the blue line. The models are not only realistic and understandable in their function, but really robust in construction and for playing.



PROFI



from page 12

The black line, which starts at 8 years of age, offers the technicians of tomorrow design construction sets that are very close to reality. Subjects such as mechanics, statics, pneumatics, electrical technology or regenerative energies guarantee outstanding experiences in the world of technology.



COMPUTING



from page 16

Using graphic software, which is easy to use, children starting at 8 years old can program and control fischertechnik models and robots from the computer. It doesn't take long to get the feeling of success.



+ PLUS

- + LIGHT
 - + MOVEMENT
 - + SOUND
- from page 11

Everything that makes fischertechnik still more attractive: fischertechnik PLUS provides light, movement, sound and more fun in playing.



EDUCATIONAL TOY

fischertechnik is an educational toy made in Germany, produced at the Waldachtal site in the Black Forest. All construction sets are ideal for use in combination with each other. The positive response from parents, teachers and engineers makes fischertechnik a successful teaching aid at schools and universities. In addition, educationalists and psychologists at the Transfer Centre for Neuroscience and Learning (ZNL) have recommended fischertechnik construction sets for the „Spielen macht Schule“ campaign („learning by playing“)



AWARDS



**NEW****NEW****NEW****NEW****NEW****NEW****Available from March 2013**

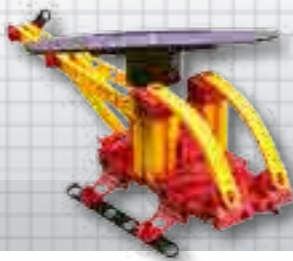
> incl. solar rotor

SOLAR

Components	60	Dimension (mm)	280x65x180	EAN	4048962168624
Item No.:	520396	Vol (m ³)	0,0033	Weight (g)	300



The new solar rotor, a combination of solar cell and motor is the heart of these three models. For building helicopter, airboat and ventilating fan. Children play while gathering their first experience with renewable energy.

**Available from March 2013**

> incl. caterpillar tracks

BULLDOZER

Components	85	Dimension (mm)	280x65x180	EAN	4048962168617
Item No.:	520395	Vol (m ³)	0,0033	Weight (g)	300



On the road grader, track mounted recovery vehicle and snow blower, the new high grip caterpillar tracks provide the required traction. Models with adjustable dozer blade and functioning cable winch.

**Available from March 2013**

> incl. play figure

TRACTORS

Components	130	Dimension (mm)	280x65x180	EAN	4048962168631
Item No.:	520397	Vol (m ³)	0,0033	Weight (g)	300



Two tractor models and one dragster, all with functioning stub axle steering, for fun and amusement.



including XS motor and battery holder

Available from July 2013

- > Incl. XS motor, 6x buckets, 6x caterpillar tracks, 2x conveyor belt
- > Ideal additions: Motor Set XS, Motor Set XM, Sound+Lights, Control Set, Power Set, Accu Set

Power Machines

Components	1,400	Dimension (mm)	465x160x390
Item No.:	520398	Vol (m ³)	0,0290
EAN	4048962168648	Weight (g)	4000



Gigantic: Nearly 1.40 m long, almost 80 cm high with 1,400 parts this construction kit sets new standards! This breath-taking bucket wheel excavator offers a variety of realistic features. The bucket wheel deposits the excavated material directly onto the conveyor belt for disposal. The excavator arm can be lifted and lowered. The entire excavator can be swiveled on the chassis platform with three crawler track units. A second crane model can also be built. Both models can be motorized with the PLUS sets, equipped with sound and lights as well as remote control.

**Available from June 2013**

- > Incl. didactic activity booklet
- > Incl. 3x optical lenses (two focal lengths), Rainbow-LED, mirrors, optical fiber, 2x lens tip lamps
- > Ideal additions: Power Set, Accu Set

OPTICS

Components	300	Dimension (mm)	465x80x320
Item No.:	520399	Vol (m ³)	0,0119
EAN	4048962168655	Weight (g)	1500



Investigate optical phenomena and experiment with light! The planetary model clearly demonstrates why the moon has phases or why solar and lunar eclipses occur. Optical lenses with various focal lengths, mirrors, lens tip lamps and a variety of other parts allow construction of a microscope, magnifier, telescope and periscope. With the periscope you can look around corners and the microscope makes tiny objects really big! With the sun dial you can determine the time of day, and the model with optical fiber demonstrates what total reflection is and how data can be transferred using light. This construction set gives young scientists a glimpse into the world of optics.

**Available from June 2013**

- > Incl. didactic activity booklet
- > Incl. solar motor (2V), 2x solar modules (1V; 400 mA), Gold Cap power storage device, LED, ON/OFF switch
- > Ideal addition: Fuel Cell Kit (Item No.: 520401)

OECO ENERGY

Components	320	Dimension (mm)	465x80x320
Item No.:	520400	Vol (m ³)	0,0119
EAN	4048962168662	Weight (g)	1700



How can ecological electric power be produced? "Renewable energies" will become our most important suppliers of energy in the future. Production, storage and use of electricity from natural energy sources such as water, wind and the sun are graphically illustrated using various models and numerous experiments. These two new solar modules not only guarantee more power; the many new attachment possibilities ensure flexible use in the models. The Gold Cap included for power storage can release the stored power at a slower rate. This helps children understand energy forms of the future. The "Fuel Cell Kit" (Item No.: 520401) offers an ideal addition. With this expansion construction set, you can build other models and operate them with a fuel cell.

**Available from June 2013**

- > Incl. didactic activity booklet
- > Incl. reversible fuel cell with integrated hydrogen storage unit, solar module (1V; 400 mA)
- > Absolutely necessary: Oeco Energy or Oeco Tech

FUEL CELL KIT

Components	20	Dimension (mm)	225x65x150
Item No.:	520401	Vol (m ³)	0,0022
EAN	4048962168679	Weight (g)	550



How does a fuel cell work and how does it generate hydrogen? The Fuel Cell Kit brings this technology of the future directly into the child's play room and provides answers to these and other questions! With the fuel cell and the additional solar module, interesting additional models can be built in connection with the "Oeco Energy" construction set. The instructional activity booklet offers assistance. (CAUTION: Absolutely necessary for operation is Oeco Energy - Item No.: 520400 or Oeco Tech - Item No.: 505284)



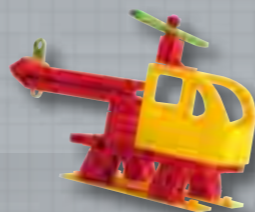


LITTLE STARTER

Components	60	Dimension (mm)	280x65x180
Item No.:	511929	Vol (m³)	0,0033
EAN	4048962111262	Weight (g)	355

60
6 Models

Starter set for young engineers from age 5. The large, easy-to-hold parts and assembly instructions written specifically for young children ensure quick construction success. Design work with this set develops important skills such as eye-hand coordination as well as gross and fine motor skills. Six models can be built: Dump truck, helicopter, power shovel, van...



JUMBO STARTER

Components	135	Dimension (mm)	465x80x320
Item No.:	511930	Vol (m³)	0,0119
EAN	4048962111279	Weight (g)	1185

135
16 Models

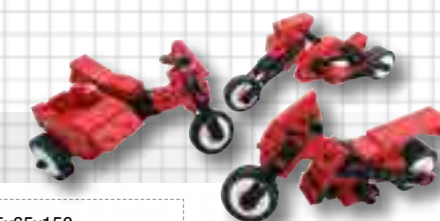
Lowboy with crane, airplane, tractor... many different models invite children to build and play. The large, easy-to-hold parts and assembly instructions written specifically for young children ensure quick construction success. Design work with this set develops important skills such as eye-hand coordination as well as gross and fine motor skills. A number of models can be built at the same time. For children from age 5.



BIKES

Components	80	Dimension (mm)	225x65x150
Item No.:	505278	Vol (m³)	0,0022
EAN	4048962069396	Weight (g)	210

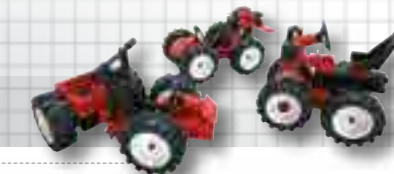
80
3 Models



CARTS

Components	50	Dimension (mm)	225x65x150
Item No.:	505279	Vol (m³)	0,0022
EAN	4048962069402	Weight (g)	220

50
3 Models



NEW SOLAR

Components	60	Dimension (mm)	280x65x180
Item No.:	520396	Vol (m³)	0,0033
EAN	4048962168624	Weight (g)	300

60
3 Models



NEW BULLDOZER

Components	85	Dimension (mm)	280x65x180
Item No.:	520395	Vol (m³)	0,0033
EAN	4048962168617	Weight (g)	300

85
3 Models



NEW TRACTORS

Components	130	Dimension (mm)	280x65x180
Item No.:	520397	Vol (m³)	0,0033
EAN	4048962168631	Weight (g)	300

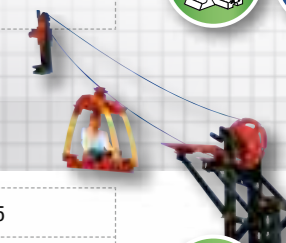
130
3 Models



CABLE CARS

Components	130	Dimension (mm)	330x80x235
Item No.:	41859	Vol (m³)	0,0062
EAN	4006209418598	Weight (g)	605

130
3 Models



Glide down the slope on a 6-meter long cable with the gondola clear up at the top and then with the freight elevator clear down to the bottom. Have fun!



ADVANCED



ADVANCED



40 Models



> Ideal additions: Motor Set XS, Motor Set XM, Sound+Lights, Power Set

UNIVERSAL 3

Components	500	Dimension (mm)	465x80x320
Item No.:	511931	Vol (m³)	0,0119
EAN	404896211286	Weight (g)	1815

500 Models



40 models, such as vehicles with steering, bulldozer with tracks, crane with cable winch, windmill with reduction gear, allow children a fascinating glimpse into the world of technology while playing. The construction site and fair grounds play worlds with a number of models which can be built simultaneously guarantee a great deal of fun building and playing. The large number of parts leaves maximum leeway for creativity. A MUST for all fischer-technicians For children from age 7.

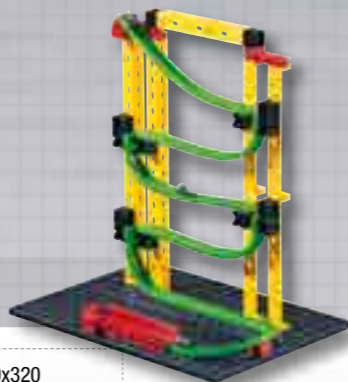


> Incl. 11 flex-rails and 4 balls

ROLLING ACTION

Components	270	Dimension (mm)	465x80x320
Item No.:	516183	Vol (m³)	0,0119
EAN	4048962136814	Weight (g)	1695

270 Models



Balls race on the unique flex-rails through various obstacle courses. They can be accelerated and decelerated by a launching lever or the pretensioned catapult, cause chain reactions, shoot through loops and run over seesaws or are moved back up by an elevator with counter weight. The Rolling Action Set can be combined perfectly with the PROFI Dynamic Set.



> Incl. XS motor, 6x buckets, 6x caterpillar tracks, 2x conveyor belt
> Ideal additions: Motor Set XS, Motor Set XM, Sound+Lights, Control Set, Power Set, Accu Set

Power Machines

Components	1,400	Dimension (mm)	465x160x390
Item No.:	520398	Vol (m³)	0,0290
EAN	4048962168648	Weight (g)	4000

1400 Models

including XS motor and battery holder



Gigantic: Nearly 1.40 m long, almost 80 cm high with 1,400 parts this construction kit sets new standards! This breath-taking bucket wheel excavator offers a variety of realistic features. The bucket wheel deposits the excavated material directly onto the conveyor belt for disposal. The excavator arm can be lifted and lowered. The entire excavator can be swiveled on the chassis platform with three crawler track units. A second crane model can also be built. Both models can be motorized with the PLUS sets, equipped with sound and lights as well as remote control.

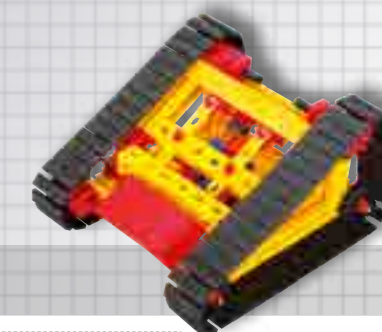


> Ideal additions: Motor Set XS, Motor Set XM, Control Set, Sound+Lights, Accu Set

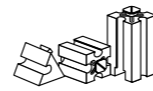
XL BULLDOZER

Components	740	Dimension (mm)	465x80x320
Item No.:	505280	Vol (m³)	0,0119
EAN	4048962069419	Weight (g)	1490

740 Models



Blocky tracked vehicles are cleaning up! This construction set offers four bulldozer types, which remain stable during play, with realistic details such as cable winch, dozer blade that can be raised and lowered and nonskid tracks. Mount up, let's go!



> Incl. XS motor and battery tray for 9V block (battery not included)
> Ideal additions: Sound+Lights, Power Set

SUPER FUN PARK

Components	660	Dimension (mm)	465x80x390
Item No.:	508775	Vol (m³)	0,0145
EAN	4048962095647	Weight (g)	1900



Complete construction set with motor and battery tray. With over 660 components, you can build a motorized Ferris wheel or a merry-go-round. The Ferris wheel has a diameter of over 50 cm and is equipped with six gondolas — a model that creates a real fair atmosphere.



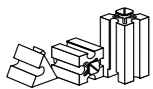
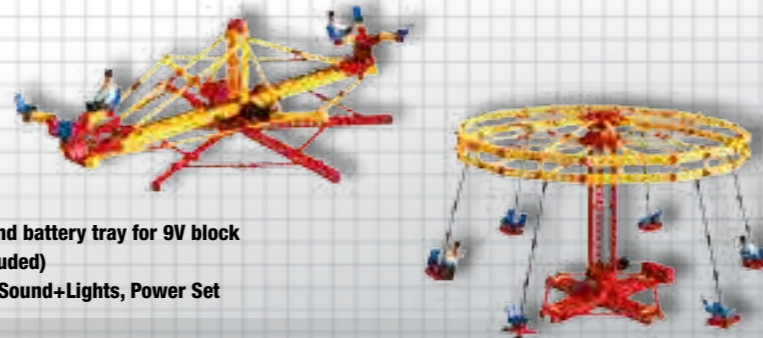
> Ideal additions: Motor Set XS, Motor Set XM, Control Set, Sound+Lights, Power Set

SUPER CRANES

Components	780	Dimension (mm)	465x80x390
Item No.:	41862	Vol (m³)	0,0145
EAN	4006209418628	Weight (g)	2665



Caution: Giants at work! More than one meter high and the boom is over a meter long, turns at the top or bottom and is built for really big loads! With traveling carriage and lifting tackle, mobile or stationary.



CREATIVE BOX 1000

Components	720	Dimension (mm)	390x95x270	EAN	4006209910825
Item No.:	91082	Vol (m³)	0,0100	Weight (g)	2750



More than 700 components from the current fischertechnik assortment. Packed in BOX 1000 with building board 390 x 270 mm as cover.



BOX 1000

Components	/	Dimension (mm)	390x95x270	EAN	4006209303832
Item No.:	30383	Vol (m³)	0,0100	Weight (g)	1860

Practical storage box with eight sorting boxes and 32 sorting partitions. The cover also serves as the big building board 390 x 270 mm.



> Performance data: Voltage 9V~, max. output 1.0 W at 6000 RPM.

MOTOR SET XS

Components	45	Dimension (mm)	225x65x150	EAN	4048962069426
Item No.:	505281	Vol (m³)	0,0022	Weight (g)	200



Thanks to the compact measurements, this motor can be installed almost anywhere. In addition to the building blocks, gearbox parts and toothed gears, the set also contains a safety battery tray with integrated pole-reversing switch for nine volt block batteries (battery not included).

> Performance data: Voltage 9V~, max. output 3.0 W about 340 RPM > Additionally required is Accu Set or Power Set



MOTOR SET XM

Components	40	Dimension (mm)	225x65x150	EAN	4048962069433
Item No.:	505282	Vol (m³)	0,0022	Weight (g)	275



High performance geared motor in compact plastic casing with numerous possibilities for attachments. With many toothed gears, axles and gearbox parts.

> Only Windows® compatible



SOUND+LIGHTS

Components	30	Dimension (mm)	225x65x150	EAN	4048962003260
Item No.:	500880	Vol (m³)	0,0022	Weight (g)	270



If you want to breathe still more „life“ into the fischertechnik models using sounds and lights then the „Sound+Lights Set“ is the ideal solution! Up to three different sounds, which can be activated with push-buttons or automatically with digital inputs, can be placed on the sound module. Depending on the requirement, the sounds can be replaced very simply per USB. The blink connection, which is also included, allows the operation of up to eight indicator lights as blinking lights. The set contains a sound module with blink electronics, a USB cable, two indicator lights with various colored luminous caps and a battery tray for a nine volt block (battery not included).

> Additionally required is Accu Set



CONTROL SET

Components	Controller, receiver	Dimension (mm)	225x65x150	EAN	4048962003277
Item No.:	500881	Vol (m³)	0,0022	Weight (g)	370

The four channel infrared remote control allows you to control fischertechnik models from a distance as well. Up to three motors and one servo can be controlled proportionally. This means an infinitely variable turning angle of the steering wheel and infinitely variable speed control. Up to four receivers can be operated with the remote control, which allows numerous applications.



ACCU SET

Components	Charger + battery pack in one	Dimension (mm)	225x65x150	EAN	4006209349694
Item No.:	34969	Vol (m³)	0,0022	Weight (g)	490



Charger, which is controlled by a microcontroller and provides reliable protection against overcharging. Very short charging time, max. two hours, powerful NiMH rechargeable battery pack with fuse for protection against a short circuit, 8.4V, 1500mAh.

> Power Pack Performance Data: Voltage 9V~/2,5 A. > Power Controller Performance Data: Regulated output 1A max., additional output with 9V~/1 A max. (not regulated), both outputs short circuit-proof with overload protection.



POWER SET

Components	Power unit + control unit in one	Dimension (mm)	225x65x150	EAN	4048962069440
Item No.:	505283	Vol (m³)	0,0022	Weight (g)	430

Power pack and infinite Power Controller. The power supply from the electrical socket for all fischertechnik models.



PROFI



PROFI



> Incl. the didactic activity booklet

DA VINCI MACHINES

Components	260	Dimension (mm)	465x80x320
Item No.:	500882	Vol (m³)	0,0119
EAN	4048962003284	Weight (g)	1580



This construction set combines several mechanical models, whose origin goes back to designs from Leonardo da Vinci: file cutting machine, pivoting bridge and chariot. An activity booklet with numerous illustrations and descriptions for the original designs from Leonardo da Vinci provides information, which is worth learning. History you can touch!



> Incl. didactic activity booklet
> Incl. XS motor and battery tray for nine volt block (battery not included).

DYNAMIC

Components	690	Dimension (mm)	465x80x390
Item No.:	511932	Vol (m³)	0,0145
EAN	4048962111293	Weight (g)	2655



Fun with physics - Balls race on the unique flex-rails through various obstacle courses They accelerate, decelerate, cause chain reactions, shoot through the loop and run through obstacles such as teeter-totters and switches. An elevator powered by an XS motor conveys the balls to the top. The effects are based on various physical phenomena (acceleration, inertia of mass, centrifugal force, law of conservation of energy, principle of linear momentum, laws of motion). These are explained in the activity booklet and can be demonstrated clearly using various experimental set-ups. Shows how entertaining physics can be!



> Incl. the didactic activity booklet
> Incl. XS motor and battery tray for nine volt block (battery not included)

TECHNICAL REVOLUTIONS

Components	270	Dimension (mm)	465x80x320
Item No.:	508776	Vol (m³)	0,0119
EAN	4048962095654	Weight (g)	1495



On the trail of James Watt, Michael Faraday and other famous inventors. The construction set brings new life to important moments of technology history. Important technological inventions can be reproduced as functional models, for example, an electric motor, cardan shaft, a Morse telegraph and a generator. The didactic activity booklet provides additional background information. For little creative tinkerers and inventors starting with nine years old.



> Incl. instructional activity booklet
> Incl. friction motor
> Ideal additions: Motor Set XM, Control Set, Sound+Lights, Accu Set

CARS & DRIVES

Components	280	Dimension (mm)	465x80x320
Item No.:	516184	Vol (m³)	0,0119
EAN	4048962136821	Weight (g)	1600



How does a balloon drive or a bending rod drive work? What is the difference between a friction drive and a rubber-band drive. How can wind be used as a drive? This set provides a glimpse into how different types of drives work. The brawny offroad vehicle with functioning steering and suspension can also be combined perfectly with the Motor Set XM and Control Set for remote control. The instructional activity booklet provides a great deal of interesting information. For young engineers from age 8!



> Incl. the didactic activity booklet
> Incl. Mini Motor and battery tray for nine volt block (battery not included)

MECHANIC+STATIC

Components	500	Dimension (mm)	465x80x320
Item No.:	93291	Vol (m³)	0,0119
EAN	4006209932919	Weight (g)	2150



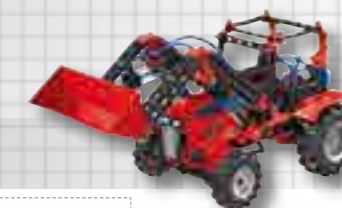
The ultimate technology construction set for all future mechanical engineers, technicians and engineers: How does a gear box work? What is a planetary gear? How is the movement of a windshield wiper produced? How do you design a stable bridge? The answers to these and other elementary questions from the subject areas of mechanics and statics are found in this construction set with 30 different models.



> Incl. instructional activity booklet
> Incl. compressor, 4 pneumatic cylinders, four 4/3-way manual valves, battery holder for 9V block batteries (not including battery)
> Ideal additions: Accu Set

PNEUMATIC 3

Components	440	Dimension (mm)	465x80x320
Item No.:	516185	Vol (m³)	0,0119
EAN	4048962136838	Weight (g)	1930



This play-and-learn construction set helps children learn the principles of pneumatics and uses realistic models to demonstrate how compressors, pneumatic valves and cylinders work. The powerful and compact compressor guarantees a reliable supply of compressed air to the models. In addition to vehicles such as front loaders, hay bale pickers and tree trunk grips, other educational models provide young inventors with background knowledge on the subject of pneumatics in combination with the instructional activity booklet.



NEW



- > Incl. didactic activity booklet
- > Incl. solar motor (2V), 2x solar modules (1V; 400 mA), Gold Cap power storage device, LED, ON/OFF switch
- > Ideal addition: Fuel Cell Kit (Item No.: 520401)

OECO ENERGY

Components	320	Dimension (mm)	465x80x320
Item No.:	520400	Vol (m³)	0,0119
EAN	4048962168662	Weight (g)	1700



How can ecological electric power be produced? "Renewable energies" will become our most important suppliers of energy in the future. Production, storage and use of electricity from natural energy sources such as water, wind and the sun are graphically illustrated using various models and numerous experiments. These two new solar modules not only guarantee more power; the many new attachment possibilities ensure flexible use in the models. The Gold Cap included for power storage can release the stored power at a slower rate. This helps children understand energy forms of the future. The "Fuel Cell Kit" (Item No.: 520401) offers an ideal addition. With this expansion construction set, you can build other models and operate them with a fuel cell.

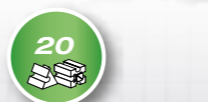
NEW



- > Incl. didactic activity booklet
- > Incl. reversible fuel cell with integrated hydrogen storage unit, solar module (1V; 400 mA)
- > Absolutely necessary: Oeco Energy or Oeco Tech

FUEL CELL KIT

Components	20	Dimension (mm)	225x65x150
Item No.:	520401	Vol (m³)	0,0022
EAN	4048962168679	Weight (g)	400



How does a fuel cell work and how does it generate hydrogen? The Fuel Cell Kit brings this technology of the future directly into the child's play room and provides answers to these and other questions! With the fuel cell and the additional solar module, interesting additional models can be built in connection with the "Oeco Energy" construction set. The instructional activity booklet offers assistance. **(CAUTION: Absolutely necessary for operation is Oeco Energy - Item No.:.: 520400 or Oeco Tech - Item No.:.: 505284)**



NEW



- > Incl. didactic activity booklet
- > Incl. 3x optical lenses (two focal lengths), Rainbow-LED, mirrors, optical fiber, 2x lens tip lamps
- > Ideal additions: Power Set or Accu Set

OPTICS

Components	300	Dimension (mm)	465x80x320
Item No.:	520399	Vol (m³)	0,0119
EAN	4048962168655	Weight (g)	1500



Investigate optical phenomena and experiment with light! The planetary model clearly demonstrates why the moon has phases or why solar and lunar eclipses occur. Optical lenses with various focal lengths, mirrors, lens tip lamps and a variety of other parts allow construction of a microscope, magnifier, telescope and periscope. With the periscope you can look around corners and the microscope makes tiny objects really big! With the sun dial you can determine the time of day, and the model with optical fiber demonstrates what total reflection is and how data can be transferred using light. This construction set gives young scientists a glimpse into the world of optics.

E-TECH

- > Incl. the instructional activity booklet
- > Incl. Mini Motor, E-Tech Modul, sensor, lightbarrier, magnetic sensor and buzzer, battery tray for nine volt block (battery not included).



Components	260	Dimension (mm)	465x80x320
Item No.:	91083	Vol (m³)	0,0119
EAN	4006209910832	Weight (g)	1710



Electrical circuits, electromechanics and electronic controls. Using functional models, for example, the principle of series and parallel connections and the control of a traffic light are explained step by step. For this purpose, the „E-Tech Modul“ with eight set programs that control, for example, a burglar alarm with a buzzer, a hand dryer with a light barrier or a garage door with a magnetic sensor and these devices are controlled through three inputs for digital sensors such as a probe, phototransistor and reed contact and an output for a motor or two indicator lights.



Including:



Software
ROBO Pro Light



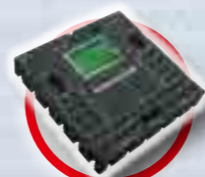
ROBO LT Controller



Including:



Software
ROBO Pro



ROBO TX
Controller



Encoder motor for
exact positioning

Functions:



Display



NTC resistor for
measuring temperature



Infrared trail sensor



- > Incl. the didactic activity booklet
- > Incl. ROBO LT Controller as control (USB interface)
- > Incl. control software ROBO Pro Light
- > Incl. XS motor, 2 indicator lights, phototransistor and push-button switch,
- > Ideal additions: Accu Set or Power Set

ROBO LT BEGINNER LAB

Components	200	Dimension (mm)	465x80x320
Item No.:	508777	Vol (m³)	0,0119
EAN	4048962095661	Weight (g)	1720



The complete beginner's packet for kids starting with eight years old. Using over 200 components and with the help of sensors (phototransistor, push-button switch) and the actuators (XS motor, indicator lights), children can construct eight easy to understand models such as a lighthouse with a blinking light, a merry-go-round or an automatic sliding door. The control ROBO LT Controller with three inputs for sensors and two outputs for motors or indicator lights has a USB interface. The software ROBO Pro Light allows quick and childishly easy programming. The detailed didactic activity booklet supports the learning process for children and explains the programming in a way, which is easy to understand. For tomorrow's engineers.



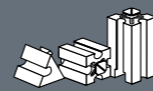
- > Incl. related instructional material on CD
- > Incl. ROBO TX Controller, software ROBO Pro, 2 each encoder motors, Motor XS, infrared trail sensor, 2 each sensing devices
- > Additionally required is Accu Set

ROBO TX TRAINING LAB

Components	310	Dimension (mm)	465x80x320
Item No.:	505286	Vol (m³)	0,0119
EAN	4048962069471	Weight (g)	1960



COMPUTING beginner construction set with everything you need for this: Consisting of 310 components for the building of six mobile robot models, for example, driverless transport system, obstacle detector and trail searcher etc., two encoder motors for exact positioning, „Motor XS“, infrared trail sensor, two sensing devices. It also Incl. the compact and powerful „ROBO TX Controller“ with Bluetooth radio interface, 32-bit processor (200 MHz), eight universal inputs and 8 MB RAM (2 MB flash), including software „ROBO Pro“ for programming. The extensive accessories provide many possibilities for creativity.



ROBO TX



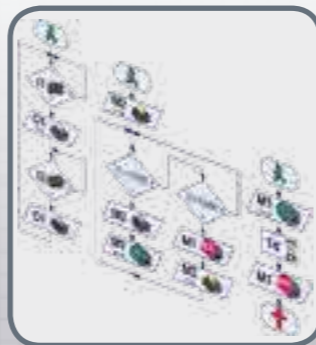
- > Incl. USB connection cable
- > Additionally required is Accu Set or Power Set

ROBO TX CONTROLLER

Components	/	Dimension (mm)	225x65x150	EAN	4048962003826
Item No.:	500995	Vol (m ³)	0,0022	Weight (g)	405

The controller with 32-bit processor, display, high storage capacity and with compact casing (90x90x15mm) offers numerous attachment possibilities on five sides. With integrated Bluetooth radio interface (2.4 GHz, range about 10 m). Several „ROBO TX Controller“ can be coupled together.

- > 32-bit ARM 9 processor (200 MHz)
- > Storage capacity: 8 MB RAM, 2 MB flash
- > Weight only 90g
- > 8 Universal inputs: Digital, analog 0-9V DC, analog 0-5kΩ
- > 4 fast counting inputs: Digital, frequency up to 1kHz
- > 4 motor outputs, 9V, 250mA: Speed infinitely variable, short circuit proof, alternatively 8 individual outputs
- > 2 expansion connections: I²C and RS 485 for coupling of additional „ROBOTX Controller“
- > Display: 128x64 pixel, monochrome
- > USB interface: USB 2.0 (1.1 compatible), max. 12 MB, including mini-USB socket connector
- > Programmable with „ROBO Pro“ or C compiler (not included)



ROBO PRO SOFTWARE

System	Windows® XP, Vista, 7, 8	Dimension (mm)	210x25x150	EAN	4006209932964
Item No.:	93296	Vol (m ³)	0,0008	Weight (g)	85

Simple entry for beginners through programming of flow charts consisting of various software building blocks. The exchange of the data between the software building blocks and the subprograms can be done through variables and graphical connections as well. This allows the program functions to be shown in an understandable manner. There are no problems with the preparation of teach-in programs or data exchange with other Windows® software.



- > Incl. the didactic activity booklet
- > Incl. 2x encoder motors, 3x indicator lights, buzzer, NTC resistor, photoresistor, ultrasonic distance sensor, optical color sensor and an IR trail sensor
- > Additionally required is ROBO TX Controller, Software ROBO Pro, Accu Set

ROBO TX EXPLORER

Components	400	Dimension (mm)	465x80x320
Item No.:	508778	Vol (m ³)	0,0119
EAN	4048962095678	Weight (g)	1590



Explore unknown areas, measure distances, follow trails, show driving directions by means of blinking signals, recognize colors, measure temperatures, avoid obstacles without touching them, recognize day and night, turn headlights on and off automatically and trigger an alarm etc. The ROBO TX Explorer sensors can do all of this and lots more: The NTC resistor, the photoresistor, the ultrasonic distance sensor, the infrared color sensor and the specially developed trail sensor. Thanks to two encoder motors, the tracks can be controlled precisely and steered synchronically. With the rescue robot, which is contained as a model, the construction set provides the ideal basis for participation in the RoboCup.



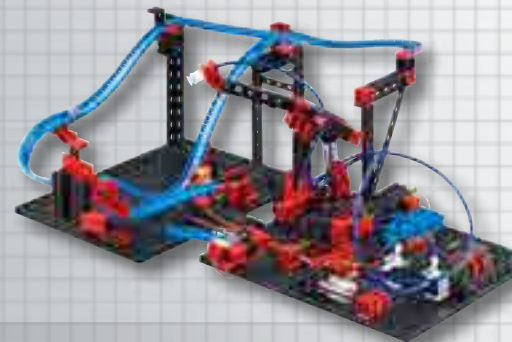
- > Incl. related instructional material on CD
- > Incl. compressor, miniature motor, 2x solenoid valves, optical color sensor, vacuum exhauster, 3x cylinders with spring, 2x photo-transistors, 2x lens tip lamps, 11 flex-rails
- > Additionally required is ROBO TX Controller, Software ROBO Pro, Accu Set or Power Set

ROBO TX ELECTROPNEUMATIC

Components	440	Dimension (mm)	465x80x320
Item No.:	516186	Vol (m ³)	0,0119
EAN	4048962136845	Weight (g)	2105



The subjects of electro-pneumatics and vacuum technology are demonstrated clearly with the aid of fascinating models such as the pneumatic motor, color sorting robot for colored parts, ball obstacle course and pinball machine. The new, powerful and compact compressor guarantees a reliable supply of compressed air to the models. The electro-magnetic valves included allow remote control of the models with a PC.



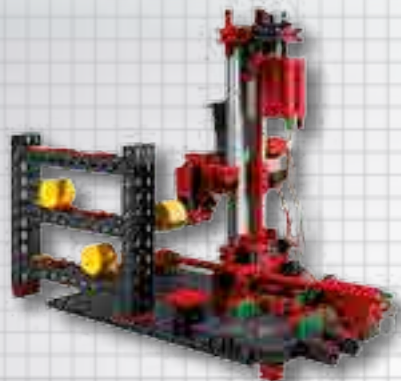
- > Including didactic activity booklet on CD
- > Incl. 2x »Encoder Motors«, 2x »XS Motors«, 6x Sensors
- > Additionally required is ROBO TX Controller, Software ROBO Pro, Accu Set or Power Set

ROBO TX AUTOMATION ROBOTS

Components	510	Dimension (mm)	465x80x320
Item No.:	511933	Vol (m ³)	0,0119
EAN	4048962111309	Weight (g)	2270



Four reality-based and fully functional industrial robots: High-rack storage, 3-axis robot and 2 other grapple robots. Sturdy fischertechnik aluminum channels used in all models. The instructional activity booklet provides support in the form of background information, projects and programming tips. For programmers and designers from age 10.





OPTIMUM PRESENTATION FOR BOOSTING SALES

We support your sales with highly effective and attention-getting measures and aids so that you can achieve the optimal presentation at the point of sale (POS) and in the display window for the best-possible attraction of the end consumer.

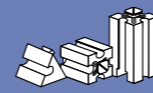
Show window decoration package (On request)



Luminous logo, 125x20cm
Item No.: 50460



Shelf strips, 125x3,5 cm
Item No.: 39911



Poster »COMPUTING« DIN A1
Item No.: 39126



Poster DIN A1
Item No.: 39125



Informative and exciting POS
video that boosts sales.
(On request)

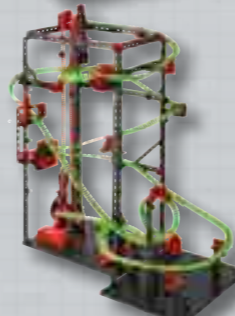


Shopping bag, 46x59 cm
Item No.: 43355



Playbox – Item No.: 41682

The play box allows the little designers to experience the fischertechnik world in a realistic and gripping way. With the many components and instructions, the play box provides optimal support for your events. The nice thing about it is that you can use it again and again.



Decoration models
(On request)



End consumer brochure
Item No.: 39090



Top sign 125x30 cm – Item No.: 39917
100x30 cm – Item No.: 47227



Brochure holder
Item No.: 120949



Banner, 200x80 cm
Item No.: 500887

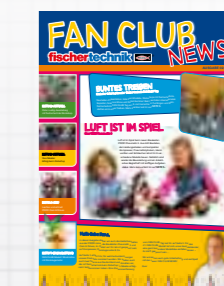


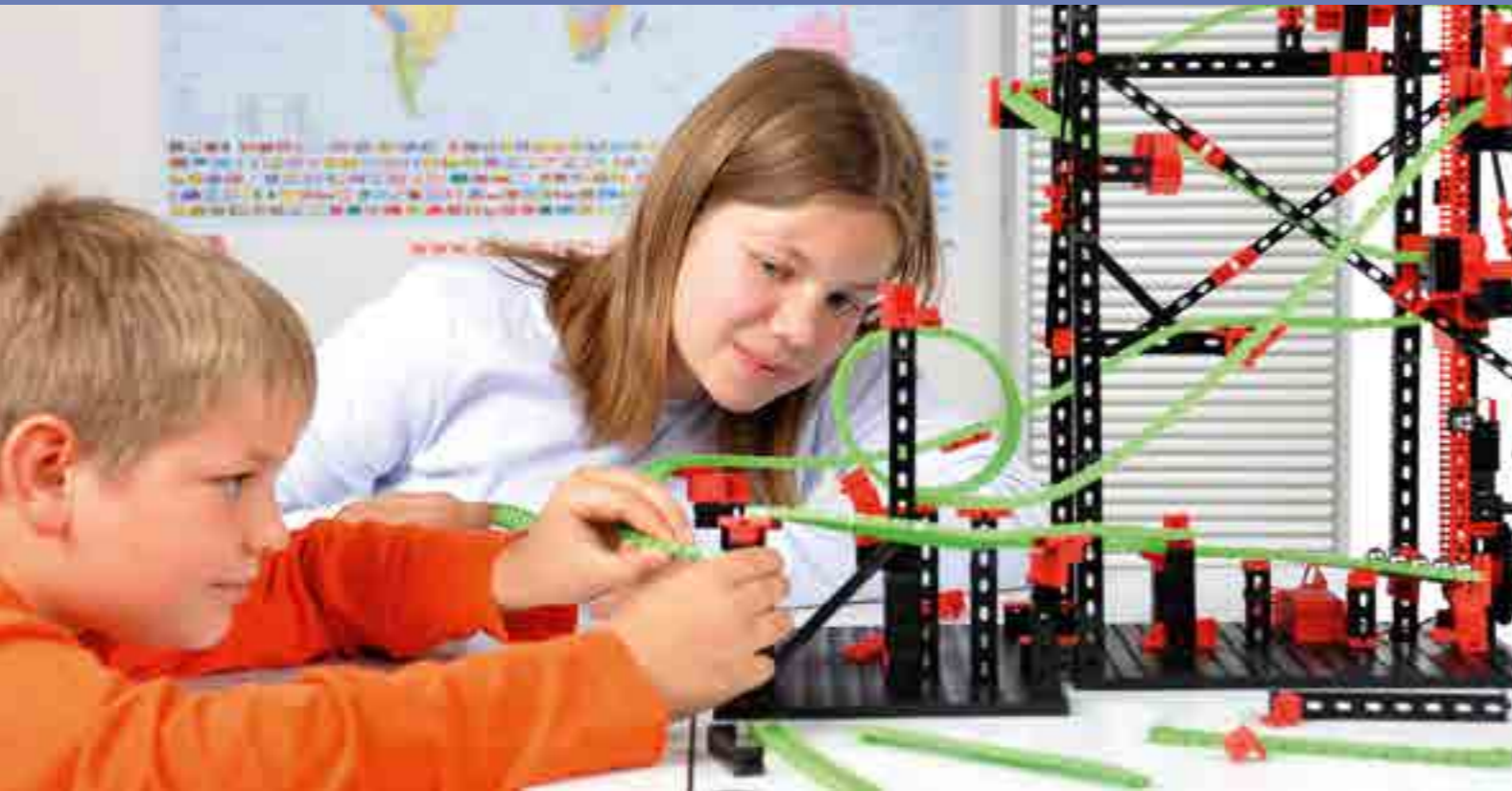
Decoration cube, 25x25x25 cm
Item No.: 142202

FAN CLUB

More than 30,000 fans are members of the free fischertechnik Fan Club. Each fan regularly receives up-to-date information and is provided with a personal membership card. Once a year, fischertechnik opens its doors for the Fan Club Day. This gives fans an exclusive opportunity to take a look behind the scenes of the traditional brand.

The twice-yearly Fan Club News guarantees a fast flow of important information to our target groups, e.g. about new products.





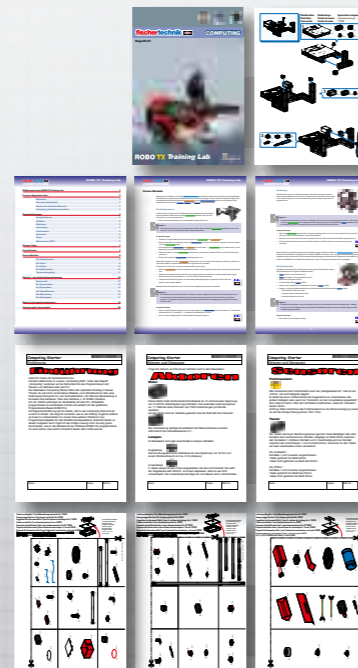
TRAINING MODELS

Compact function models, which are already assembled, provide ideal training and demonstration models for training and in-service training and industrial automation. Available in the 9V standard voltage and in the worldwide 24V industrial standard.

CONSTRUCTION SETS AND MORE ...

How does a gear box work? What is a planetary gear? How is the movement of a windshield wiper produced? These are questions, which our instructional activity booklets illustrate and are explained in a way that is easy to understand. This starts with elementary subjects such as mechanics, statics, electronics and information science etc. and progresses to the practical implementation, which can be understood quickly, of everyday technical devices such as traffic lights, fans and a lifting tackle and then moves on to the technically refined and demanding solutions for robotics and computing. Additional worksheets can be downloaded from the fischertechnik Web site and with the thematically developed questions and answers, these are an additional instrument to provide understanding of the corresponding instruction in a simple and precise manner and to test the learning success.

In addition, there is the very practical and systematically constructed storage system where each part has its place and is quickly found and helps with the daily didactic work (available separately).



ASSEMBLY INSTRUCTIONS

ACTIVITY BOOKLET

WORKSHEETS

SORTING SUGGESTION

WELL-THOUGHT-OUT STORAGE



The instructional construction sets from fischertechnik are specially designed for use in technical instruction and in technical facilities for the basic and secondary level. Here, there are the following topics: Mechanics, statics, electrical technology, regenerative energies and measuring, controlling and regulating (information science, mechatronics and computing). This is supported by books, instructional activity booklets and worksheets. For this purpose, there are intelligent storage systems that provide order and reliability for the everyday things at school.

Additional information is available at:
www.fischertechnik.de

PLAN + SIMULATION

The function models from fischertechnik, Plan+Simulation, are a proven and inexpensive means to plan and to develop industrial controls with the associated software and to test processes. They are employed worldwide in the areas of training, development and presentation.

The flexibility and the modularity of the fischertechnik system in connection with the industrially adapted sensors and actors as well as the controls from leading manufacturers open

up almost unlimited possibilities for hardware simulation. Complicated technical systems are presented realistically and thus perfectly simulated so that they are understandable for everyone. This makes investment decisions easier and reduces the costs for the correction of planning mistakes.





fischertechnik

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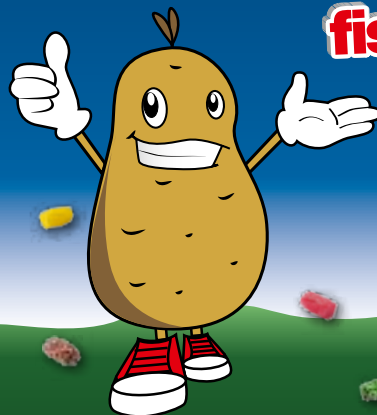
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Befestigungssysteme
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