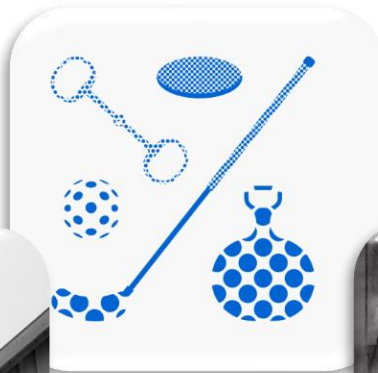


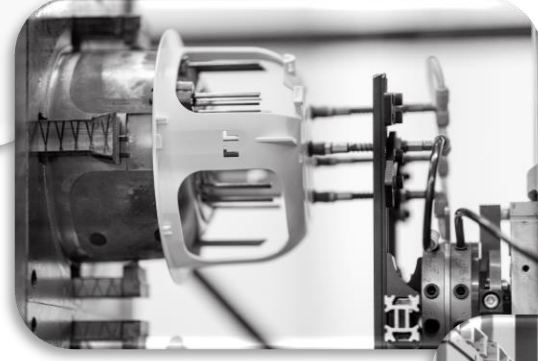
habo•plast

Sustainability is one of our watchwords.  
We are actively working to reduce Our environmental impact through smarter material choices and internal and external circular flows. For us, it's a cultural thing.



Habo Plast has been supplying the market with sports products since 1971. Among other things, through our brand Jolly.

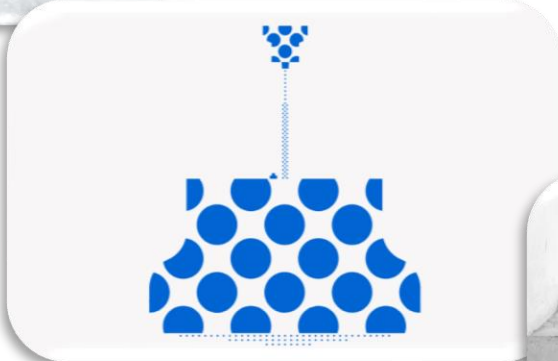
Our machinery consists of 16 pcs. injection moulding and 2 pcs. Extrusion Machines  
We work exclusively with engineering plastics



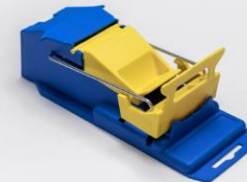
# habo•plast



We know plastic. With over 50 years of experience in both production and product development we help you find right for your business



70% of our products are shipped to the lighting industry.



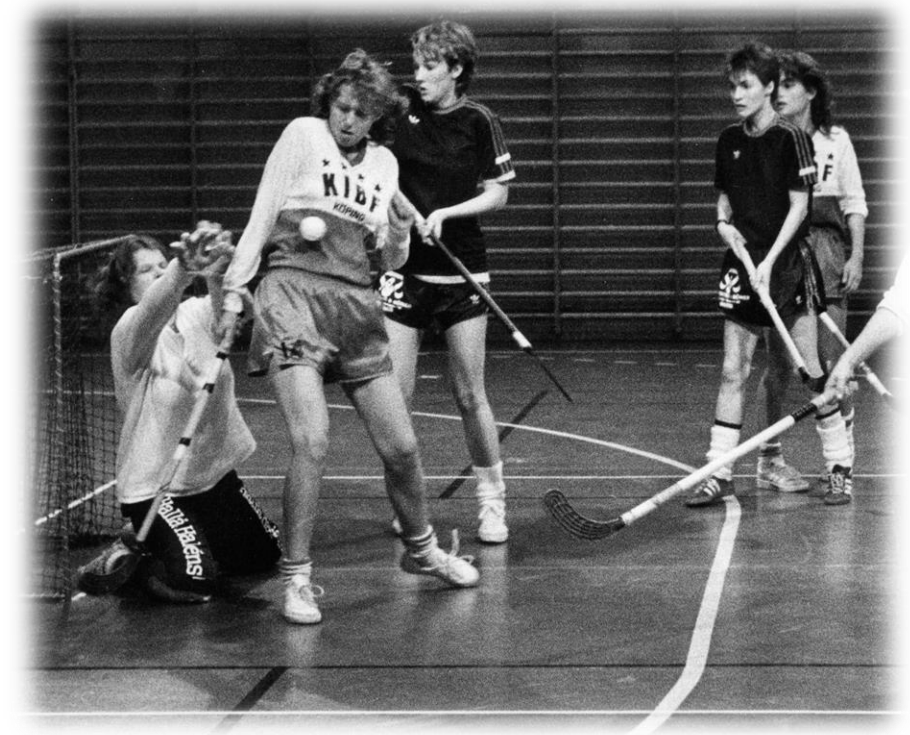
The Mouse and Rat Trap Mjölner is produced by us.

We currently deliver over 1400 unique items

7 days delivery time regardless of order size. Several of our customers have reduced their inventory by up to 80% by ordering just the quantity they need in that particular production week.

# Introduction and background

Habo Plast was founded in 1970 and is based in Baskarp. The company was born through an outsourcing of Fagerhult Lighting's internal plastic production. Shortly thereafter, the Jolly (floorball) brand was established and the production of all the Nordic floorball sticks for schools was started at Habo Plast. Later, floorball became a professional sport and then floorball equipment was also manufactured for professional use within the company. Today, Habo Plast is a subcontractor in the plastics industry that supplies primarily to the lighting industry, sporting goods, electronics enclosures and car accessories.



# Introduction and background

- Habo Plast strives to be a local player in injection molding with a focus on sustainability, fast deliveries and high quality.
- We are actively working to lower the threshold for our customers who want to make a smaller CO2 footprint through smarter material choices and designs.



# Services and products

## Service Offering

Injection molding services for plastic materials

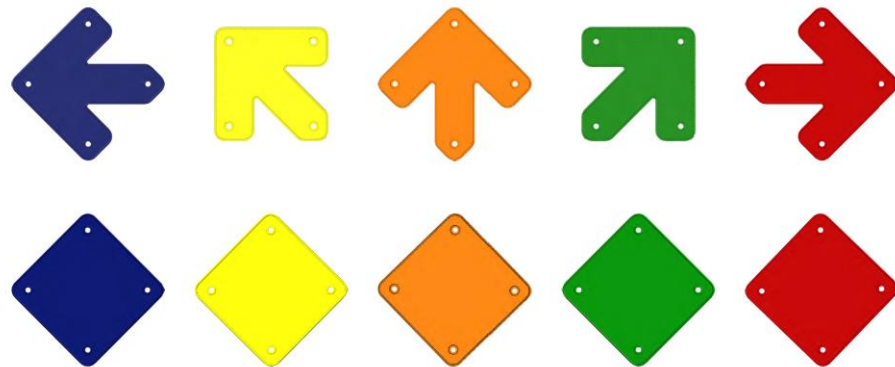
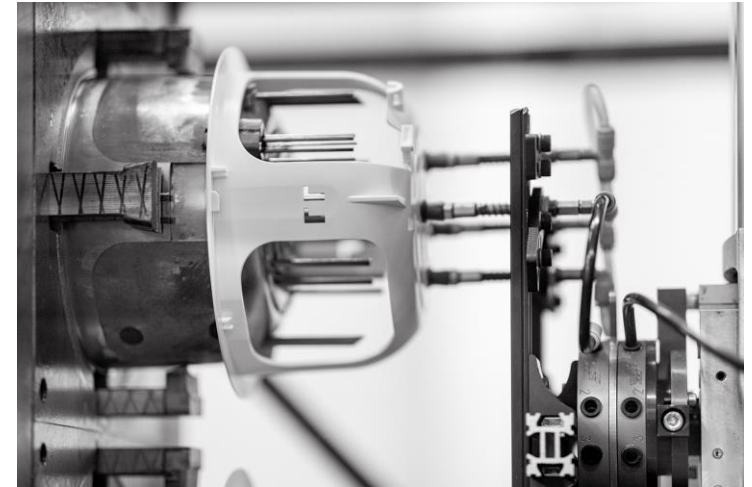
Extrusion of plastic materials

Assembly and packing

Stock

Technical consulting and construction

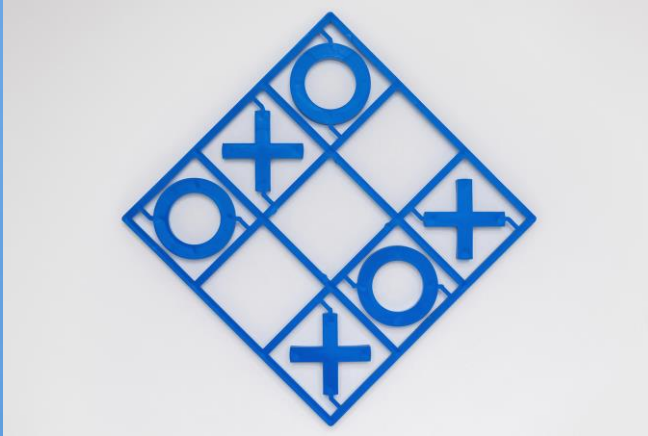
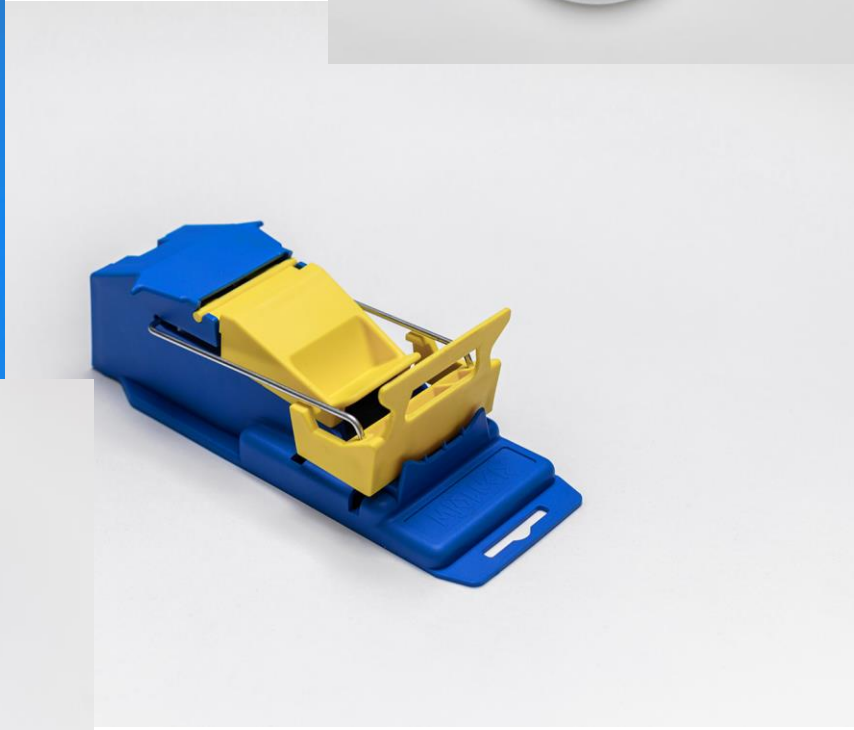
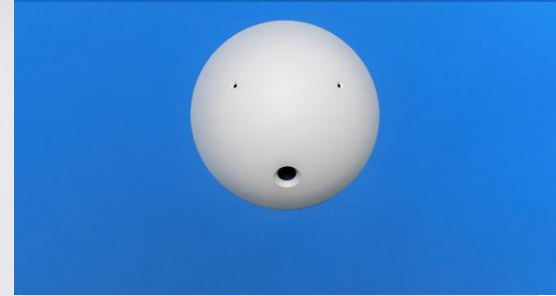
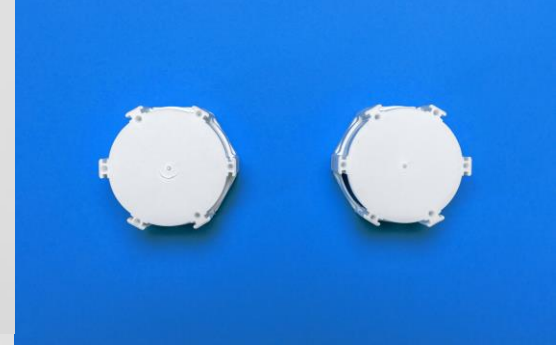
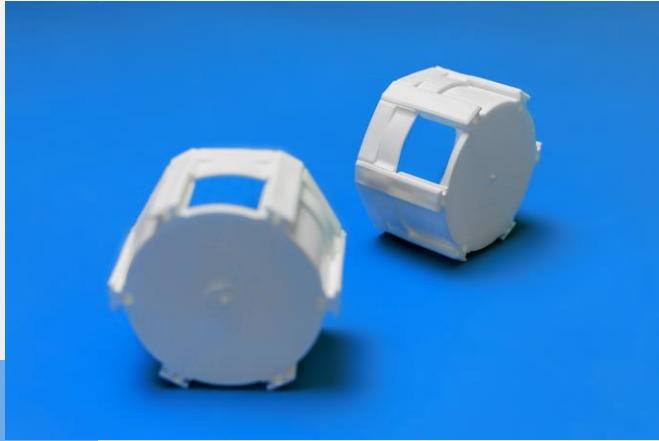
Material selection and strategic degradation of plastic materials



## Products

Track markers for jogging tracks  
Biodegradable or completely fossil-free

# Products





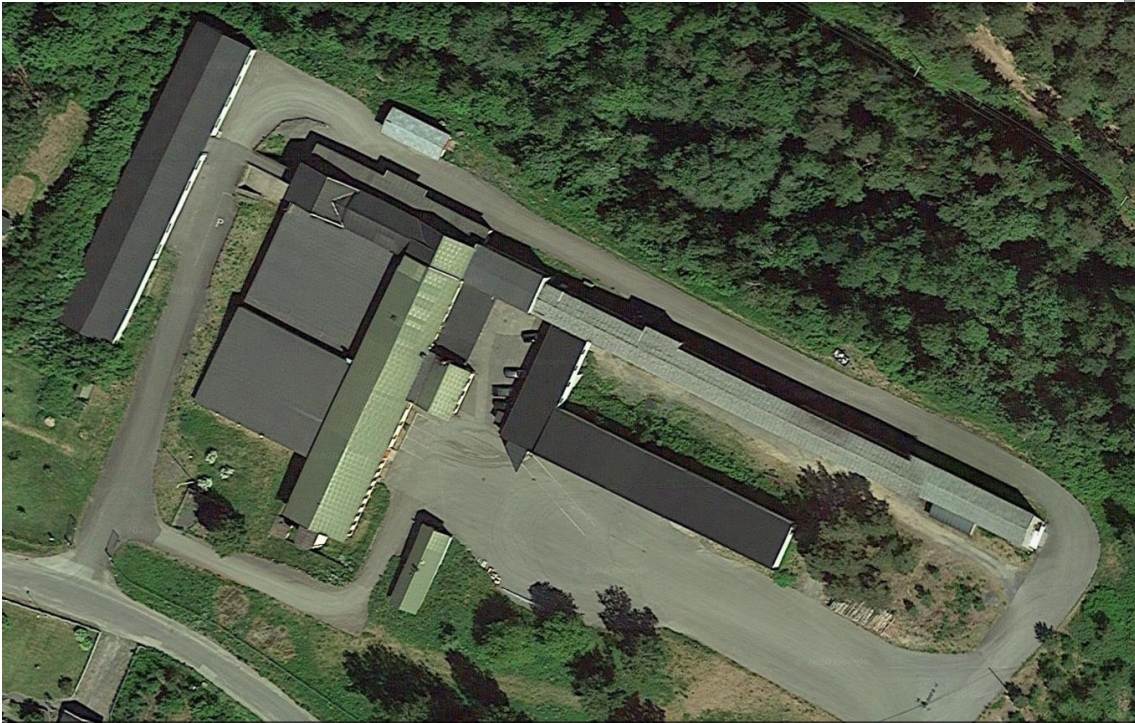
# Machinery

Machine number	Machine Name	Locking force (tons)
1	Engel	500
2	Engel	300
3	JSW	230
4	Engel	175
5	Engel	250
6	Engel	300
7	Engel	110
8	Engel	175
9	Engel	175
10	Engel 2k	175
11	Krauss-Maffei	110
12	Engel	50
13	Arburg	70
14	Ultra Tech	230
15	Arburg	25
19	IDE	20kW
20	IDE	20kW
21	Demag	50





# Factory

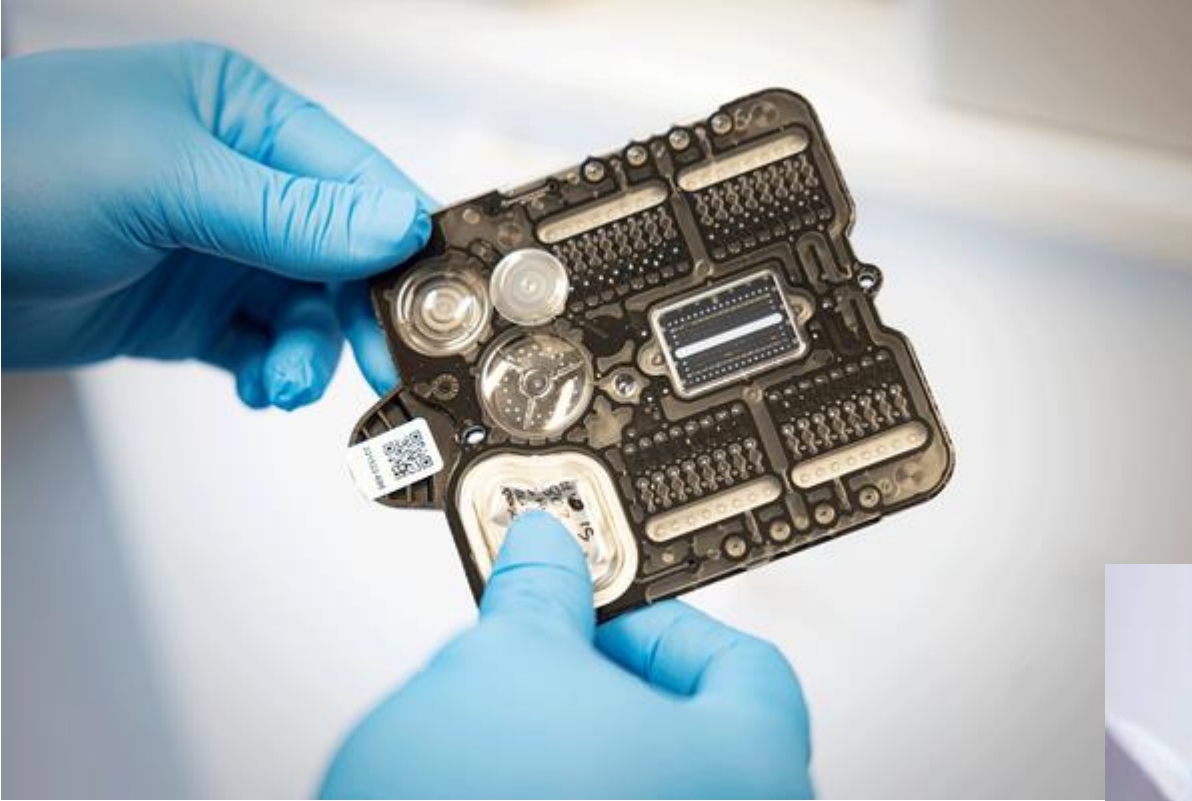


8700 sqm available under roof





# Customer references – Astrego Diagnostics



- Reintroduce antibiotics that have been scrapped
- Counteracting antibiotic resistance
- Fast results

# Materials

What do we think about Habo Plast?



- There is no clear solution in the near future to replace fossil-based oil as a basis for plastics
- There is no clear alternative to plastic in many applications
- Demand will probably continue to increase, which means that prices will go up for recycled and fossil-free plastics, so we must be agile and live with dynamic flows
- In the long term, we believe that the solution with the best scalable possibilities is mycelium, but that is a long way off
- Transparency and being able to withstand scrutiny will become increasingly important
- Therefore, we believe in a clear material strategy and approach for plastics
- Most importantly, do something!



# Materials

"You can recycle plastic up to 10 times before additives are required".....

So how do we do this in a smart way?

## Design

Colour choice an enabler for recycling

## R&D

The right material in the right place

For example, use a reflector material that can be circulated and then recycled

Use the new material for the first time in the visible applications

Robust designs that allow for "inferior" material qualities

## Purchase

Hotrunners in the tools

Make supplier choices according to material concentration and possibility of recycling

LTAs and securing recycling in the same way as tooling and production equipment

## Business development

Create business concepts that enable circular flows

Don't sell your raw material!

## Marketing and communication

Use credible sources that stand up to scrutiny (ISCC, for example)





# Materials

Grupp	Namn	Art Nr	Internt	Färg	Leverantör 1
ABS	Khumo	775N (EXT)	1025	Nat	Safic-alkan nordic ab
HD	Ineos	HD5502S-S	1050	Nat	Lautrup chemicals
HD	Ineos	5211 EA	1051	Nat	Lautrup chemicals
HD	Hostalen	4731B	1053	Opal	Albis
LD	Eltex	PH23T630	1041	Nat	Lautrup chemicals
LD	Borealis	FA 3200	1054	Nat	Nexeo
LD	Borealis	FT3200	1057	Nat	Nexeo
PP	Sabic pp	FPC70	1027	Nat	NORDIC POLYMERS
PA	Grilamid	TR 55 LX	1007	Nat	ERTECO
PA	Grivory	GV-6H EF	1009	Svart	ERTECO
PA	Zytel	ST 801	1017	Nat	Distrupol nordic
PA	Akromid	B28 GF30	1019	Nat	KD FEDDERSEN
PA	Akulon	K 223 TP 4	1026	Nat	Nexeo
PA	Akromid	B 3-9	1031	Nat	K.D.FEDERSEN
PA	Zytel	ST 801	1036	Svart	Distrupol nordic
PA	Akulon	K-FKGS6	1038	Nat	Nexeo
PA	Grilon	TSM-30	1044	Svart	
PA	Akromid	A3 GK 30 black	1059	svart	K.D.FEDERSEN
PA	Zytel	80G14 NC10	1098	NAT	Distrupol nordic
PBT	Polyshine	D201GF30	1015	Nat	Polykemi
PBT	Longlite	1100-630 s	1016	Nat	Gazechim
PBT	Polyshine	D201	1042	Nat	Polykemi
PBT	Longlite	1100-104 s	1060	Svart	Gazechim
PC	Lexan	LUX 1169	1001	Vit	ERTECO
PC	Lexan	3412 R (EXT)	1005	Svart	ERTECO
PC	Lexan	LUX2114G	1006	Opal	ERTECO
PC	Lexan	123 R - 82062	1013	Opal	ERTECO
PC	Lexan	123 R - 111	1023	Klar	ERTECO
PC	Xantar	19 UR	1029	Vit	K.D.FEDERSEN
PC	Xantar	RX 2024	1039	Vit	K.D.FEDERSEN
PC	Lexan	141 R	1046	Svart	ERTECO
PC	Erka	SV/VIT/OPAL	1061	Bland färg	Erka
PC	Lexan	LUX2114G-WH8B492XRW	1086	Opal	ERTECO
PC	Lexan	LUX2289-WH9G012RW	1087	Vit	ERTECO

Grupp	Namn	Art Nr	Internt	Färg	Leverantör 1
PC	Xantar	RX 2125	1088	Vit	K.D.FEDERSEN
PC+ABS	BayBlend	T85 XF	1002	Nat	Albis
PC+ABS	BayBlend	T 85011	1003	Vit	Albis
PC+ABS	BayBlend	FR3005	1037	Nat	Albis
PC+ABS	BayBlend	T88 GF30	1099	Nat	Albis
PET-G	Ecozen	CAS-27387-WZ	1024	Vit	Addvanze
PET-G	Ecozen	T90G	1052	Vit	Biesterfeld Plastic
PLA	A Good Choice	IMI08	1100	Nat	Improv Tec
PMMA	Altuglas	DR 66020	1010	Opal	Resinex
PMMA	Altuglas	DR 66039	1011	Opal	Resinex
PMMA	Altuglas	VM010	1028	White	Resinex
PMMA	Altuglas	Diffuse 301	1035	OPAL	Resinex
PMMA	Altuglas	DRT-101	1040	Klar	Resinex
PMMA	Altuglas	REFLECT M31	1045	White	Resinex
POM	AMCELL	KP 20	1014	Nat	
PP	Ineos	400-GA03	1000	Nat	Lautrup chemicals
PP	Celstran	PP GF 40-0414	1004	Nat	K.D.FEDERSEN
PP	Premix	Pre-elec 1370	1022	Svart	Alsiano
PP	Polyfill	PPH K8020	1030	Nat	Polykemi
PP	Polyfill	PPHC K8040	1033	Nat	Polykemi
PP	Polyfill	PPHC K8030	100009	Nat	Polykemi
PP	Inspire	PP 114 EU	1048	Nat	Resinex
PP	Ineos	100 GA 12	1083	Nat	Lautrup chemicals
PP	Reelab	160000R	1084	Nat	Reelab
PS	Polystyren	EMPERA 514	1075	Nat	Polykemi
HD	Reelab	HDPE 00081R	1047	Nat	Reelab
TPE	Tefabloc	Tpsd333 70A W 001	1032	Nat	K.D.FEDERSEN
TPE	Mediprene	880266	1043	Nat	Hexpol
TPU	Irogran	A 87 H 4615	1034	Nat	IMCD
TPU	Isothane	3085AU	1090	Nat	Erteco

Today we have about 70 materials in our plant and 12 "material families"

# Sustainability and plastics

Fossil-free plastic



Recycled plastic



Biodegradable plastics



Bio plastics



Bio-based plastics



Ocean plastic



# Sustainability and Habo Plast

## Habo Plast's sustainability goals until 2025

- 🕒 • Have either a recycled or a fossil-free alternative on all material families, when new quotations are made
- ✅ • Our production runs 100% on fossil-free energy
- ✅ • Increased level of knowledge from low to high regarding producing in recycled plastics
- ✅ • We can manage on 1 pcs 190L and 1 pcs 140L waste container, 2 emptyings a month in normal operation
- 🕒 • Received the first batch of material from outside of recycled products

## Habo Plast's sustainability goals until 2030

- 🕒 • Energy-neutral (photovoltaics, batteries, insulation, energy exchange programs)
- ✅ • Electric vehicle fleet (company cars and forklifts)
- 🕒 • Established circular flow
- 🕒 • Possibility to wash/dry grannulated plastic





# Materials

## Successful conversions so far...

PA > 100% recycled from textile

HD > 100% recycled from shampoo bottles

HD > 40% fossil-free in accordance with ISCC

PC > 100% recycled

PC > 30-40% fossil-free in accordance with ISCC

ABS > 100% recycled with the option to add up to 30% lignin

PP > 100% recycled residual product from industry

TPE > 60% fossil-free

PET-G > 100% recycled



# Current challenges

- We have a widely varying pricing of plastic prices, electricity prices and freight prices on the market, being able to predict these is desirable.
- As a small company like us, the inventory value is important to keep track of in order not to tie up too much capital but also to avoid obsolescence. Therefore, it would be desirable to be able to determine what inventory value we would like to have, based on the data we know, and then have a function that could suggest which parts and how many parts we should have in inventory based on available knowledge.
- We do not have a large sales organization, but we have a great need to find the right way quickly when we court new customers. So to be able to have a good match between us as a company where you have taken into account our knowledge, machines and capacity and then matched it with customers who need those particular skills would have been a valuable tool.