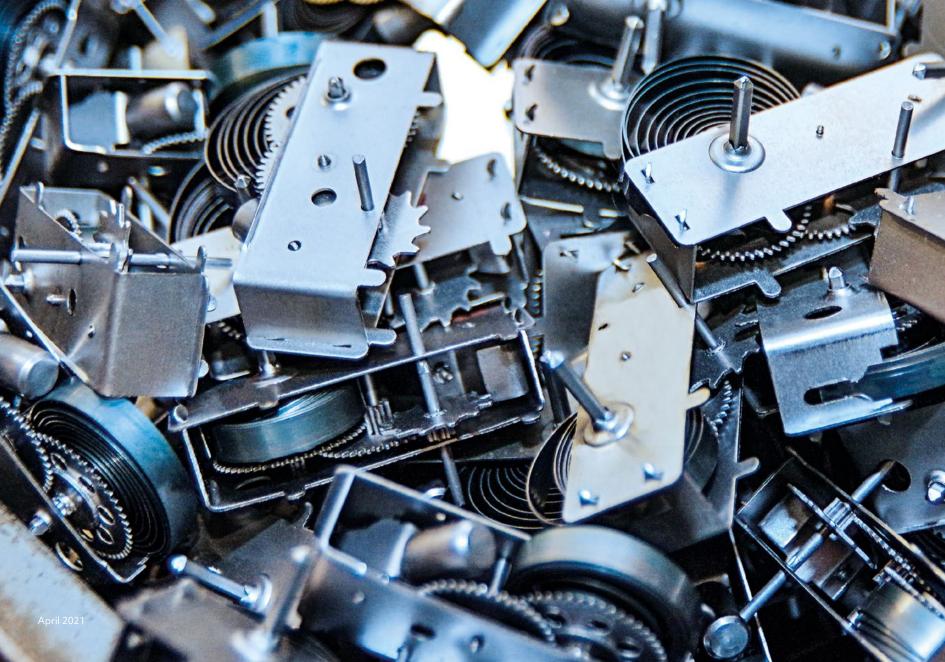


Generations of Play



Dear readers,

The catalogue you are holding in your hands contains mechanical toys developed and manufactured by KOVAP Náchod s.r.o.. This catalogue not only presents our products, but also the technologies necessary for their production. However, the most important tool for manufacturing beautiful and high-quality mechanical toys is not technological in nature, but rather it's the people who, in addition to their skill, patience and diligence, also have years of experience and a loving relationship with the product that their hands help to create. I am happy that it is just such people that work at KOVAP.

Even though entertainment is moving rapidly into the virtual world, on the screens of computers, game consoles or mobile phones, there is definitely no need to worry about the fate of the traditional mechanical toy. Toys reflect the state of the world and technology. Although we cannot imagine our lives without electronics, our lives are still based in mechanics, i.e., the simple movement of bodies from A to B. Moreover, this cannot be done without gears, transmissions or springs. As long as people makes extensive use of mechanical machines, they will also play with mechanical toys. What's more, ours use a basically inexhaustible renewable energy source for their propulsion: the movement of the human hand.

In 2021, KOVAP is celebrating its 75th anniversary. For the occasion, we will present our vision for the development and production of mechanical toys in the 21st century. A vision that reminds the public that a mechanical toy is not just for playing with, it is also a source of knowledge for young, future designers or equally it can be a beautiful interior decoration. It will be a vision that proves that a mechanical toy can unite generations.

I hope that mechanical toys remain a source of fun, joy and entertainment in the lives of all those that read the KOVAP catalogue.

Filip Klepek General Manager





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History

KOVAP Náchod, s. r. o. is a Czech company that **manufactures traditional tin toys of world renown.** It can boast a wide range of original tin toys, including the legendary ZETOR 25 tractor, a wind-up ladybird or popular models of the heavy-duty off-road Tatra truck. In every KOVAP product, there is an **emphasis on manual production, precise design and a long life**. The toys are all environmentally friendly.

KOVAP's tin products are an ideal gift for children and adults alike and are one of the popular traditional souvenirs from the Czech Republic.

In Semily, the tradition of making mechanical toys from tin is **over 70 years old**. The Sedlák brothers started production at the beginning of 1946. In a building rented from a former textile printing house, the Sedlák brothers set up a tin printing press, a press shop, a tool shop, an office and a warehouse. The company employed 15 workers. The first toy to be made was a **steam roller**.

The Sedlák brothers' company developed successfully until 1950. At the time, the political situation did not favour private enterprise, which led to the Sedlák brothers entering the **SVED Liberec** cooperative. Eduard Sedlák worked there as a designer and from 1954-1956 he and his colleague František Zeman managed to develop the now legendary **ZETOR tractor** toy. This mechanical tin toy had an original clockwork drive, which had three speeds forward and reverse. The ZETOR tractor is also unique in that it has been **manufactured and sold continuously since 1957**.

The Sixties saw changes in the county boundaries for self-government and the Semily plant was affiliated to Kovodružstvo Náchod. This was the start of plastics being used in the manufacture of the toys, replacing some of the original sheet metal components. This development continued into the Seventies, but the production of tin mechanical toys was also kept, as they were becoming a popular seller in the "capitalist" markets. At the time, there were several Kovodružstas operating in Czechoslovakia and export companies had a problem distinguishing between them, therefore Kovodružstvo Náchod began exporting under the brand name **KOVAP (kov a plast)** (metal and plastic). The end of the Eighties saw cooperation with the German toy company Georg Kellermann Nürnberg, which made an offer to purchase the machines for the production of model tin toys. The then head of the Semily plant, Václav Drašnar, convinced the management of Kovodružstvo to become a partner with the German toy industry, and so some of Kellermann's toys began to be manufactured in Semily in the late Eighties.

In the early Nineties, the Kovodružstvo cooperative was broken up. The Semily and Nový Hrádek plants were transformed into a new cooperative that took on the KOVAP brand name that had been used for export since the Seventies. The newly-established company gradually **ceased to manufacture plastic toys and again specialized exclusively in mechanical tin toys**. Thanks to this step, in the mid-Nineties it won orders to manufacture replicas of mechanical tin toys from the well-known company **SCHUCO**, which had been producing toys since before the Second World War.



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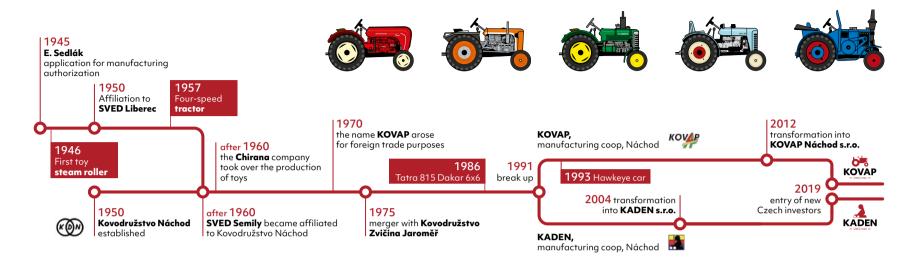
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II.

A few of our many loyal employees (in KOVAP from-to)

1992 Doly, Nový Hrádek

2020 Doly, Nový Hrádek FREERS



Despite the fact that the current toy market is saturated with electronics, or precisely because of it, the classic tin toy still has its loyal supporters and admirers.

2019 was a turning point for KOVAP in many ways. In the middle of the year, the **company changed owners** and work began on restructuring and modernization. It saw the acquisition of the company KADEN, which had once been one company with KOVAP for thirty years when Kovodružstvo Náchod was still in operation. **KADEN is a company producing models of cars, military vehicles, construction kits and metal parts.** Under the new management, the successful cooperation from the past is being revived.

Despite 2020 being a generally unfavourable year, the companies are introducing modern production technologies, are creating new products and design packaging, and are seeking new sales channels through e-shops and social networks. Thanks to these activities, they are once again growing and getting closer to the wishes of their customers.



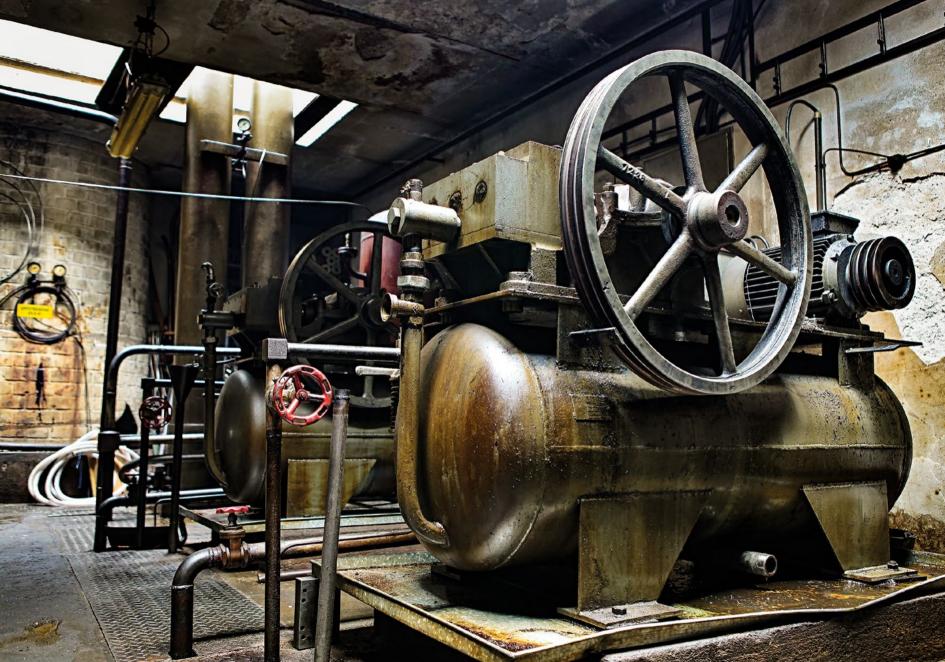




Metalworking

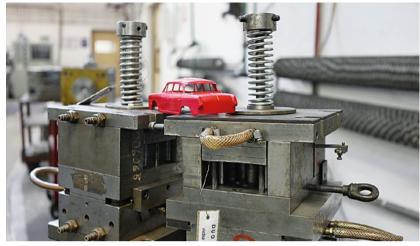
The days when we made steel moulds for toys by redrawing them from wooden standards with a pantograph are long gone, nevertheless we still have this equipment and technology available. Since the Seventies, we have been using ageless **lathes**, grinders and drills to make the moulds and jigs necessary for manufacturing our toys. **These tools' reliability will mean they will be used by generations after us.** At the turn of the millennium, **electrical discharge machining** technology was added to them. Thus, KOVAP became an independent tool shop, one where we can ensure all the development, construction and actual manufacture of the product and moulds under our own direction. Just to give you an idea, the manufacture of the **ZETOR 25 A** tractor involves over **70 moulds and jigs**, without which it would be impossible to produce the toy with such **precise workmanship and attention to detail.**











Sheet metal cutting and bending

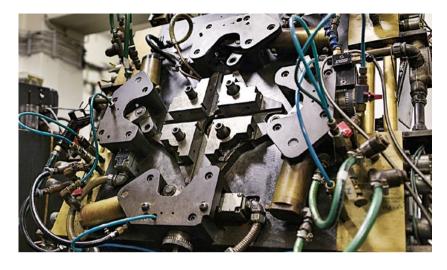
There is a certain magic to bending sheet metal that we have been practicing ever since we were established by the Sedlák brothers in 1946. Our machine park includes a total of **sixteen pressing machines** in the range of **10 to 40 tons of clamping force**. Not only do we think about how to shape the sheet metal, but also how to join it together into a compact unit, so that the sheet metal's sharp edges won't injure human and especially children's hands. **All our toys are certified as a safe product.**

Plastic injection moulding

Some products simply cannot be made of sheet metal, either for economic or logical reasons. For instance, a tyre. We can mould them all in the injection moulding facilities at the Nový Hrádek plant. **Even in pink**, if we so desired.









Zinc alloy die casting

The zinc alloy die-casting machine took a curious route to find itself in the KOVAP machine park. **In the Seventies**, a talented rep for exports secured an order to sell toys to Canada. However, as was the custom at the time, no foreign exchange could flow in the opposite direction, and so a machine at a value corresponding to the needs of the then planned economy was shipped to the Czechoslovak Socialist Repub-

lic. It was made by **DYNACAST** and we work with it to this day. We appreciate its story and the fact that we have no maintenance costs for it. We always repair it ourselves, even though we no longer have the maintenance instructions for it.

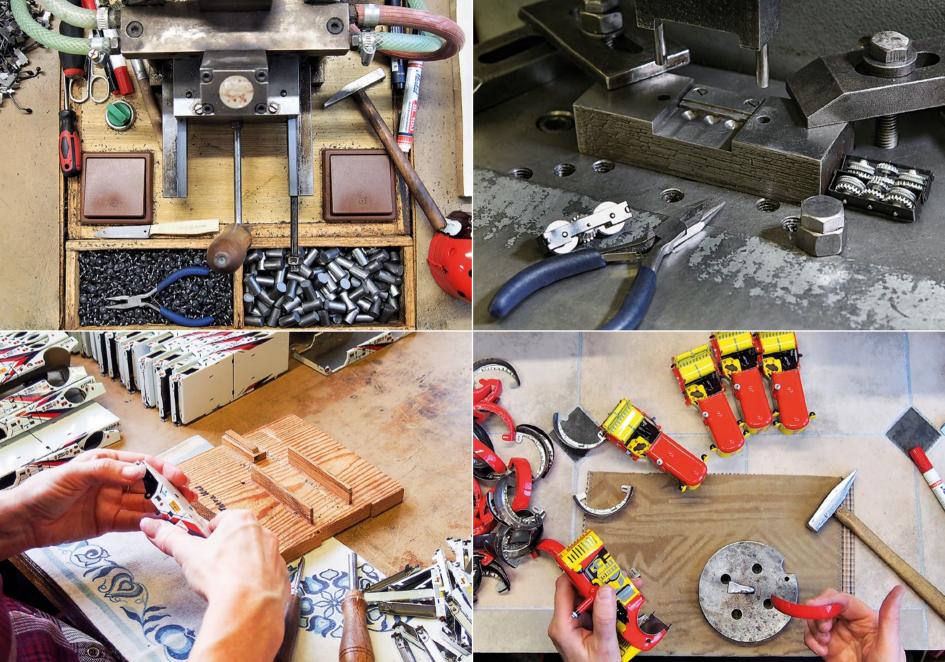


Metal sheet offset printing

We buy our tin from the Slovak supplier U.S. Steel Košice and this is the only material entering the toy manufacturing plant that we buy abroad. The offset machine was manufactured in 1942 by J. G. Mailänder in Stuttgart, now called Koenig & Bauer. It wound up in the Náchod Kovodružstvo plant in Nový Hrádek in the Sixties. However, it wasn't put into operation until the end of the Eighties, when the

original, even older, machine was taken out of service. From the very first days it was used to print tin for toys. We have calculated that during that time it has **printed a total of 900,000 sheet metal plates** in the format 765 x 535 x 0.32 mm. It continues to fulfil its role to this day and will continue to do so.











Hand assembly

All the toys, including the clockwork mechanisms, are assembled by hand by our skilled and experienced workers in the plant in Chuchelna near Semily. Our production documentation numbers a total of 8433 standardized manual assembly operations. If you imagine that each standardization had to be agreed on by at least one hour of a verification series, it is a total of 8433 hours. Working on a single shift operation and working 260 days a year, it means it took 4 years just to record the standards for correctly calculating the production costs of our toys. Standardization mainly took place in the Seventies, and Mr. Jindřich Tomíček can take the main credit for it. He was an ordained priest who was arrested as part of the church trials and sentenced in 1949 to 2.5 years in Pankrác Prison for reading a "pastoral letter". After his release, he managed to get approval to work as a priest, but not until 1984. In the meantime, he worked in the then Kovodružstvo Náchod. One of his jobs was as a standardizer.





Tractors and accessories

The tractor is without a doubt KOVAP's most popular product. It can boast a sophisticated design, a working steering wheel and a unique spring clockwork movement with three speeds, reverse and a handbrake. You can complete it with accessories such as flatbed trucks, potato lifters, seed drills and other agricultural machinery.

Wind-up drive 100 % Czech product "Safe Toys" certificate beautiful craftsmanship





ALLGAIER AP 16

product code: **32503**, scale **1:25** Manufactured since **2013**.

DEUTZ F2M 315

product code: **34504**, scale **1:25** Manufactured since **2008**.

EICHER ED 215

product code: **33500**, scale **1:25** Manufactured since **2007**.



EILBULLDOG HR 7

product code: **36502**, scale **1:25** Manufactured since **2014**.



FAHR F22

product code: **34401**, scale **1:25** Manufactured since **2011**.



FENDT F 20

product code: **33003**, scale **1:25** Manufactured since **2003**.



HANOMAG R40

product code: **34003**, scale **1:25** Manufactured since **2004**.





product code: **36912**, scale **1:25** Manufactured since **2011**.



MAN AS 325 A

product code: **35503**, scale **1:25** Manufactured since **2012**.



PORSCHE MASTER 419

product code: **32101**, scale **1:25** Manufactured since **2005**.



SCHLÜTER DS 25

product code: **36704**, scale **1:25** Manufactured since **2018**.



SCHLÜTER DS 25

product code: **36804**, scale **1:25** Manufactured since **2019**.



product code: **38303**, scale **1:25** Manufactured since **2003**.

ZETOR 25 A

product code: **37301**, scale **1:25** Manufactured since **2014**.

ZETOR 50 SUPER

product code: **38501**, scale **1:25** Manufactured since **2009**.

ZETOR 50 SUPER

product code: **38503**, scale **1:25** Manufactured since **2015**.



ZETOR metal discs

product code: **38101**, scale **1:25** Red models manufactured from **1957**.



ZETOR metal discs

product code: **38102**, scale **1:25** Manufactured since **2019**.



ZETOR metal discs

product code: **38103**, scale **1:25** Manufactured since **2019**.



ZETOR plastic discs

product code: **38001**, scale **1:25** Red models manufactured from**1975**.



ZETOR plastic discs

product code: **38002**, scale **1:25** Manufactured since **2015**.



ZETOR plastic discs

product code: **38003**, scale **1:25** Manufactured since **1975**.



ZETOR with trailer - metal discs

product code: **39201**, scale **1:25** Red models manufactured from **1975**.



product code: **39501**, scale **1:25** Red models manufactured from **1975**.





ZETOR with trailer - metal discs

product code: **39202**, scale **1:25** Manufactured since **2019**.



product code: **39502**, scale **1:25** Manufactured since **2015**.





ZETOR with trailer - metal discs

product code: **39203**, scale **1:25** Manufactured since **2019**.



product code: **39503**, scale **1:25** Manufactured since **1975**.



Trailer red

product code: **43000**, scale **1:25** Manufactured since **2005**.



product code: **40700**, scale **1:25** Manufactured since **2015**. Trailer with stanchions - metal discs

product code: **40303**, scale **1:25** Coloured versions manufactured since **1957**.



Trailer orange

product code: **40800**, scale **1:25** Manufactured since **2011**.



MAN trailer green

product code: **43200**, scale **1:25** Manufactured since **2012**.



Trailer with extension

product code: **40403**, scale **1:25** Manufactured since **1993**.



Single-axle trailer

product code: **40500**, scale **1:25** Manufactured since **2002**.



Single-axle FENDT trailer

product code: **40600**, scale **1:25** Manufactured since **2003**.



Trailer with extension

product code: **43100**, scale **1:25** Manufactured since **2011**.



Potato spinner

product code: **39900**, scale **1:25** Manufactured since **1993**.



Plough

product code: **42200**, scale **1:25** Manufactured since **2013**.

Tedder

product code: **40000**, scale **1:25** Manufactured since **1993**.



Hay rake

product code: **40200**, scale **1:25** Manufactured since **1994**.

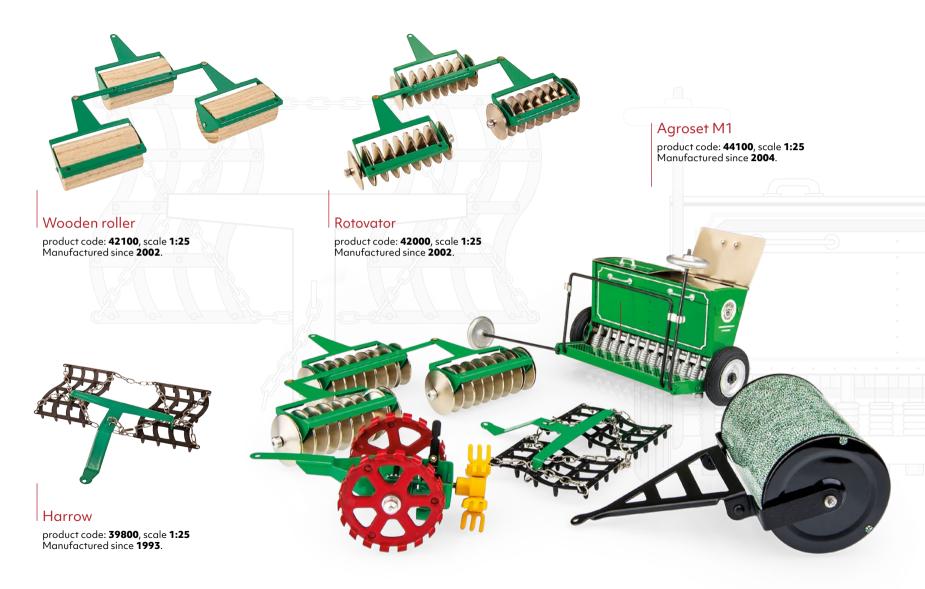


Seed drill

product code: **40100**, scale **1:25** Manufactured since **1994**.

Roller

product code: **39700**, scale **1:25** Manufactured since **1993**.



Agroset M2

product code: **44200** scale **1:25** Manufactured since **2004**.







Tatra

Each Tatra race special is the actual model that drove in the particular year of the rally, including the crew that drove it through the desert. You can make up your own story and dangers while playing with it. Future firefighters will also have fun with us.

100 % Czech product"Safe Toys" certificatebeautiful craftsmanship







product code: **61600**, scale **1:43** Manufactured since **2018**.

Tatra 815 Dakar 1995 Granada

product code: **68000**, scale **1:43** Manufactured since **2020**.



product code: **61400**, scale **1:43** Manufactured since **1995**.



Tatra 815 Dakar 1996 Poldi

product code: **68200**, scale **1:43** Manufactured since **2020**.



Tatra 815 Dakar 2001 Petrobras

product code: **68100**, scale **1:43** Manufactured since **2020**.



Tatra 815 fire engine

product code: **61500**, scale **1:43** Manufactured since **1997**.

Lorries and buses

Do you prefer a red London double-decker, a wind-up bus or would you rather have fire engines or military trucks? You can choose a classic tipper, crane, flatbed, a Mercedes or the legendary American Hawkeye.

T

100 % Czech product "Safe Toys" certificate beautiful craftsmanship



DB bus

product code: **49601**, scale **1:43** Manufactured since **1992**.



Bus with drive

product code: 49206, scale 1:43 Coloured versions manufactured since **2005**.



Routemaster Bus RM 5

product code: **22300**, scale **1:36** Coloured versions manufactured since **2006**.



product code: **60507**, scale **1:32** Manufactured since **1995**.

product code: **60508**, scale **1:32** Manufactured since **1995**.

product code: 60509, scale 1:32 Manufactured since **1995**.



Hawkeye money box KOVAP

product code: **60102**, scale **1:32** Coloured versions manufactured since**1993**.



Hawkeye circus with drive

product code: **59700**, scale **1:32** Manufactured since **2002**. Hawkeye transporter

product code: **59801**, scale **1:32** Manufactured since **2001**.



Hawkeye fire engine - crew

product code: **59901**, scale **1:32** Manufactured since **1999**.



Hawkeye fire engine - ladder truck

product code: **60201**, scale **1:32** Manufactured since **1993**.



Hawkeye circus campervan

product code: **59400**, scale **1:32** Manufactured since **2010**.



Hawkeye circus campervan with drive

product code: **59500**, scale **1:32** Manufactured since **2010**.



Hawkeye hearse

product code: **60400**, scale **1:32** Manufactured since **1995**.



Hawkeye flatbed trailer

product code: **60300**, scale **1:32** Manufactured since **1993**.



Hawkeye menagerie

product code: **59600**, scale **1:32** Manufactured since **2002**.



Mercedes cement mixer truck

product code: **62700**, scale **1:43** Coloured versions manufactured since **2000**.



Mercedes crane

product code: **62600**, scale **1:43** Coloured versions manufactured since **1999**.



Mercedes dumper truck

product code: **62400**, scale **1:43** Coloured versions manufactured since **1998**.



Mercedes flatbed trailer

product code: **62300**, scale **1:43** Coloured versions manufactured since **1997**.



Mercedes military crane

product code: **66409**, scale **1:43** Manufactured since **2013**.



Mercedes fire engine

product code: **62201**, scale **1:43** Manufactured since **1996**.



Mercedes MB 335 fire engine

product code: **62801**, scale **1:43** Manufactured since **2009**.



Mercedes MB 335 fire engine - crane product code: 62901, scale 1:43 Manufactured since 2009.

36 - Generations of Play



Do you just simply love classic cars, for example the design of the Porsche 356 or the Tatra 603? In our range, you will find a Mercedes convertible or coupe, the legendary VW beetle and camper van and even a garage to house them.

Cars



Red wind-up car

product code: **55801** Manufactured since **2006**.



Yellow wind-up car

product code: **55806** Coloured versions manufactured since **1994**.



Porsche 356 Cabrio silver

product code: **56205** Manufactured since **2006**.



Porsche 356 Cabrio yellow

product code: **56306** Manufactured since **2006**.



Tatra 603

product code: **56113** Manufactured since **2004**.



Tatra 87 product code: **56007** Manufactured since **2004**.



Mercedes Cabrio blue product code: 60702, scale 1:32 Manufactured since 1994.



Mercedes Cabrio silver product code: 60705, scale 1:32 Manufactured since 1994.



Mercedes Coupe red

product code: **60801**, scale **1:32** Manufactured since **1994**.



Mercedes Coupe silver

product code: **60805**, scale **1:32** Manufactured since **1994**.



kovap.cz - 39



VW 1200 beetle

product code: **64010**, scale **1:32** Manufactured since **2000**.



VW 1200 beetle circus

product code: **64907**, scale **1:32** Manufactured since **2002**.



VW 1200 beetle red product code: 64001, scale 1:32 Manufactured since 2000.



VW1200 beetle fire dept.

product code: **64101**, scale **1:32** Manufactured since **2001**.



VW 1200 beetle police

product code: **64203**, scale **1:32** Manufactured since **2001**.



VW 1200 beetle post product code: **64306**, scale **1:32** Manufactured since **2001**.



VW 1200 beetle with drive

product code: **67002**, scale **1:32** Manufactured since **2005**.



VW 1200 beetle ski

product code: **64406**, scale **1:32** Manufactured since **2000**.



VW fire dept.

product code: **63101**, scale **1:43** Manufactured since **1996**.



VW campervan

product code: **61001**, scale **1:43** Manufactured since **1995**.



VW campervan with drive

product code: **66012**, scale **1:43** Manufactured since **2005**.



VW police

product code: **63203**, scale **1:43** Manufactured since **1996**.



VW post

product code: **63306**, scale **1:43** Manufactured since **1996**.



VW ambulance product code: 61311, scale 1:43 Manufactured since 1995.



VW flatbed trailer product code: 61102, scale 1:43 Manufactured since 1995.





Caravan

product code: **60900**, scale **1:32** Manufactured since **1994**.



Circus caravan

product code: **65000**, scale **1:32** Manufactured since **2003**.

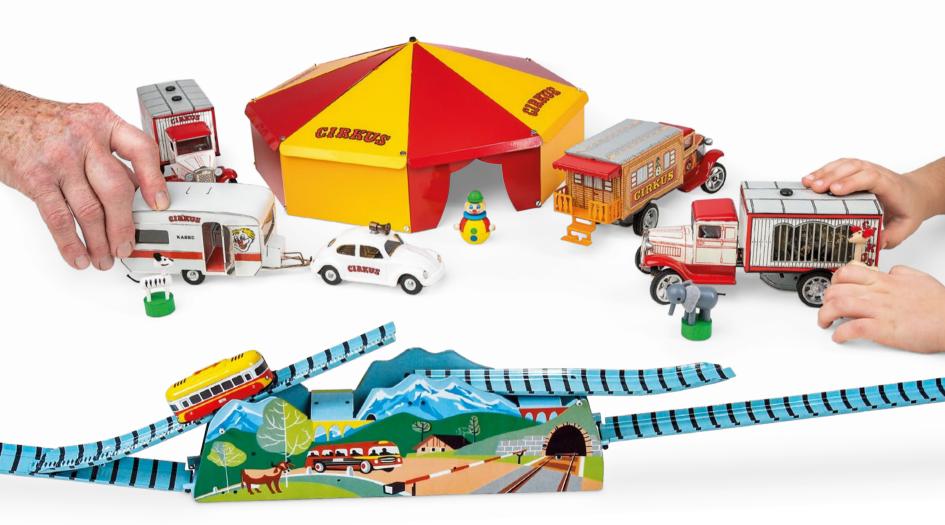
Forklift

product code: **49706**, scale **1:43** Coloured versions manufactured since **1993**.



Garage

product code: **48200**, scale **1:32** Manufactured since **1989**.



KOVAP classic

Probably every adult Czech at least saw one of our oldest toys in their youth or was even lucky enough to spends hours of fun playing with them in those carefree moments.



Clicker ladybird

product code: **75200** Manufactured since **2008**.



Cable car Lomnický štít product code: 62121, scale 1:43 Manufactured since 2011.



product code: **55001** Manufactured since **1960**.



product code: **75300**

Coloured versions manufactured since **1990**.

Clicker bottle

product code: **75900** Manufactured since **2007**.



Clicker frog

product code: **75100** Manufactured since **2003**.







Dustbin money box

product code: **82002** Manufactured since **2021**.



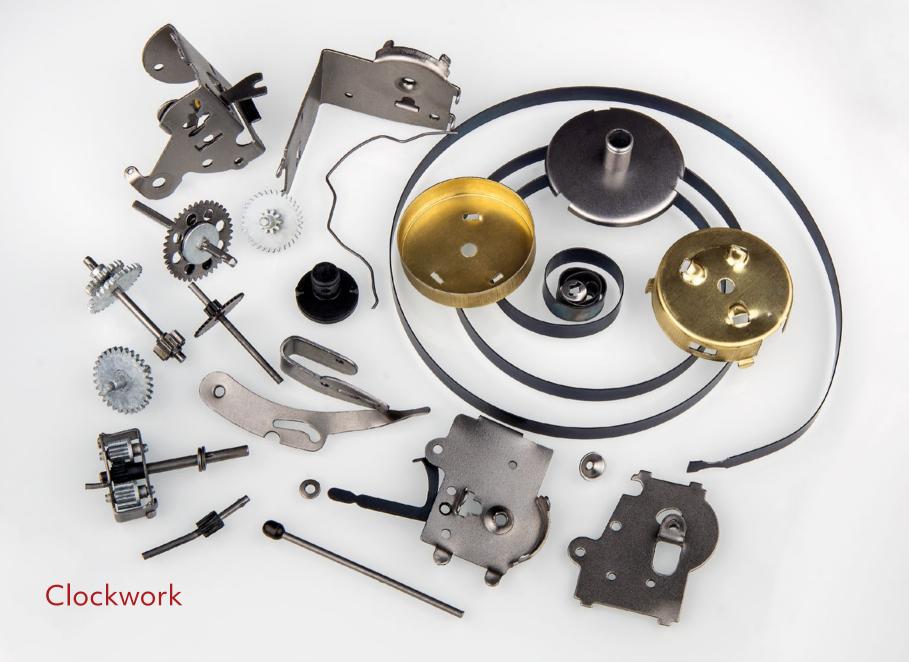
Boy on tricycle

product code: **62000** Manufactured since **1960**.



Tower crane

product code: **48306** Manufactured since **1989**.





Bus Manufactured since 2005 50 production operations



Old-timer Car Manufactured since 1950** 39 production operations



Hawkeye Manufactured since 2002 56 production operations



Ladybird

Manufactured since **1953* 47** production operations



Mountain railway Manufactured since **1958*** 60** production operations



Routemaster Bus RM 5

Manufactured since **2006 61** production operations



Boy on tricycle

Manufactured since **1960 50** production operations



Cable car

Manufactured since **1991 90** production operations



Road roller

Manufactured since **1946 46** production operations



VW 1200 beetle VW campervan

Manufactured since **2005 46** production operations



Tractor

Manufactured since **1957 138** production operations

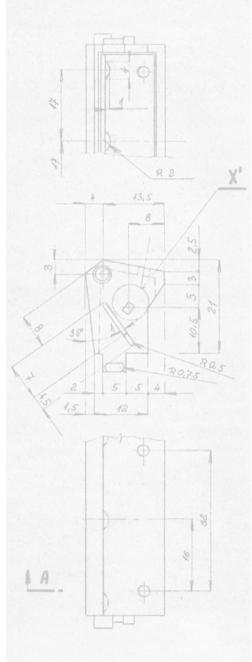


Toy and model manufacture in KADEN www.kaden.cz

Kovodružstvo Náchod was founded in 1950. Its main activity was **to manufacture mechanical toys from printed sheet metal and plastics**. Examples of the cooperative's ancillary activities include installing central heating, manufacturing metal furniture or producing electronic components. Ever since the Seventies, its logo has been a picture of a kneeling child with a toy, which is also the symbol KADEN uses today. **Since the Nineties, its focus has been on manufacturing models** and it continues with this to this day. It specializes in **Tatra and Škoda** models. It also plans a series of toys for the youngest collectors.







Awards

Our toys combine tradition and **high-quality craftsmanship**. They are **safe for kids and environmentally friendly**. Generations have been playing with them and, despite the digital age, they are still attractive to today's kids. Thanks to that, we have won various awards for our products.

Awards we have won



Czech Toy of the Year 2011 The award went to our popular Agroset 2, consisting of a tractor with a flatbed and six other pieces of agricultural machinery. www.hracka-roku.cz



Czech Toy of the Year 2017

Our model ZETOR tractor with flatbed trailer won the Boy Toys category. www.hracka-roku.cz

Our Certificates



The Right Toy Our tower crane and Zetor tractor with flatbed trailer bear this certificate. www.sdruzenihracky.cz



Safe Toy

All our toys, except for three collector's models, meet the criteria for this certificate. www.itczlin.cz

Membership in



Czech-German Chamber of Commerce and Industry www.tschechien.ahk.de









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