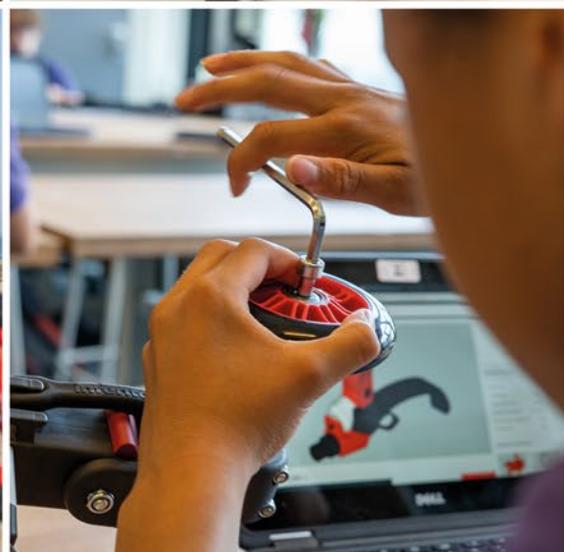




Modular magic in the classroom

Bring engineering to life with Infento



How do you truly inspire your students with STEAM education?

The world is changing quicker than ever before, and schools are trying their best to keep up. Everyone in the education space agrees that we need to enhance what kids learn and how they learn. By doing so it will allow students to develop all the necessary skills to thrive in the future.

A lot of buzz words have popped up over the last decade that promise to contribute towards the education solution. 21st century skills, STEAM, inquiry-based learning, design thinking, etc. But do they live up to their promise?

We think they most certainly can! But it all boils down to the materials and tools that are being used. Most often students get a one-off experience that fails to inspire. They make something that is out of their realm of experience or that they can't really use in real life settings. Given these problems we would like to introduce our company, Infento.

With our life-size construction kits STEAM education finally becomes truly inspiring for students of all ages and gender!

What student wouldn't want to build their own life-size electric vehicle? Make their own eSports gaming chair or racing scooter. And what if you could shoot a water rocket 100 feet up in the air from your own constructed launch pad? Welcome to the world of Infento. Hop on our ride to the future and discover all the possibilities.

Education Team Infento



Your ride
to the future

Table of contents

4	Modular magic
6	Inquiry-based learning and design thinking
8	21st century skills
10	Sustainability and quality
12	Talent Kit
14	Pro Kit
16	Science Builds
18	Rides
20	Electric ePulse® Rides
23	International awards
24	In the media
25	About Infento
26	What teachers say
27	Summary

Modular magic in the classroom

Infento has developed modular parts for your students to create life-size vehicles and science builds. You can build a skateboard, recumbent bicycle, water rocket, fitness machine, electric motor-bike or electric kart. Anything is possible with Infento!

While students build together, they will acquire new skills that they can benefit from throughout their entire life. Students will learn about mechanics, realizing a design plan, assembling, tools, braking systems, electric mobility and much more.

As soon as they finish their custom design (electric) Ride, it's time to drive it! Steer like Jeff Gordon, let the young pit crew change tires and continue the race. Who's clocking the fastest lap? Infento connects into the child's world, bringing engineering to life.



Six reasons to choose Infento



Inquiry-based learning at its best



Great for kids in elementary, middle and high school



Makes students enthusiastic about STEAM



Autonomous learning with clear instructions



High ceiling, wide walls learning opportunities



Teaches kids important 21st century skills

Widely applicable at your school

AFTER-SCHOOL PROGRAM

Infento will make your after-school program a big hit, guaranteed. Lay out an indoor or outdoor course and let students race their life-size (electric) vehicles. Inform students that they can build these vehicles themselves. You will definitely see an increase in new students wanting to join the after-school program to enjoy their time with Infento.

MIDDLE SCHOOL

No matter what middle school grade you're in, or whether you're a girl or boy, you can start using Infento immediately. No basic knowledge is required. Students can start building a simple, fun construction and finish within one class period. Build a robot, chair, spinning top, ab wheel, water rocket, simple scooter or push cart. Anything is possible! Want a bigger project? Let groups of students make one of the bigger Rides and Science Builds together! These larger projects are guaranteed to get your students excited about engineering.

HIGH SCHOOL

Do you have more time dedicated to engineering classes? Build an electric go-kart, motorcycle or recumbent bike. Get working on the Infento Design Challenges and make your own version of a crane, stretcher, home trainer, gaming chair or carousel. You can also assemble a Science Build and launch a water rocket a hundred feet into the air. With Infento's modular parts, the sky literally is the limit!

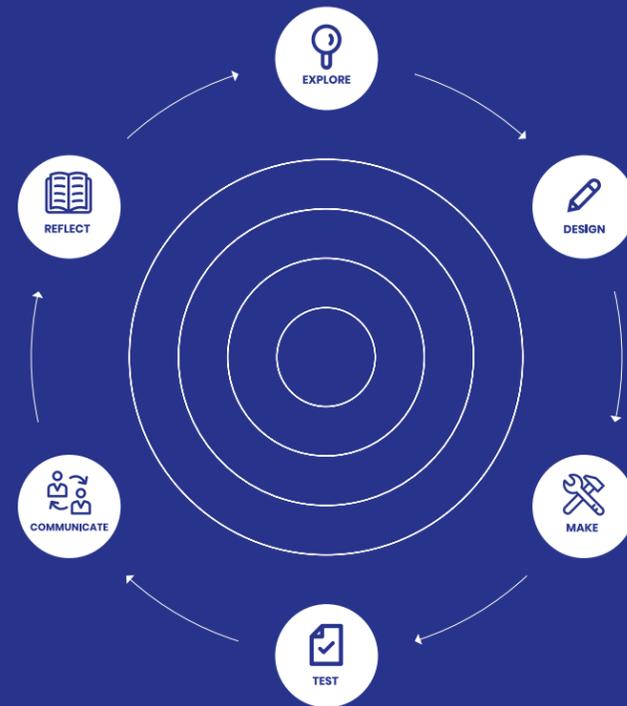
Inquiry-based learning and design thinking

STEAM education encourages students to be curious and experiment as lifelong learners. Inquiry-based learning and design thinking are excellent frameworks for STEAM since it promotes critical thinking and innovation.

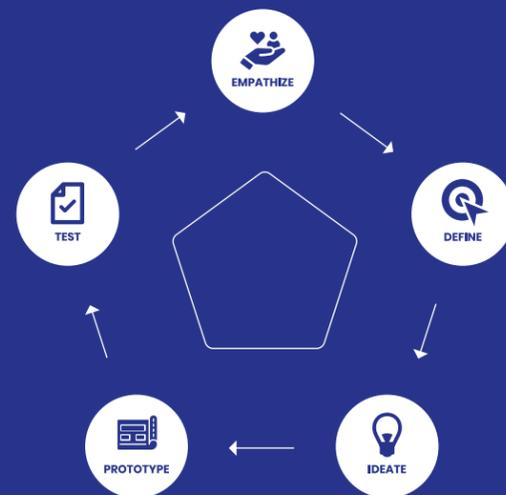
Inquiry is an approach to learning where students are provided with opportunities to explore the natural or material world, ask questions, look for solutions, make observations and test out ideas in search for a new understanding.

Design thinking and inquiry based learning overlap each other in many ways. The big difference is that your end goal with design thinking is to come up with the best possible product for a specific end user while inquiry-based learning is about moving students from a position of curiosity and wondering to a position of enacted understanding and further questioning by letting them generate questions, ideas and observations.

These two processes can help students systematically learn and apply these techniques to later solve real world problems in a creative and innovative way. In both their future jobs and lives, Infento is ideal to kickstart this type of learning.



Inquiry-based learning cycle



Design thinking cycle

Educational innovation with Infento

Infento helps your school take a big step towards innovative education. Our educational Kits and teaching programs are in line with the methods of inquiry-based learning and design thinking and stimulates the development of engineering skills. Infento challenges and appeals to the creativity and thinking skills of students.

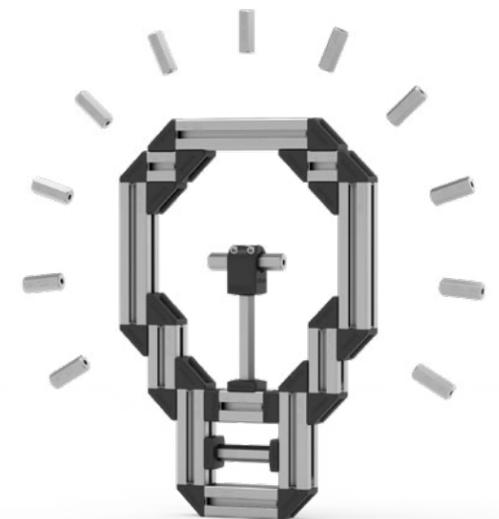
The unlimited possibilities that Infento offers thanks to our modular parts, enables kids to build virtually anything they can think of. This is inquiry-based learning at its best. On the Infento website you and your students can access exciting Science Builds, the coolest Rides and amazing Design Challenges.

Infento Design Challenges

Infento has developed unique Design Challenges that unleash all creativity in children. The fact that students can design and build something that they can then actually test and use afterwards, guarantees plenty of enthusiasm amongst your student population.

What will your design look like?! Ready, set, go!

- 1 Leg prosthesis
 - 2 Vehicle with sidecar
 - 3 Electric recumbent bike
 - 4 Horse for the princess
 - 5 Popemobile 2.0
 - 6 Merry-go-round
 - 7 Fitness machines
 - 8 Mobile desk and chair
 - 9 Electric Formula 1 car
 - 10 Hospital stretcher
- ...and many more Challenges!



Done? Test your design. Have a go with the entire class!



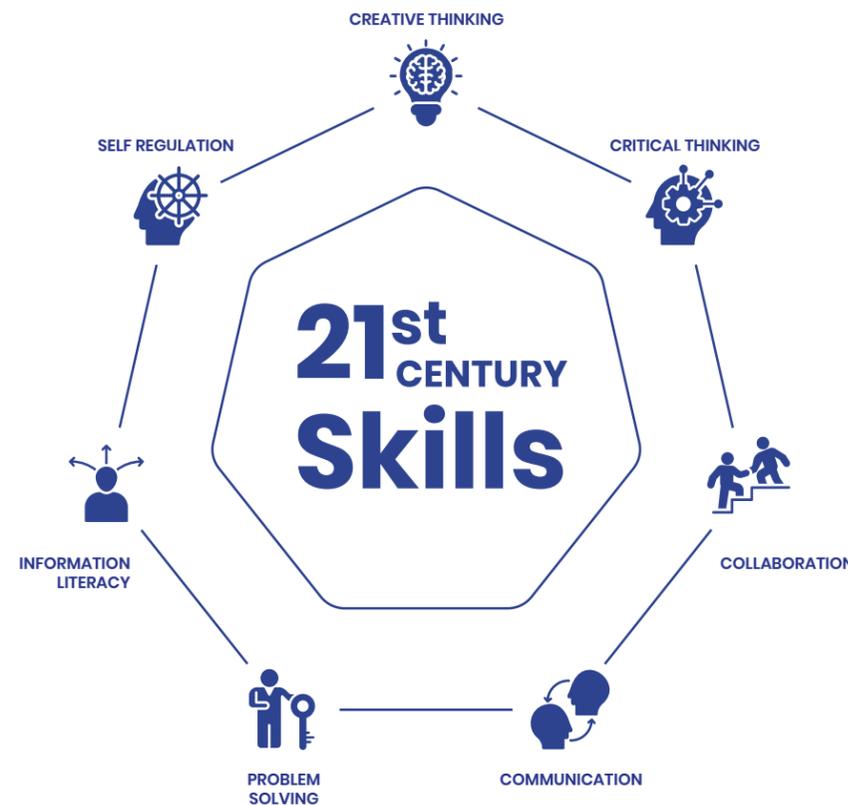
21st century skills

Our society keeps rapidly changing in the 21st century. There are massive technological, economical and societal developments occurring that will influence the future of work and living environment of children.

For schools, it's a huge challenge to keep up but it's crucial to do so, in order to sufficiently prepare students for the future.

Repetitive and routine work tasks will be less and less executed by humans, where robots and artificial intelligence will take over. Instead of performing simple tasks, employees will rely heavily on skills like creativity and critical thinking.

To prepare students for their future, it is critical that 21st century skills take up a key role in education at your school. Teaching needs to stimulate a curious, inquisitive and problem solving attitude amongst children. Infento will help you accomplish this goal.



Infento activates these 21st century skills

“65% of children entering primary school today will ultimately end up working in completely new jobs that don't yet exist.” – World Economic Forum

Creative thinking

Creative thinking is the ability to create something new with your imagination and available materials.



Enhance your creativity by using 100% modular parts to create your own vehicle or any other construction you can think of.



Critical thinking

Critical thinking results in substantiated consideration and decisions, taken autonomously.



Infento encourages children to first come up with a design, followed by a systematic approach on how to realize your design.



Collaboration

Collaboration is working towards a shared goal together. This involves supporting and complementing each other.



Assembling your own vehicle means students need to (learn to) cooperate. Complementing each other and dividing tasks is essential to reach this goal.



Communication

Communication is not only about bringing across a certain message, but also about the relationships between the participants.



Creating your own life-size vehicle or science build is not a small challenge and requires good communication on all levels.



Problem solving

Problem solving is the ability to recognize a problem and come up with a plan to solve it.



Infento's modular parts offer students the opportunity to reach several different solutions to a problem.



Information literacy

Information literacy empowers students to first recognize the need for information and act on this need by searching, selecting, evaluating and using relevant information.



Students can independently use the step-by-step materials and manuals to build the technical construction of their choice.



Self regulation

Self regulation involves the ability to complete a task or process in a goal oriented manner and take responsibility for your actions.



Independently building a large technical construction or vehicle is an in-depth task and requires plenty of effort and perseverance.



Sustainability and quality

100% RECYCLABLE

The aluminum profiles are 100% recyclable and this makes them a very sustainable material.

INDESTRUCTIBLE ALUMINUM

The profiles are made of anodized aluminum. This material is light, indestructible and does not corrode.

GLASS FIBER REINFORCED PLASTIC

All plastic parts are reinforced with glass fiber, making them extra strong.

BEST POSSIBLE BRAKES

The disc brakes function well in any circumstance, wet or dry. Safety comes first.

DURABLE PARTS

Year after year our modular parts maintain their durability even after intensive usage.

RUBBER DRIVE BELT

We don't use an oily metal chain, but a belt that is clean, safe and will last for years.





Talent Kit

Contents

- 775 modular parts
- 5 sturdy storage boxes
- Tools for building
- Digital manuals
- Teaching materials

To be build

- 7 Rides
- 5 Science Builds
- 10 Design Challenges
- Endless own creations

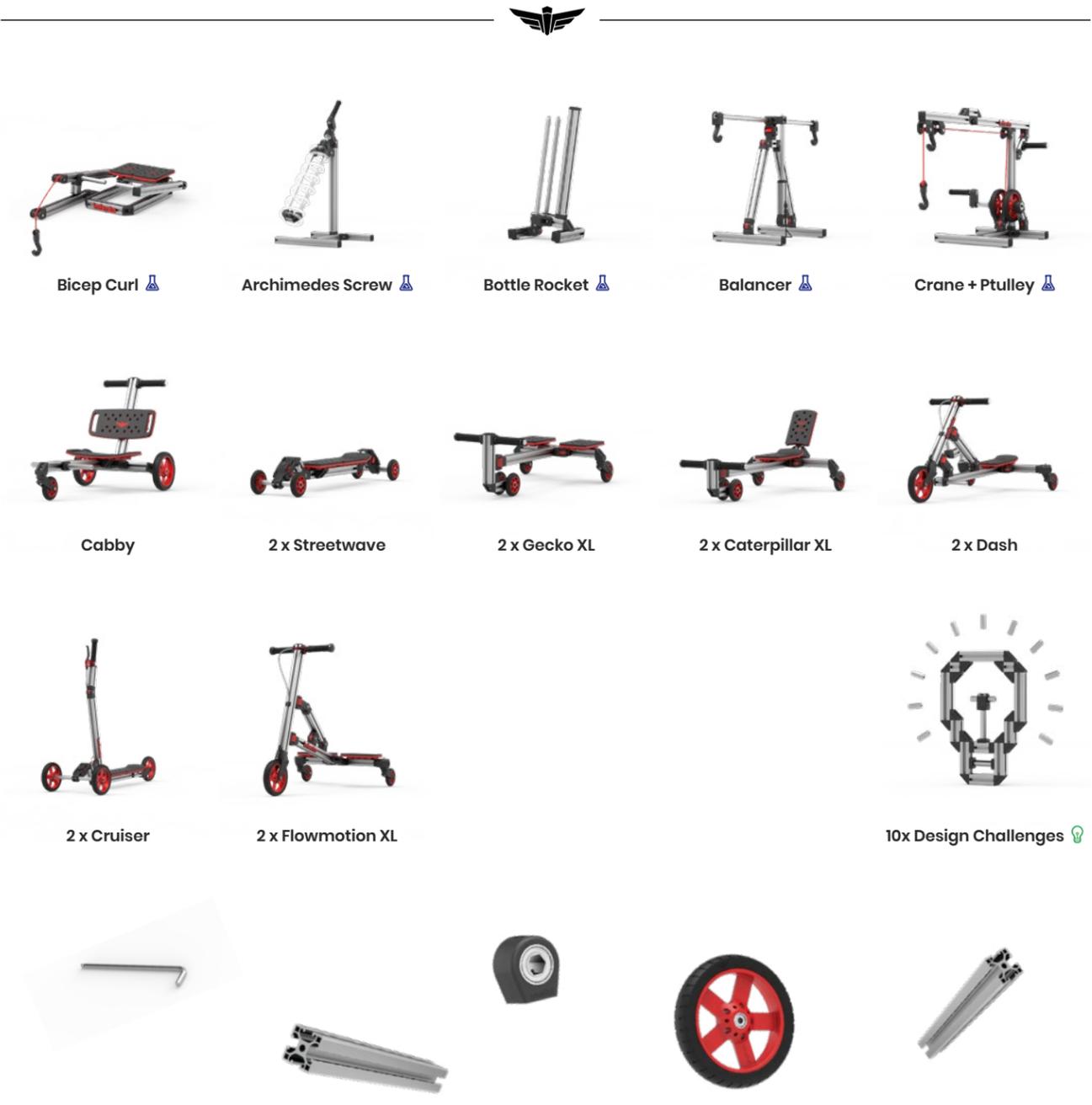
\$995

The Talent Kit is widely applicable and accessible for any type of student. No basic knowledge is required to build constructions, neither for the students, nor for the teachers. The students can directly get to work using the clear instruction manuals and user friendly teaching materials.

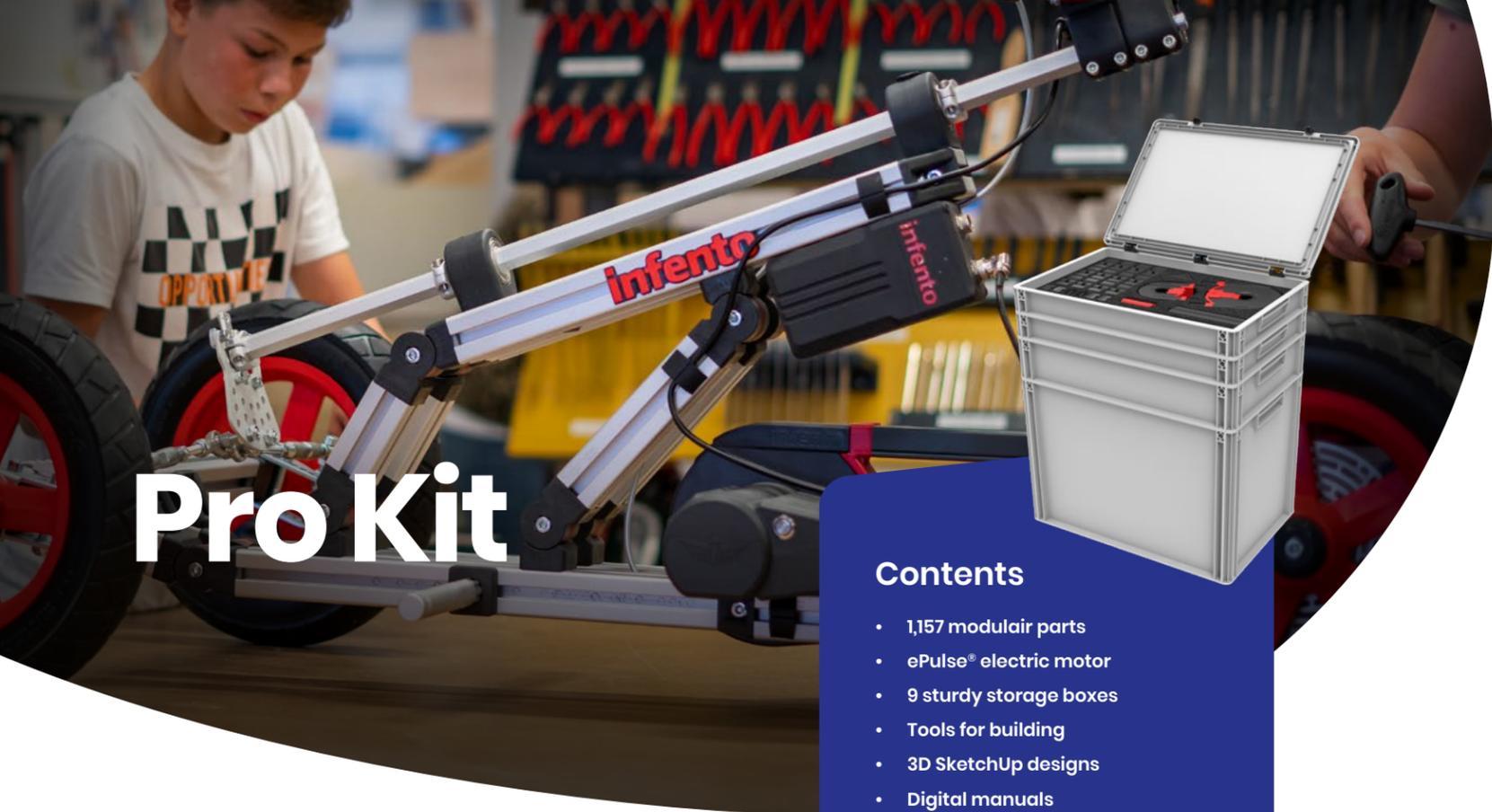
A maximum of **eight children** can be occupied at the same time with one Talent Kit. You can use this Kit as an individual project or have two groups of two or four kids create different inventions for example our Funboard, Flowmotion or Cruiser. As soon as your cool new skateboard or scooter is finished, the time has come to organize a race between the groups! Prefer to work with the entire class? With three or four Talent Kits, the whole class can build at the same time!

The Kit consists of 775 modular parts that are very robust and durable. This makes intensive use possible over a period of several years. Thanks to the high number of parts, Students can get creative with the special Design Challenges. The Talent Kit comes with five sturdy storage boxes that have a clear layout. The creative and technical talent of your students will emerge in no time with this Kit!

Talent Kit overview



- 5 Science Builds
- 7 Life-size vehicles
- 10 Design Challenges
- Up to 8 students per kit
- Endless creations
- Tools
- 775 modular parts
- Digital manuals
- Grades 2+



Pro Kit

Contents

- 1,157 modular parts
- ePulse® electric motor
- 9 sturdy storage boxes
- Tools for building
- 3D SketchUp designs
- Digital manuals
- Teaching materials

To be build

- 12 Rides
- 5 ePulse® Rides
- 5 Science Builds
- 20 Design Challenges
- Endless own creations

\$1895

The Pro Kit is, just like the Talent Kit, widely applicable in middle school and high school. All types of students and teachers can start working with it, without any prior knowledge. The big attraction of the Pro Kit? The amount of Design Challenges, a huge amount of parts for your own creations and... the ePulse electric motor! Is the new Henry Ford or Elon Musk at your school? Infento can spark the engineering fire in any child. Who doesn't like building their own electric vehicle to race at the schoolyard afterwards!?

With one Pro Kit, a maximum of **eight students** can be occupied. A group of four can build an electric vehicle or a Science Build together. Two groups of four can build a smaller vehicle at the same time, such as a skateboard or scooter. Of course it's also possible to work individually on an Infento project or with a smaller group. When using multiple Pro Kits you can have the entire class work with Infento, or divide the Kits over several grades.

The Pro Kit consists of 1,157 modular parts that are conveniently stored in nine high quality, mobile storage boxes. Students can let their imagination go wild constructing the Design Challenges, thanks to the enormous amount of parts. Build an electric recumbent cycle, a special gaming chair, a futuristic pedal go-kart or a fitness machine. Anything is possible! The Pro Kit ensures educators that their students will become familiar with critical 21st century skills, all while building inventions full of passion and enthusiasm!

Pro Kit overview



Minibike ⚡



Quad ⚡



Hot Rod ⚡



Go-Kart ⚡



Buster ⚡



Bicep Curl 🧪



Archimedes Screw 🧪



Bottle Rocket 🧪



Balancer 🧪



Crane + Pttuley 🧪



Cabby



2 x Streetwave



2 x Gecko XL



2 x Caterpillar XL



2 x Dash



2 x Cruiser



2 x Flowmotion XL



20x Design Challenges 💡

5 ePulse® ⚡ Rides

5 Science 🧪 Builds

20 Design 💡 Challenges

12 life-size vehicles

Up to 8 students per kit

1,157 modular parts

Endless creations

Digital manuals

Grades 2+

Tools

Science Builds



Balancer

Kids will discover everything about dividing weights. Which two objects are different in shape but equally heavy? How many pieces of paper would you need to balance one pencil? How does mass versus volume work? Students can also learn about the lever rule by changing the position of the hooks.



Bicep Curl

Build your own fitness equipment! Who is the strongest in class? Which muscles do you use? Do your own research. What happens if you place the handle bars at a different position? What if you extend the arm of the machine?

Archimedes Screw

The Dutch are famous for reclaiming land from the sea by using windmills. But how did that work? Students will learn to build a fully functional water screw and understand how it works. They will discover how water can beat gravity!



Crane+Pulley

How does a mechanic lift an entire engine out of a car? How can a crane be strong enough to lift enormous weights? Students will learn all the secrets behind the crane and the pulley!

Bottle Rocket

Launching a real water rocket and understanding the science behind it, what could be cooler? Make a real rocket from a water bottle. Fill the bottle with water and compressed air and the kids will find out why this causes the rocket to shoot in the air. The same principle is used for real rockets! Experiment and discover the science and principles behind thrust, air resistance, aerodynamics and the center of gravity.





Rides



Cabby

This is a true duo ride. First build together, then ride together! The one sitting down can steer using their feet while the partner is pushing and running. This requires maximum trust in each other to have fun. The Cabby is a real team builder!

Dash

How does drifting work with the Dash? Keep one hand at the steer and one hand on the drift activator in the back. Let a classmate push you and to generate some speed. Now turn both the handlebar and the drift activator at the same time to start drifting. Change roles afterwards.



Streetwave

A classic skateboard, with an Infento twist. Both at the front and back the Stabilizr System is mounted. Place the axles and wheels and test your board. Can you master this cool skateboard?



Flowmotion XL

Experience a unique new way of moving forward with the Flowmotion. Sway your hips and your own bodyweight and the swivel wheels at the back will set you in motion immediately. Discover how you are able to move forward in this magical way!



Gecko XL

This Ride will amaze children. Put your knees on the seat boards and move your hands quickly from side to side. The Gecko will move! A hand powered Ride that moves without a chain. How is that possible? Build it, try it, and observe how it works.

Guaranteed success in your classroom with these cool vehicles!



Cruiser

The most unique scooter in the world! This 3-wheeled scooter uses lean-to-steer: where you use your bodyweight to head in the right direction. Gain speed, put your feet on the scooter and lean right or left to magically make turns.



Caterpillar XL

First build together, then discover how the Caterpillar XL works. Sit back, relax and enjoy! Grab the rear profile with your hands and move the steer left and right with your feet. You'll zigzag forward in no time!



Electric ePulse® Rides

Electric engines will power the future. Cars, bicycles, motorcycles, boats and even planes. Imagine how exciting it is to let kids build their own electric vehicle! Infento enables this.

students can first use the manuals to build an electric quad, go-kart or a motorcycle. If they get the hang of it, they are ready for the next step; making their own electrified creations! An electric recumbent bicycle, scooter, wheelchair, or racing car. The boundaries are limitless!

The powerful ePulse® motor has a 4 Ah lithium-ion battery that can be placed in various positions. Modular is the magic word! The battery is ready for 60 minutes of continuous run time. After only two hours of charging it will be ready for action again!



ePulse® motor and ePulse® battery



Quad

Build a Quad with a group of two or four students. Lots of kids have probably already experienced driving a quad once. Now they can make one themselves! They will learn to connect the electric drivetrain and mount the disc brakes. Surely the children will be proud when driving their quad around the schoolyard! This is the perfect way to get them enthusiastic about engineering.



Buster

This is the SUV amongst go-karts. Assemble the front and back axle. Set the seat at the right position and off you go! Test your result at the schoolyard with classmates. Who will set the fastest lap time?





Go-Kart

Go-karting is a loved activity amongst kids. Now it's time they build a go-kart with their own hands! The ePulse System motor will provide 60 minutes of fun when your students are driving around. The disc brake will enable a safe stop at all times. Even backing up is not a problem, just press the green button. Are you the new go-kart pro?

Hotrod

Meet our tribute to an iconic vehicle: the Hot Rod. This lowrider beauty will definitely turn some heads as the students whizz by. With 20nm of torque available, they'll zoom away at 7 mph all while the students discover the power of torque!



Minibike

Electric fun on two wheels. A real minibike for the biker minded students! This is one of the favorite models of the Infento fans. It's a great experience to build an electric bike together, and afterwards learn to drive it.



Awards

Infento's concept has won many design and education awards including the most recognized and reputed awards of the world.



Red Dot Award

"The Kits are remarkable: it makes children do something useful together which is fun and develops essential skills. The modular parts offer countless possibilities and have an important function: they spark children's creativity and give them technical skills."



Parents' Choice Gold Award

"Our test panel has been wowed by the kit's contents. The quality of the parts will last through the re-builds. And the journey is as much fun as the result. In addition to the great value per ride these kits provide invaluable learning experiences."



German Design Award

"This comprehensive kit allows children to create their own functional and roadworthy vehicles, with virtually no limits to the imagination. The technical look and feel appeals both to the young and the old, plus it encourages real social contact in an era when games and communication are increasingly taking place on a digital level."



ambiente

In the media

Infento's innovative concept was embraced by the international media. The unique idea was praised for its versatility and educational value.

BBC

“

In the world of convertible, growing locomotion, the most drool worthy must be Infant. From trike to bike and beyond: the transforming-transport trend reaches its zenith with the multi-talented Infento.

”

Forbes

“

Infento is inspiring the next generation of makers and innovators to make the world a better place.

”

Treehugger

“

The emphasis here is on a modular design that promotes ease of use and assembly, and do-it-yourself goodness that is sure to inspire curious youngsters to tinker and make more of their own stuff.

”

De Telegraaf

BUSINESS INSIDER

WIRED

Forbes

de Volkskrant

NRC
HANDELSBLAD

NOS

GEARJUNKIE

The Auteursmer

Stuff

CROWDFUND INSIDER

Treehugger

Outside

WANT

INSIDEHACK

designboom

GiGADGETS

BBC

CHASSEURS DE COOL

AUTOEVOLUTION

GEARHUNGRY

HICONSUMPTION

DER SPIEGEL

heise online

TRENDSHUNTER
FIND BETTER IDEAS, FASTER

Make:

NEW ATLAS

BIKERUMOR

About Infento

The Dutch company Infento was founded in 2010 by Sander Letema and Spencer Rotting. The idea for life-size modular vehicles arose when Spencer worked as a volunteer at youth organizations. He and the kids built cool soapboxes to have races with.

Spencer was amazed by the resourcefulness the kids showed and dreamed how cool it would be if they had multifunctional parts available. Like LEGO and Meccano but then life-size! His brother in law Sander was equally intrigued by the idea and started designing. After a long period of drawing, testing and developing, the first modular construction kit for schools was the result!

INTERNATIONAL BREAKTHROUGH

The big international breakthrough came in 2015. Infento launched a consumer Kit on Kickstarter (world's largest crowdfunding platform) that year. This became one of the biggest educational campaigns worldwide and Infento was covered by media like the BBC, Wired, Forbes and Der Spiegel. The Infento video went viral on social media and has been watched by 25 million people. In 2018 Infento ran another Kickstarter campaign that was so successful, that it was awarded the most heavily funded STEM project the crowdfunding platform had all year.

Infento is a quickly growing company. Our team now consists of 25 creative Infentors. We design and produce all the construction Kits in our own factory in Amsterdam. We are very proud to see our Kits sold worldwide in over 50 countries. Our mission: "Raise a generation of children that has the skills to build a better future."



What teachers say



“I see the children are super involved, pick up a lot of knowledge in a short amount of time and above all have great fun while building with Infento.”

Shane VanderKooi
Green Mouse Academy



“User friendly and accessible. Students can work autonomously and they are enthusiastic because it links perfectly into their world.”

J. Weckhuysen
Lambertus School

“Infento is a huge enrichment for education. It is the perfect way to enhance and develop engineering skills in children.”

R. Broekman
Stanislas College

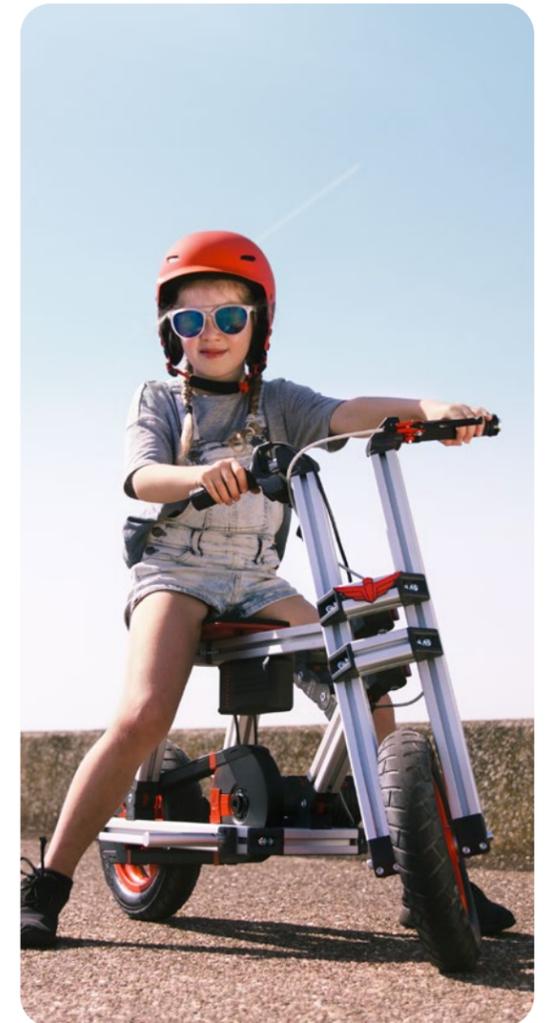
The value of Infento at your school

- ✓ Inquiry-based learning at its best
- ✓ Makes students enthusiastic about STEAM
- ✓ High ceiling, wide walls learning opportunities
- ✓ Great for kids in elementary, middle and high school
- ✓ Autonomous learning with clear instructions
- ✓ Teaches kids important 21st century skills

Want more Information?

Do you want to offer truly inspiring STEAM education at your school? If so, Infento will allow you to succeed!

Order directly at our website or contact our education team at edu_usa@infento.com





infento

Your ride to the future

Infento.com

Alle rights reserved © Infento 2020