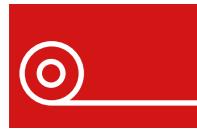


# Product Catalogue





## Innovations in the stretch films. Global Leader.

**ZPF Efekt Plus Sp. z o.o. is a polish manufacturer of stretch film using the CAST method.** Many years of experience, qualified staff, the latest generation production lines and a well-equipped testing laboratory have allowed us to enter foreign markets, which has made us a respected and recognizable European brand.

Our offer includes manual films, including pre-stretch films, machine films, jumbo films and silage films. Please check our catalog, in which we present our current offer, as well as, our company and its history.

### INTRODUCTION

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# | Company history



Start of line <b>Handrollex</b>	Launch of R&D laboratory and <b>Jumborollex</b> line	New 3-metre line for the production of <b>E7 film</b>	New 6-metre production line: <b>the MasterCast</b>	Installation of a production line for silage <b>AgroWrap®</b>	The launch of a dedicated and world's only production line for <b>Eco-Performance Pre-Stretch®</b> film
<b>2010</b>	<b>2011</b>	<b>2013</b>	<b>2015</b>	<b>2020</b>	<b>2021</b>
<b>2006</b>	<b>2012</b>	<b>2019</b>			
<b>Efekt Plus based in Rzeszów, Poland</b>	Establishment of the new plant in <b>Głogów Małopolski</b>	Completion of the new plant in the zone <b>Dwórzysko (Rzeszów)</b>			
<b>Launch of the stretch film production (CAST method).</b>	Launch of the new <b>4-metre line</b>				

We have been producing stretch film since 2006. Our goal is to provide products of the highest quality standards. The confirmation of the implementation of our activity is the dynamic development of sales on the domestic and foreign markets.

For seventeen years, we have focused on continuous development and the highest quality of products. At that time, we launched two separate production plants in the AEROPOLIS Science and Technology Parks - Głogów Małopolski and Dworzysko - Rzeszów, we significantly increased the number of employees, developed a laboratory and a quality control department. Between 2009 and 2021, we launched a total of 7 production lines. We introduced new products to domestic and foreign markets.

As the only company in the world, we offer Pre-Stretch manual film made using the IN-LINE method.

We also have a unique 6-meter production line for the production of stretch film using the CAST method. **It is the largest technological installation of this type in the world.**



# Technologies and refinements



Technology mark	M50	Seven
Feature	50-layer stretch film	7-layer stretch film
Film type	Machine stretch / Jumbo	Machine stretch / Jumbo
Properties	<ul style="list-style-type: none"> <li>• High resistance to puncture and tear resistance</li> <li>• Strong mesh structure</li> <li>• Increased stabilisation load</li> <li>• Economical product</li> </ul>	<ul style="list-style-type: none"> <li>• High resistance to puncture and tearing</li> <li>• High stretchability</li> <li>• Economical product</li> <li>• Environmental care</li> </ul>
Colour	Black, White, Blue, Transparent	Transparent
Quality Classes	Standard Power Pośrednie	Standard Power Super Power Ultra Intermediate

Technology mark	E7	Efekt Stretch Plus
Feature	7-layer environmental film	5-layer stretch film
Film type	Hand stretch / Machine stretch / Jumbo	Machine stretch / Jumbo
Properties	<ul style="list-style-type: none"> <li>• High resistance to puncture and tear resistance</li> <li>• Use of up to 30% regranulate during production</li> <li>• Economical product</li> </ul>	<ul style="list-style-type: none"> <li>• High resistance to puncture and tear resistance</li> <li>• High stretchability</li> <li>• Economical product</li> </ul>
Colour	Transparent	Transparent
Quality Classes	Standard Power Intermediate	Standard

## Production technologies

Advanced machinery and many years of experience in the production of stretch film allow us to offer technologies that are unheard-of by other manufacturers. These are innovative solutions dedicated to specific types of film.



**! The availability of a particular technology must be confirmed directly with the Customer Service Department.**

## Available refinements

For customers requiring additional product options, we have prepared refinements:



### OSC (High Slip)

Slippery films dedicated to the close storage of products. Prevents the phenomenon of „pallet sticking”.



### Frozen

Films resistant to low temperatures.



### Food

Food safe films that may come into direct contact with it.



### UV

The material shows increased resistance to UV radiation.



### High Cling

Increased stickiness of the film, a solution dedicated to confectioners.

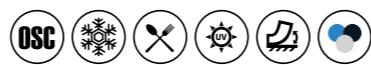


### Product masking

The coloured films effectively conceal the contents of the cargo.

# Hand stretch films

## Available Refinements:



**Hand stretch films are used for manual wrapping the loads.**

We are able to produce manual film from **8 µm** to **35 µm** in thickness and widths of **250, 400, 450** and **500 mm**, depending on the Customer's needs.

Stretch film above **17 µm** is used primarily to protect heavy goods such as bricks, paving stones or metal articles.

Thanks to fully automated production lines, it is possible to pack stretch film into boxes of 6 pcs.



Hand films	<b>Thickness</b>	<b>8-11 µm</b>	<b>12 µm</b>	<b>15-35 µm</b>
	<b>Width</b>	250, 400, 450, 500 mm	250, 400, 450, 500 mm	250, 400, 450, 500 mm
	<b>Net weight</b>	0,7 - 4 kg	0,7 - 4 kg	0,7 - 8 kg
	<b>Stretchability</b>	120% - 200%	150% - 250%	150% - 300%
	<b>Colour</b>	transparent	transparent	transparent, black*, white*, blue**

\*available in stretches from 150% to 250%,  
\*\* available in stretches of 150%.

# Mini Rap

## Features

**i** Mini RAP stretch film is an excellent alternative to adhesive tape.

**i** Mini RAP's are dedicated to secure smaller loads.

**Available in right- and left-handed, as well as universal.**



Thickness	<b>8-35 µm</b>
<b>Width</b>	100, 125 mm
<b>Stretchability</b>	120% - 250%
<b>Colour</b>	transparent, black*, white*, blue**

\*available in stretches from 150% to 250%,  
\*\* available in stretches of 150%.



# Eco-Performance Pre-Stretch®



The **Eco-Performance Pre-stretch film** produced by **Efekt Plus** is the world's first pre-stretched film produced directly on the production line.

Pre-stretch is produced in a version with and without overlaps. The advanced technological process and carefully selected raw materials allow us to offer a product with high strength and performance parameters.

<b>Pre-stretch</b>	<b>Thickness</b>	<b>6-12 µm*</b>
	<b>Width</b>	430**, 440, 450 mm
	<b>Wrap</b>	400 - 800 meters
	<b>Colour</b>	transparent

\*recommended thickness 7-9 µm

\*\*standard roll width

## Features

**i** A typical single roll of Pre-Stretch film with a thickness of 8 µm is as much as 600 m of material. **Pre-stretch is made up of 13 layers.**

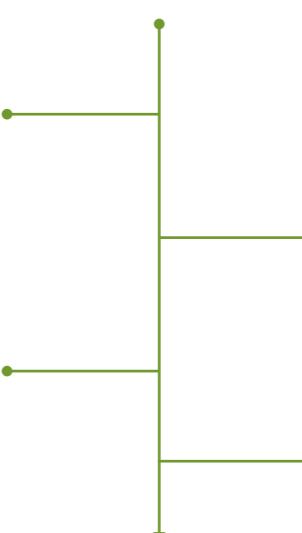
Compared to a standard stretch film, the **wrapping costs are reduced by up to 40%**.



## Why pre-stretch?

**High load stability**  
the flexibility of the film and the low stresses balance and secure the load. Load stabilization is comparable to the POWER class film load stabilization.

**Tear resistance**  
the pre-stretched film has 13 layers.



**Easy to use**  
requires less force to stretch the film and wrap the goods, saving the worker time and energy.

**Pro-ecological product**  
the use of pre-stretch film guarantees a reduction in film consumption which equates to less waste.





# Machine stretch films & Jumbo films

**Machine films are dedicated to all type of wrappers.**

Depending on the customer's needs, we produce machine film in various thicknesses from **8 to 35 µm** and the widths given below.



## Features

Dedicated films for all type of wrapping machines.



**Our machine films and Jumbo films are available in various colours.**

### Available Refinements:



# Machine stretch & Jumbo - guaranteed stretchability

**Standard + class shows increased puncture and tear resistance**

Thickness	Standard	Standard+	Power	Super Power	Ultra
<b>8 - 9 µm</b>	NA	NA	150%	NA	180%
<b>10 - 11 µm</b>	120%	NA	150%	NA	200%
<b>12 - 14 µm</b>	150%	150%	200%	NA	250%
<b>15 - 16 µm</b>	150%	150%	200%	250%	300%
<b>17 - 19 µm</b>	150%	150%	250%	300%	325%
<b>20 - 22 µm</b>	150%	150%	250%	300%	335%
<b>23 - 24 µm</b>	150%	150%	250%	300%	350%
<b>25 - 35 µm</b>	150%	150%	250%	300%	370%

(NA - no available)



Thickness	<b>8-9 µm</b>	<b>10-11 µm</b>	<b>12 µm</b>
<b>Width</b>	250 - 2000 mm	250 - 2000 mm	250 - 2000 mm
<b>Net weight</b>	5 - 25 kg (for 500mm width)	5 - 25 kg (for 500mm width)	5 - 25 kg (for 500mm width)
<b>Stretchability</b>	120% - 180%	120% - 200%	150% - 250%
<b>Colour</b>	transparent	transparent	transparent



Thickness	<b>15-16 µm</b>	<b>17-23 µm</b>	<b>30-35 µm</b>
<b>Width</b>	250 - 2000 mm	250 - 2000 mm	250 - 2000 mm
<b>Net weight</b>	5 - 25 kg (for 500mm width)	5 - 25 kg (for 500mm width)	5 - 25 kg (for 500mm width)
<b>Stretchability</b>	150% - 300%	150% - 350%	150% - 370%
<b>Colour</b>	transparent, black*, white*	transparent, black*, white*, blue**	transparent, black*, white*, blue**



Thickness	<b>8-9 µm</b>	<b>10-11 µm</b>	<b>12 µm</b>
<b>Width</b>	290, 400, 450, 500 mm	290, 400, 450, 500 mm	290, 400, 450, 500 mm
<b>Net weight</b>	26 - 55 kg	26 - 55 kg	26 - 55 kg
<b>Stretchability</b>	120% - 180%	120% - 200%	150% - 250%
<b>Colour</b>	transparent	transparent	transparent



Thickness	<b>15-16 µm</b>	<b>17-23 µm</b>	<b>30-35 µm</b>
<b>Width</b>	290, 400, 450, 500 mm	290, 400, 450, 500 mm	290, 400, 450, 500 mm
<b>Net weight</b>	26 - 55 kg	26 - 55 kg	26 - 55 kg
<b>Stretchability</b>	150% - 300%	150% - 350%	150% - 370%
<b>Colour</b>	transparent, black*, white*	transparent, black*, white*, blue**	transparent, black*, white*, blue**

\*available in stretches from 150% to 250%.

\*\*available in stretches of 150%.

Note: Roll width 290 mm only available in transparent colour.



# | Silage film AgroWrap®



The silage film available under the **AgroWrap®** brand is produced using high-quality raw materials to meet all customer requirements and expectations.

Numerous researches on the Silage film allowed to obtain a product that has high quality and strength parameters.



## Features

**Agricultural film made up of 7 layers.**  
Guarantees a complete seal.

**i** It is characterised by adequate resistance  
resistant to tearing during wrapping.

Available in green and white colour.



Silage	Width	500 mm	750 mm
	<b>Thickness</b>	25 µm	25 µm
	<b>Wrap</b>	1800 meters	1500 meters
	<b>Net weight</b>	21,5 kg	27,0 kg
	<b>Sleeve diameter</b>	3"	3"
	<b>Sleeve type</b>	paper - hydrophobic	paper - hydrophobic
	<b>Colour</b>	white, green	white, green

Logistics	Width	500 mm	750 mm
	<b>Type of packaging</b>	Special cardboard box (with instruction manual included)	
	<b>Number of rolls on a pallet</b>	48	40
	<b>Pallet height</b>	1,73 m	1,70 m
	<b>Pallet size</b>	110 x 130 cm	110 x 130 cm

## Why AgroWrap®?

**Tear resistance**  
**AgroWrap®** film with a thickness of 25 µm is durable and resistant to tearing and puncture.

**High stickiness**  
is a guarantee of tightness of the wrapped bale. Innovative adhesives do not settle on the rollers, which has a direct impact on the condition and cleanliness of the agricultural wrapper.

**Silage safety**  
The film is resistant to the harmful effects of plant protection products, fertilizers and chemicals used in agriculture.

**UV protection**  
**AgroWrap®** is a film that has a high resistance to UV radiation. Thanks to this, negative weather conditions do not affect the degradation of the film.

This ensures ideal conditions for the fodder fermentation process and its long-term storage.

The **AgroWrap®** silage film has been tested by farmers, so we know that it will work in practice.

**AgroWrap®** is a film that keeps the fodder in the best condition possible.





## Machine park

The machinery park in the **Efekt Plus** production plants is equipped with modern and fully automated production lines as well as packing and palletizing robots, improving the entire production process.

**i** Our lines are adapted to the production of multilayer stretch film. All our machines are innovative on a global scale.



## R&D Laboratory

Our R&D Laboratory is a team of specialists who watch over the quality of the film we produce.

We test our input raw materials and finished products. Each sample of a given production batch undergoes the following tests and measurements:

- Quality test
- Puncture resistance check
- Stickiness test
- Break resistance test
- Thickness measurement
- Retention power
- Roll dimensions

**i** We are sure that, thanks to this, our films meet the highest quality standards.

Our specialists are constantly working on improving our products, and thus set the highest quality standards on the stretch film market.

## Sustainable development of Efekt Plus

Sustainable development is one of the most important aspects in modern economy and management. It assumes the conscious use of resources in such a way that they are sufficient to build the prosperity of the present generation, but also to meet future needs. Limiting the use of non-renewable resources or eliminating hazardous, toxic or non-recyclable materials from processing contributes to sustainable development.

What is sustainable development is perfectly reflected in the activities conducted by our company. We optimize our products in terms of energy consumption in production and logistics, as well as the materials used. We also use regranulation, and the automated production and palletizing process significantly reduces the amount of waste.

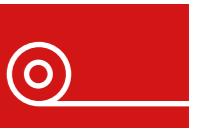


We introduce products with high strength parameters, while reducing their thickness, which contributes to a significant reduction in the amount of plastics placed on the market and thus significantly reduces the amount of waste generated.

Efekt Plus, apart from maintaining high standards, conducts pro-ecological activities. The film produced by us is 100% recyclable, while the production waste generated in the company during production is recycled on site. We used heat energy recovery from production lines to heat rooms and water in the company. The confirmation of these activities is the **ISO Environmental Management System Certificate: 14001**



# NotePad





**Zakład Produkcji Folii Efekt Plus sp. z o.o.**  
**Company HQ**  
ul. Złota 44 / 334  
00-120 Warszawa

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**Production plant**  
**Głogów Małopolski**  
ul. Innowacyjna 10  
36-060 Głogów Małopolski

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**Production plant**  
**Rzeszów Dworzysko**  
ul. Kapitałowa 9  
35-213 Rzeszów

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