

More than 4 800 000 tonnes of plastic end up in the ocean every year, half of it used only once.

Source: European Commission

WE CAN DO BETTER

The world is drowning in plastic waste, primarily due to our consumer behaviour. While most plastic is made from fossil fuels and is used only once before being thrown away, it can take centuries to break down naturally. Often ending up outside of the waste stream, the plastic degrades into small pieces of microplastics. During this usually uncontrolled process, they are given time to work their way into the environment and eventually enter and move through the food chain.

We believe the world needs a material renaissance, and that is why we have developed completely new solutions that will allow us to replace plastic in a wide variety of products, and prevent more plastic pollution.

IT'S TIME FOR CHANGE

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JOSEF ŽÁDNÍK I CEO



We combine waste and natural resources with modern technological know-how to create new innovative materials and products to replace single-use plastic in everyday situations with a better solution for a more sustainable planet.

Refork is addressing the UN's Sustainable Development Goal #12 as our goal is to ensure sustainable consumption and production patterns. From the beginning to the end, we keep the environment at the heart of everything we do and strive for continuous improvement in every aspect of our business.





FROM NATURE FOR NATURE



Developing unique materials based on industrial waste and natural resources that are good for both the environment and people.

**MATERIAL** 



Combining our patented technology and know-how of injection and extrusion moulding with materials to quickly scale the production.

TECHNOLOGY



Prototyping new solutions for various industries and designing final products while always keeping the customer experience in mind.

**PRODUCT** 

#### **OUR STORY**

#### JOSEF HOMOLA | FOUNDER | TECHNOLOGY



It all started with the idea to replace plastic in everyday products with more sustainable material. Drawing from previous experience with manufacturing, our founder Josef Homola spent several years looking for a solution. In 2018, the team discovered how to bind wood flour to natural substances. That is how our pioneering fork was born.

In 2019, we founded Refork. To achieve our mission, we decided to establish our Research & Development Centre in Prague and in September 2021, we have opened a new factory to scale our production. We take pride in it being local and in-house.

THE FORK IS ONLY **THE BEGINNING** 



# MATERIAL





We spent two years looking for the right ingredients to make completely natural and renewable material that could be quickly processed. After many trials and errors, we have developed a new innovative material that is made only from elements already existing in nature. All ingredients fully biodegrade in home compost, soil, and the marine environment without leaving any microplastics or harmful chemicals behind. In the future, our material has the potential to be entirely made from waste.

We are partnering with leading suppliers and research institutions to develop new materials that will allow us to extend and improve our portfolio.

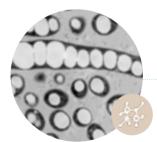
WELCOME TO MATERIAL RENAISSANCE





The main ingredient is wood flour, waste from industrial wood processing filtered and cleaned of any impurities.

**WOOD FLOUR** 



As a binder, we use PHB(V), a naturally occurring polymer produced by microorganisms through fermentation processes.

PHB(V)



We add naturally occurring and renewable mineral additives to improve the properties of our material.

MINERALS

**MATERIAL 2.0** 



#### **TECHNOLOGY**

PETR BÖHM | MANUFACTURING



We have developed a new patented technology for material blending that allows us to combine up to 60% waste wood with natural polymers which is not possible with conventional compounding lines. We have created a process that allows us to apply our material to conventional plastic technology as injection or extrusion moulding. We are also working on developing a thermoforming technology for our materials.

Our new production facility in Prague includes a fleet of injection moulding machines, extrusion line and packaging lines. The factory has capacity of 10 million pieces per month.

TIME-PROVEN TECHNOLOGY WITH AN **INNOVATIVE TWIST** 



We use injection moulding technology to produce cutlery and other complex products.

INJECTION MOULDING



We use extrusion moulding technology to produce straws and other tubes.

**EXTRUSION MOULDING** 



MTI is a patented blending technology that we use to bind wood flour with natural polymers and other natural additives.

MECHANICAL THERMODYNAMIC MILL



We use CNC to develop prototypes of new products rapidly. We can create a prototype mould within 6-8 weeks and test it with our customers before making the final mould for mass production.

COMPUTER NUMERICAL CONTROL

## PRODUCTS FOR GASTRONOMY

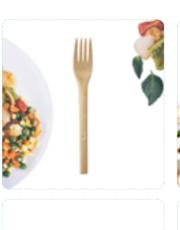
DAN BESEDA | PRODUCT & MARKETING



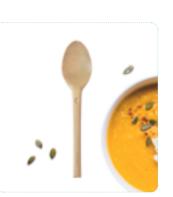
Our cutlery is made for every situation when silverware is not an option. After use, it can be hand-washed, reused or composted at home. If that is not an option, it can be discarded in the general trash and incinerated.

Our customers are seeking sustainable and functional alternatives to plastic. They understand that they are creating a long-term value for their business, community, stakeholders, and the environment by adopting better practices.

YOUR NATURAL CHOICE WHEN EATING OUT



















# **REFORK PRODUCT PILLARS**



Certified 100% biobased.
Our products are made
only from elements already
existing in nature.

#### NATURAL



Our products fully biodegrade in nature, leaving no microplastics behind.

## MICROPLASTICS-FREE



We are turning wood flour, a by-product of wood processing, into functional products and maximizing the value of natural resources.

## RESPONSIBLE



Our products are manufactured in our factory in the Czech Republic.

LOCAL

USE THE QR CODE TO SEE OUR PRODUCTS



## PRODUCTS FOR DENTAL HYGIENE





In 2022, we are launching a new product portfolio for the dental care market, starting with a toothbrush. Made from the Refork material, we are bringing a sustainable solution to replace one of the most daily used plastic products with something new and better.

The product was developed together with a team of professionals from the dental industry to meet the highest quality standards with one goal in mind: to bring a toothbrush that would keep both your smile and our planet healthy.

YOUR **NATURAL CHOICE** WHEN KEEPING YOUR SMILE HEALTHY



# **PARTNERSHIPS**

We are looking globally for partners to enter new markets outside Europe. Refork provides material and technological know-how and scaling of the production. We can also develop new materials based on local industrial waste to keep the material sourcing as local as possible.



# INTERNATIONAL EXPANSION

We can develop new products based on current materials used to make almost anything made of plastic. We can also create new materials for specific product applications.



**NEW PRODUCTS** 







Imagine a world where the products normally made from plastic are made completely from waste. A healthy world without microplastic. A world where you can easily recycle or compost the products you buy after you are done with them.

Our purpose is to give people a better choice. Plastic must be re-invented as our planet deserves better. And we do so too.

LET BE THE ONLY THING YOU LEAVE BEHIND

