

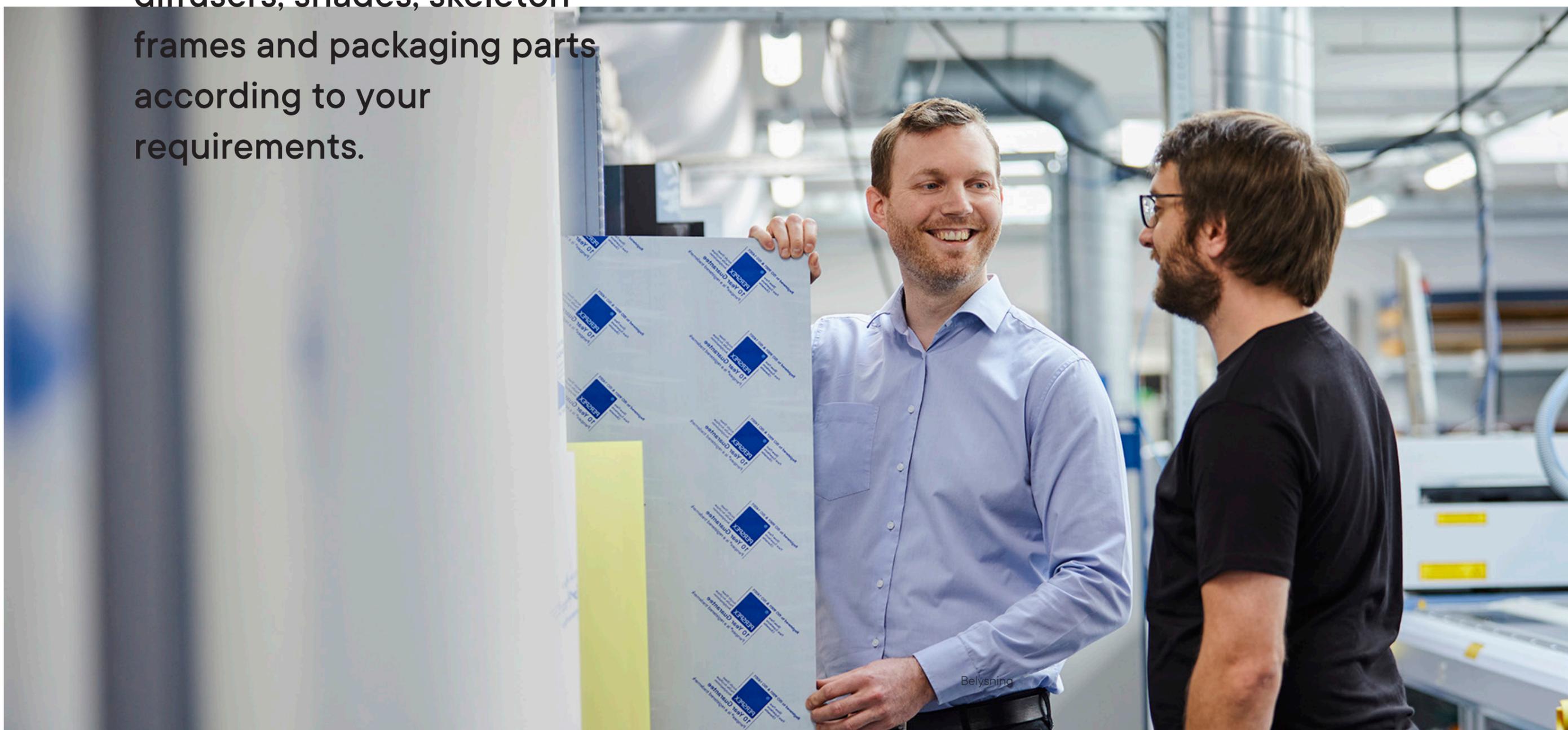
# Lighting



Solutions that endure

**INDUFLEX**

When it comes to components for lighting Induflex is your total supplier. Among others we can produce spacers, film, diffusers, shades, skeleton frames and packaging parts according to your requirements.





## Brief

A good collaboration begins with great understanding. We will ask about your wishes, ideas and requirements regarding your product and material.

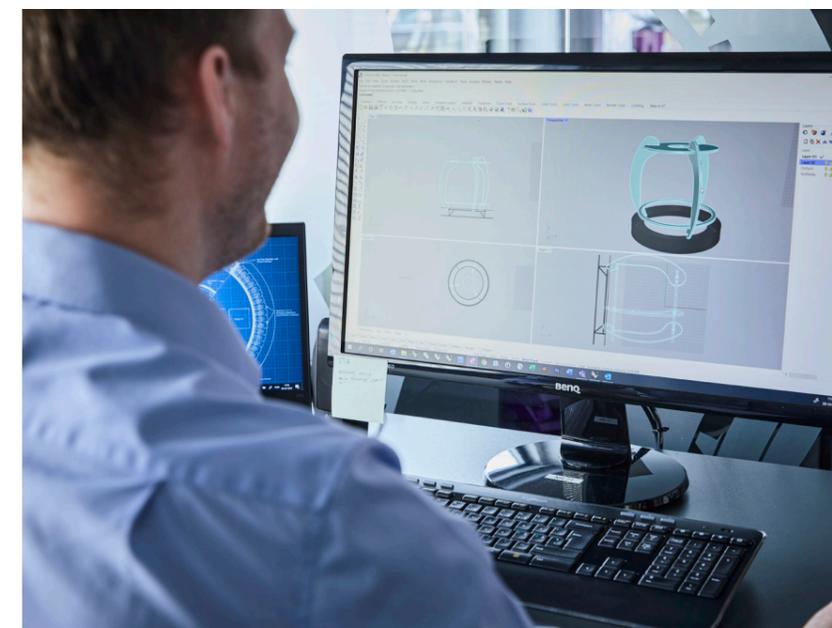


## Prototype

With a prototype you can test the functionality and design. We will adjust the prototype until all elements are exactly as you want them to be.

## Design and construction

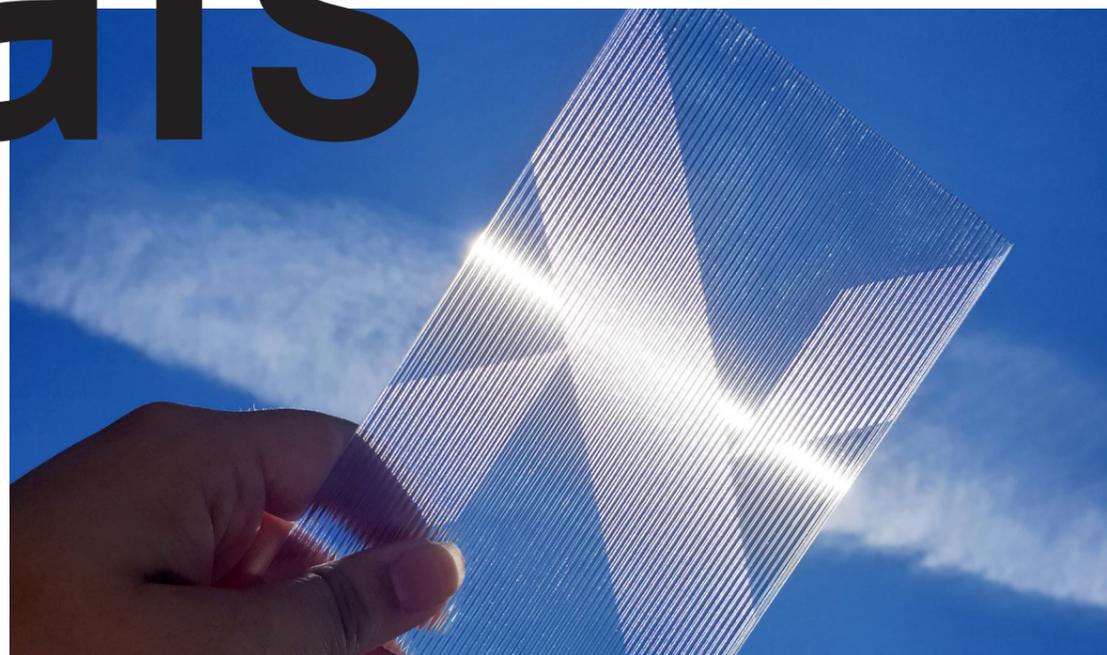
We are experts in plastics. Based on your design and wishes we will find the perfect materials and solutions. We will help you with your idea, regardless of whether you have a draft or a file with your final design.



## Production and delivery

When everything is in place, and you are satisfied with the material and the possible prototype, we will put your design into production. We have a versatile and flexible production plant and skilled employees. Therefore we can produce your order in almost no time. We assemble, pack and deliver your products, as you wish. Whether assembled or in components is up to you.

# Ma teri als



Extruded acrylic  
with grooves and print.



At Induflex you can produce your  
design in materials in many colours,  
shades and structures.



Diffusers with different light  
transmissions.

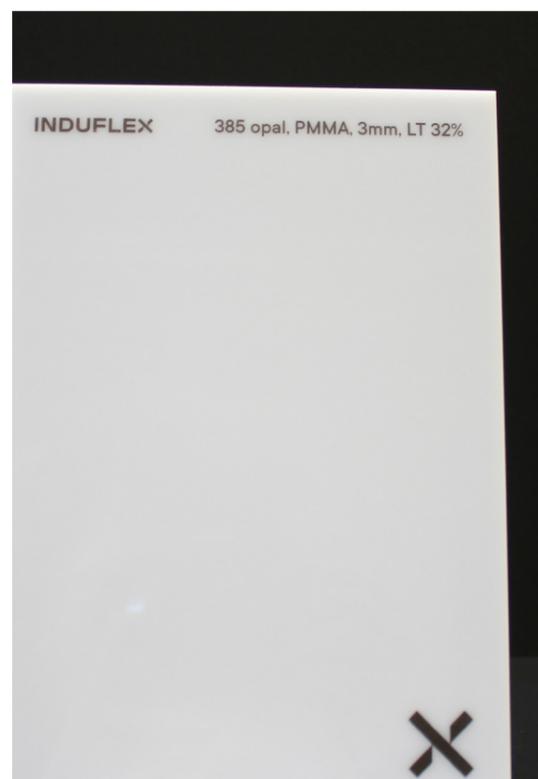
Your choice of material depends on parameters such as light transmission, light source, surroundings (indoors or outdoors) and special circumstances including shock-resistance or sheet thickness. Based on your requirements we will help you find the perfect material. Take a look at the selection of diffusing materials on the following pages.

## Opal 385

Opal 385 is a classic opal acrylic (PMMA).

This particular acrylic has a low light transmission between 26 and 35 % depending on the thickness of the sheet.

If you are in need of a very light diffusing material, where only a small amount of light slips through, this opal is an obvious choice for your project.



Data	
Material	PMMA (acrylic)
Light transmission	2 mm 35 % 3 mm 32 % 4 mm 27 % 5 mm 26 %
Density	1.19 g/cm <sup>3</sup>
Temperatures	- 40 °C to 80 °C
Surface finish	Shiny/shiny
UV resistant	Yes
Thickness tolerance	+/- 5 %

Available sizes	
Sheet size	3050 x 2050 mm
Available thickness	2, 3, 4 and 5 mm
Alternatives	Opal 499, iFrost, Spectrum LED

Machining method	
Laser	Yes
Plotter/CNC	Yes
Digital print	Yes
Thermoforming	Yes

## Opal 499

Opal 499 is an opal polycarbonate (PC).

This opal has a relatively low light transmission between 32 and 40 % depending on the thickness of the sheet.

Opal 499 is made of polycarbonate. The material is therefore break-proof and fit for outdoor lighting or lighting placed in areas, where it is exposed to impact.



Data	
Material	PC (polycarbonate)
Light transmission	2 mm 40 % 3 mm 38 % 4 mm 35 % 5 mm 32 %
Density	1.2 g/cm <sup>3</sup>
Temperatures	- 40 °C to 120 °C
Surface finish	Shiny/shiny
UV resistant	Yes
Thickness tolerance	+/- 5 %

Delivery schedule	
Sheet size	3050 x 2050 mm
Available thickness	2, 3, 4 and 5 mm
Alternatives	Opal 385 and iFrost

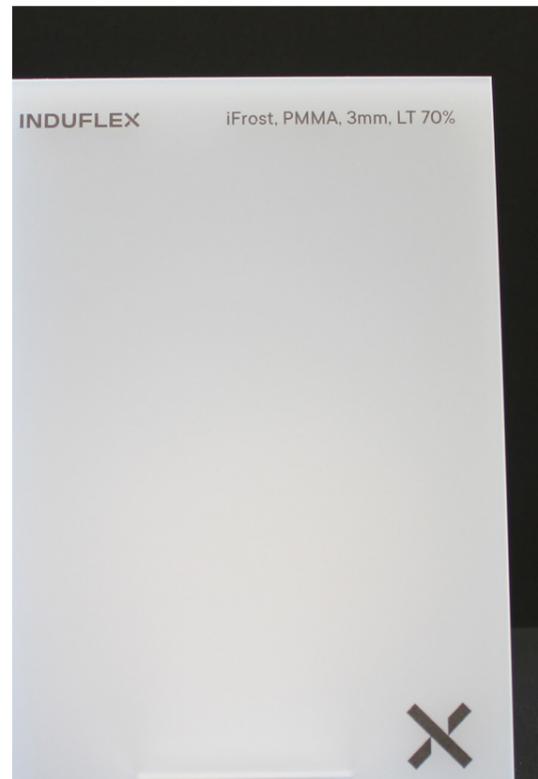
Machining method	
Laser	No
Plotter/CNC	Yes
Digital print	Yes
Thermoforming	Yes, up to 5 mm in thickness

## iFrost PMMA

iFrost PMMA is a diffusing opal acrylic (PMMA) with a high light transmission of 70 %

Both sides of this acrylic has a frosted surface that minimises reflection.

iFrost PMMA is used for both indoor and outdoor lighting.



Data	
Material	PMMA (acrylic)
Light transmission	2 mm 70 % 3 mm 70 %
Density	1.19 g/cm <sup>3</sup>
Temperatures	- 40°C to 80°C
Surface finish	Matt/matt
UV resistant	Yes
Thickness tolerance	+/- 5 %

Available sizes	
Sheet size	1250 x 2050 mm
Available thickness	2 and 3 mm
Alternatives	Opal 385 and iFrost (PC)

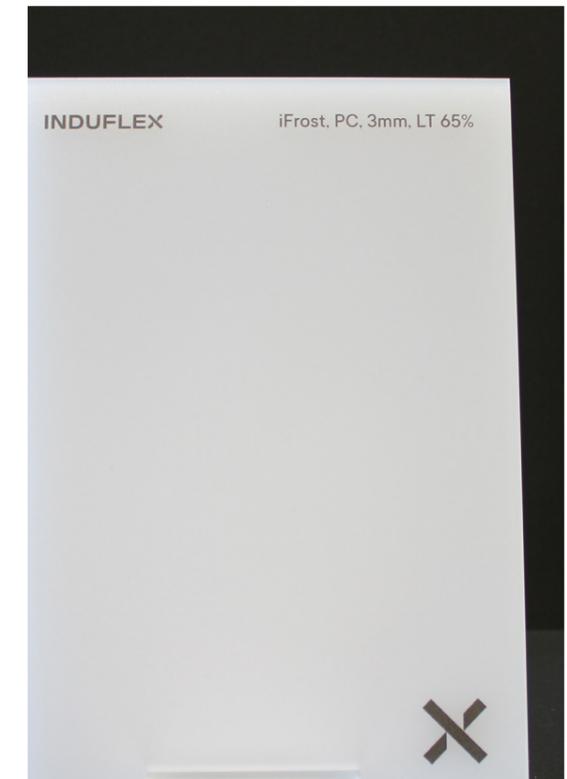
Machining method	
Laser	Yes
Plotter/CNC	Yes
Digital print	Yes
Thermoforming	Yes

## iFrost PC

iFrost PC is a diffusing opal polycarbonate (PC) with a light transmission between 65 and 75 % depending on the sheet thickness.

Both sides on this acrylic has a frosted surface that minimises reflection. iFrost PC is fit for lighting, where you want a lot of light without any reflection.

Polycarbonate is break-proof and UV resistant. Therefore, it is fit for both indoor and outdoor lighting.



Data	
Material	PC (polycarbonate)
Light transmission	2 mm 75 % 3 mm 65 %
Density	1.2 g/cm <sup>3</sup>
Temperatures	- 40 °C to 120 °C
Surface finish	Matt/matt
UV resistant	Yes, however it is primarily recommended for indoor use
Thickness tolerance	+/- 5 %

Available sizes	
Sheet size	1250 x 2050mm
Available thickness	2 and 3 mm
Alternatives	Opal 499 and iFrost (PMMA)

Machining method	
Laser	No
Plotter/CNC	Yes
Digital print	Yes
Thermoforming	Yes up to 5 mm in thickness

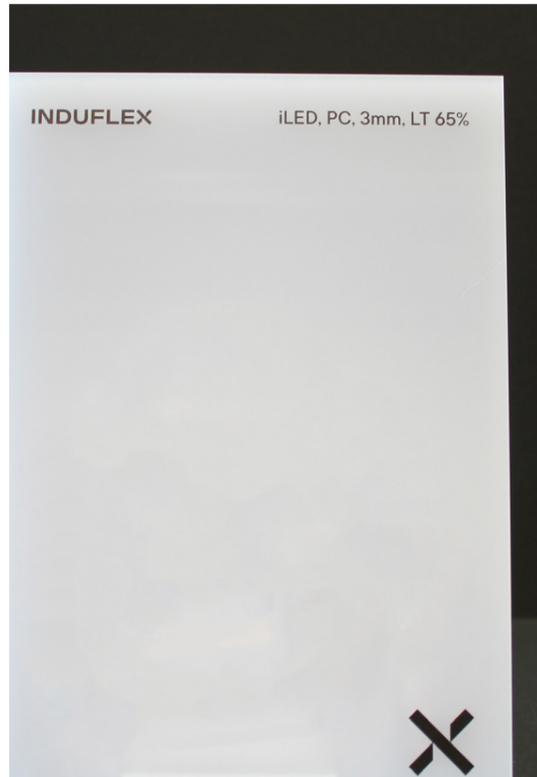
# iLED

iLED is a diffusing polycarbonate (PC) which is fit for LED lighting.

It is an impact-resistant sheet which is developed for application in indoor lighting.

This iLED has a light transmission of 65 % regardless of the thickness of the sheet.

The surface on this iLED is shiny on both sides.



Data	
Material	PC (polycarbonate)
Light transmission	2 mm 65 % 3 mm 65 %
Density	1.2 g/cm <sup>3</sup>
Temperatures	- 40°C to 120 °C
Surface finish	Shiny/shiny
UV resistant	Yes, however it is primarily recommended for indoor use
Thickness tolerance	+/- 5 %

Available sizes	
Sheet size	3050 x 2050 mm
Available thickness	2 and 3 mm
Alternatives	Opal 499 and iFrost (PC)

Machining method	
Laser	No
Plotter/CNC	Yes
Digital print	Yes
Thermoforming	Yes up to 5 mm in thickness

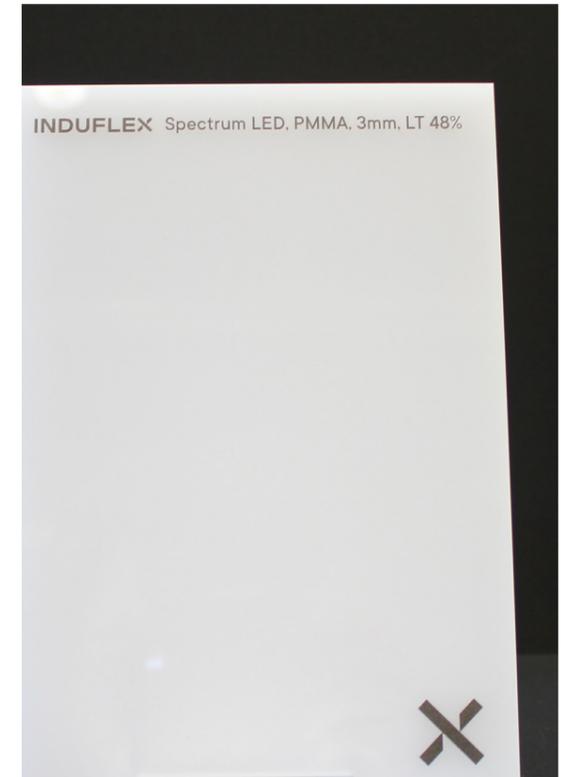
# Spectrum LED

Spectrum LED is a cast acrylic (PMMA), which is very suitable for LED lighting.

This LED has diffusing crystals, that are developed specifically to allow a higher diffusing.

The light transmission of this sheet is 48 % regardless of the thickness of the sheet.

Spectrum LED comes in many colours of which 1TL2 is most frequently used.



Data	
Material	PMMA (acrylic)
Light transmission	3 mm 48 % 5 mm 48 %
Density	1.19 g/cm <sup>3</sup>
Temperatures	- 40 °C to 80 °C
Surface finish	Shiny/shiny
UV resistant	Yes
Thickness tolerance	+/- 15 %

Available sizes	
Sheet size	3050 x 2030 mm
Available thickness	3 and 5 mm
Alternatives	Opal 385 and recycled acrylic (RMMA)

Machining method	
Laser	Yes
Plotter/CNC	Yes
Digital print	Yes
Thermoforming	Yes

# Recycled acrylic (RMMA)

We offer Green Cast® and POLICRIL recycled acrylic for lighting, which both are fit for LED light.

These acrylics are 100 % recycled and have great diffusing properties.

The acrylics comes in a shiny and matt finish in clear and opal.

The following data concerns the acrylic Green Cast®.



Data	
Material	PMMA (acrylic, 100 % recycled)
Light transmission	3 mm ~ 48 % 5 mm ~ 48 % 8 mm ~ 48 % 10 mm ~ 48 %
Density	1.19 g/cm <sup>3</sup>
Temperatures	- 40 °C to 80 °C
Overfladefinish	Matt/shiny
UV-stabilitet	Yes
Tykkelsestolerance	+/- 15 %

Delivery schedule	
Sheet size	3050 x 2030 mm
Available thickness	3, 5, 8 and 10 mm
Alternatives	Opal 385 and Spectrum LED

Machining method	
Laser	Yes
Plotter/CNC	Yes
Digital print	Yes
Thermoforming	Yes

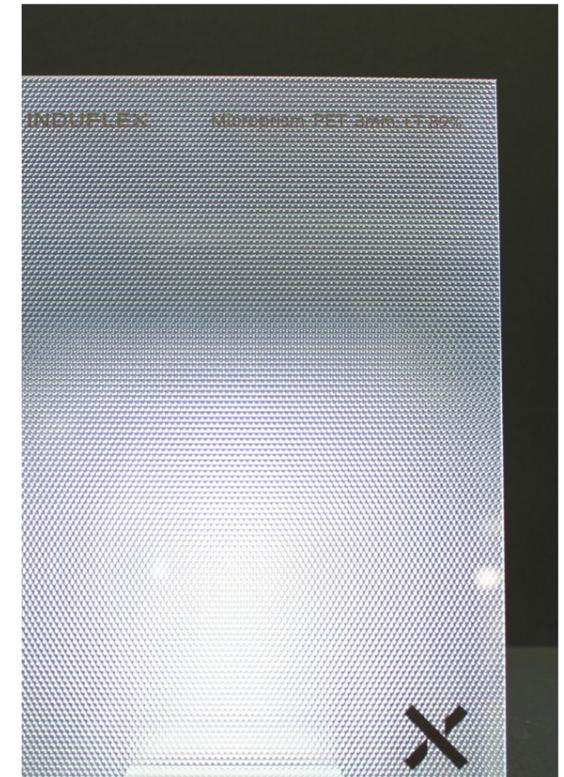
# Microprism

Microprism is a diffusing plastic that scatters the light without any damping effects.

We offer Microprism in acrylic (PMMA) with a light transmission of 92 % and in polyester (PET) with a light transmission of 89 %.

Microprism can be used as a diffuser sheet behind an opal sheet to create a uniform light.

The following data concerns Microprism acrylic.



Data	
Material	PMMA (acrylic) - We also offer PET (polyester) Microprism
Light transmission	PMMA (regardless of thickness) 92 % PET (regardless of thickness) 89 %
Density	1.19 g/cm <sup>3</sup>
Temperatures	- 40 °C to 80 °C
Surface finish	Prism/shiny
UV resistant	Yes
Thickness tolerance	+/- 5 %

Available sizes	
Sheet size	1250 x 2050 mm
Available thickness	2 and 3 mm
Alternatives	-

Machining method	
Laser	Yes
Plotter/CNC	Yes
Digital print	Yes
Thermoforming	No

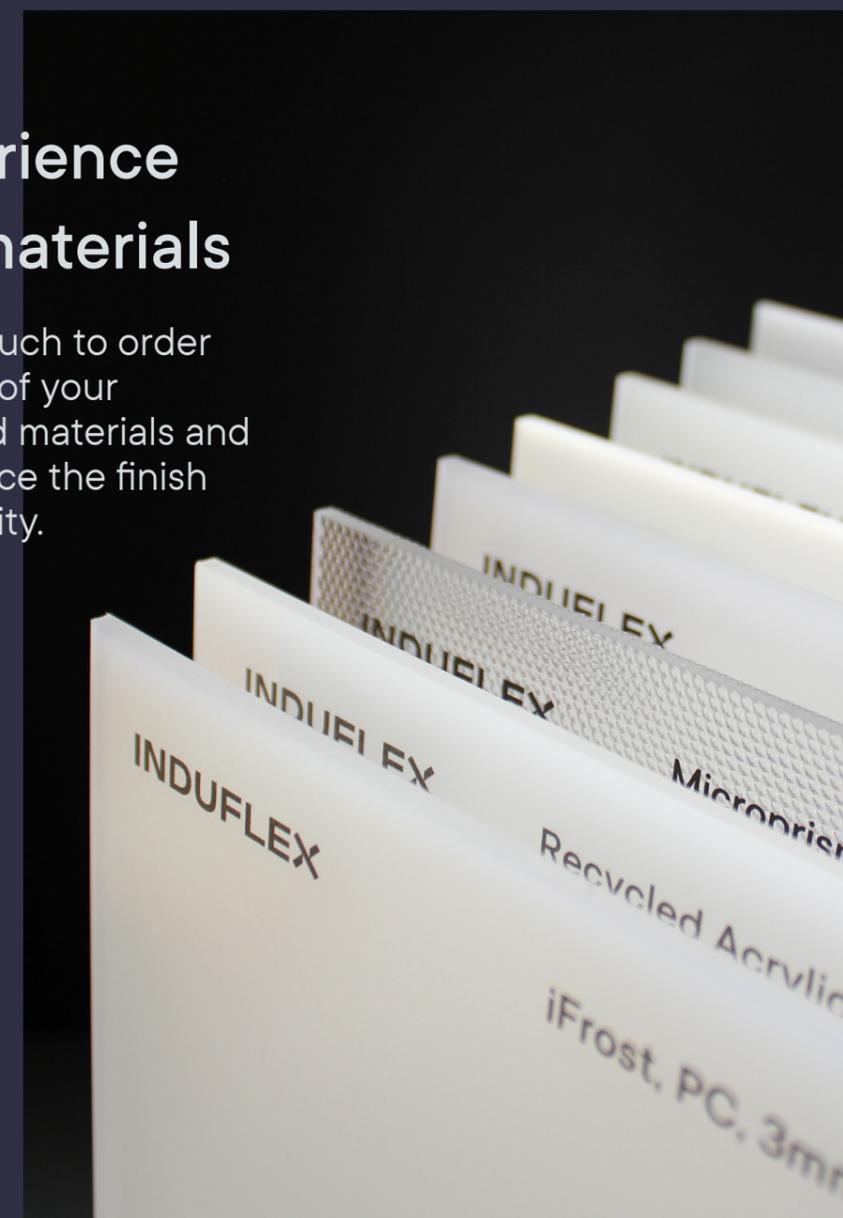
## Materials available

Material	Thickness mm	Width mm	Length mm	Colour	Surface finish	LT %	Stock levels
Opal 385 PMMA Extruded	2	2050	3050	Opal	Shiny/shiny	35	On request
Opal 385 PMMA Extruded	3	2050	3050	Opal	Shiny/shiny	32	In stock
Opal 385 PMMA Extruded	4	2050	3050	Opal	Shiny/shiny	27	In stock
Opal 385 PMMA Extruded	5	2050	3050	Opal	Shiny/shiny	26	In stock
Opal 499 PC*	2	2050	3050	Opal	Shiny/shiny	40	In stock
Opal 499 PC*	3	2050	3050	Opal	Shiny/shiny	38	In stock
Opal 499 PC*	4	2050	3050	Opal	Shiny/shiny	35	In stock
Opal 499 PC*	5	2050	3050	Opal	Shiny/shiny	32	In stock
iFrost PMMA Extruded	2	1250	2050	Opal	Matt/matt	70	In stock
iFrost PMMA Extruded	3	1250	2500	Opal	Matt/matt	70	On request
iFrost PC	2	1250	2500	Opal	Matt/matt	75	On request
iFrost PC	3	1250	2500	Opal	Matt/matt	65	On request
iLED PC*	2	2050	3050	Opal	Shiny/shiny	65	In stock
iLED PC*	3	2050	3050	Opal	Shiny/shiny	65	On request
Spectrum LED PMMA Cast	3	2030	3050	Opal	Shiny/shiny	48	In stock
Spectrum LED PMMA Cast	5	2030	3050	Opal	Shiny/shiny	48	In stock
Recycled acrylic PMMA Cast	3	2030	3050	Opal	Shiny/matt	~ 48	In stock
Recycled acrylic PMMA Cast	5	2030	3050	Opal	Shiny/matt	~ 48	In stock
Mircoprism PMMA Extruded	2	1250	2500	Clear	Prismatic	92	In stock
Mircoprism PMMA Extruded	3	1250	2500	Clear	Prismatic	92	On request
Mircoprism PET	2	1250	2500	Clear	Prismatic	89	On request

\* These materials are UV coated.

## Experience the materials

Get in touch to order samples of your preferred materials and experience the finish and quality.

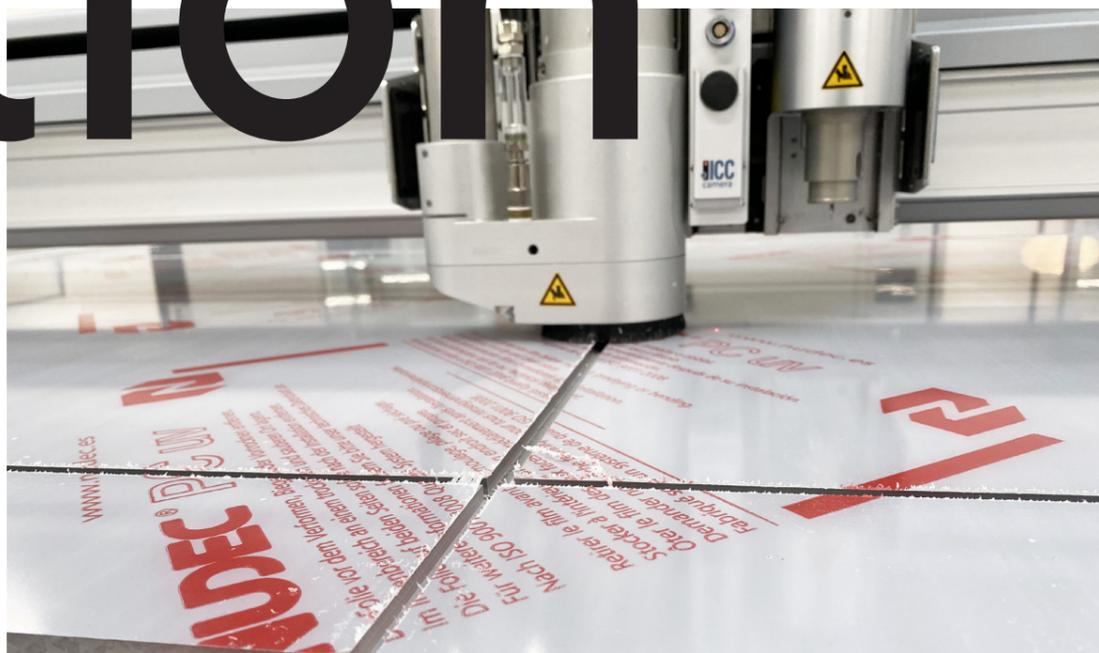


# Pro duc tion



With Induflex you get a supplier that has great experience with laser cutting.

We can cut your parts with knife or laser in a matter of days.



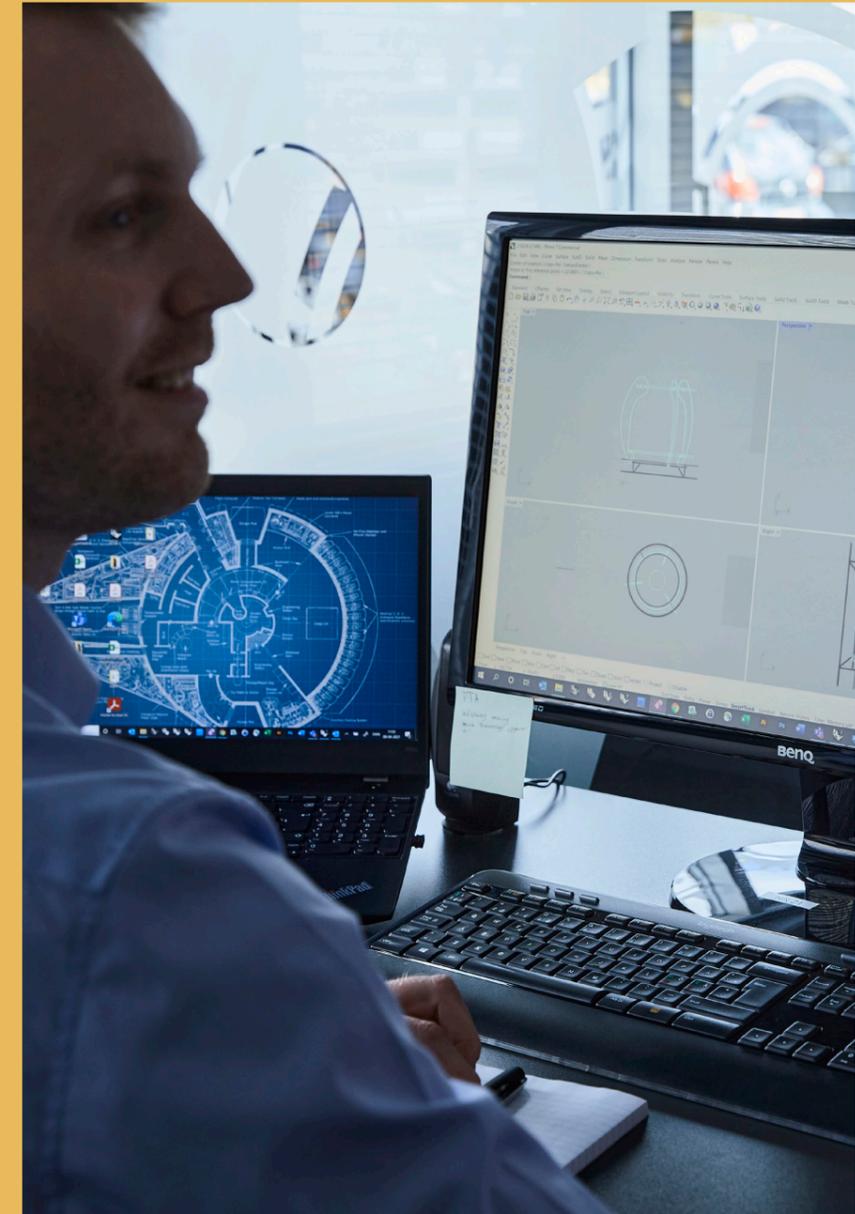
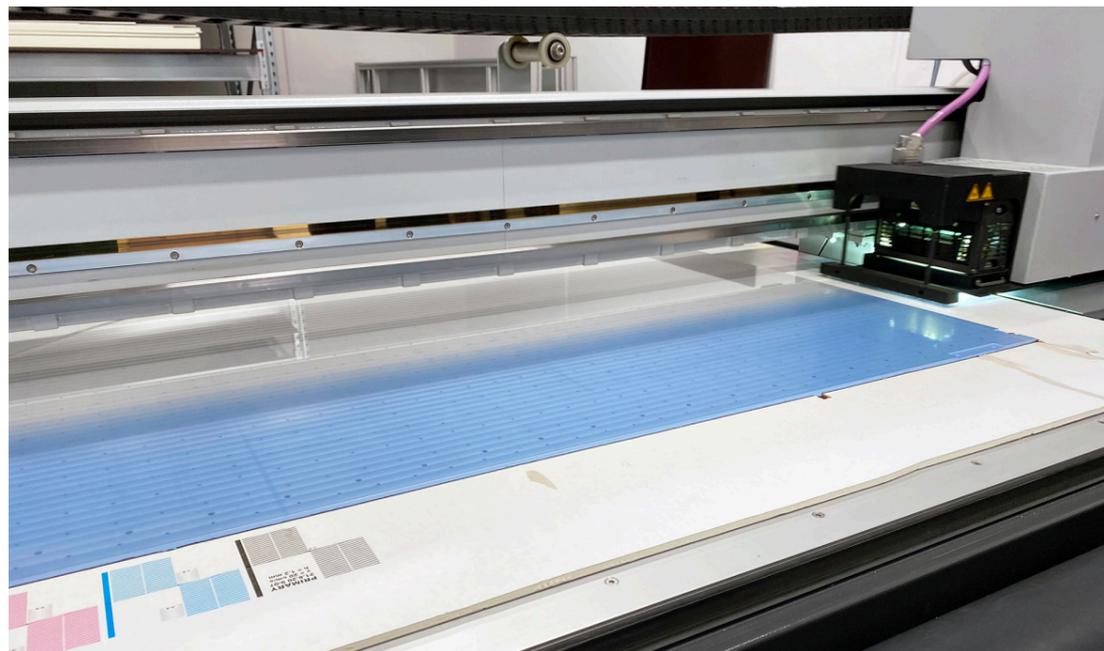
Our assembly department will take care of the final touches.

We can help you with design, construction, cutting with knife and laser, CNC milling, CNC turning, digital printing, laser engraving, cold and heat bending plus assembly and packaging. All of it in accordance with your wishes.



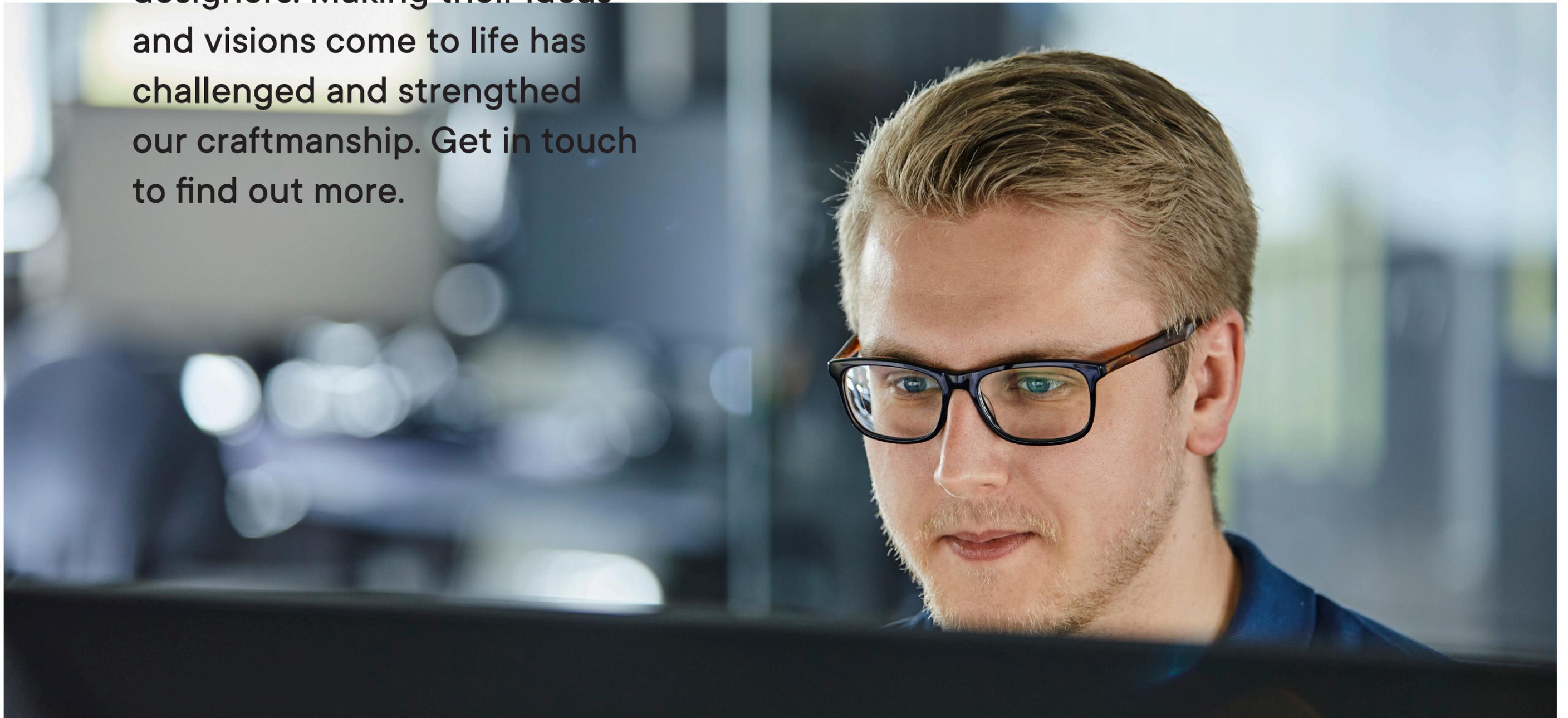
We can produce your components in engineering plastics with our CNC machinery.

With our digital printer we can print anything on your products with high quality.



Do you have a question regarding design or construction? Our technical department are ready to help you.

Our experience in the production of lighting solutions comes from collaboration with great designers. Making their ideas and visions come to life has challenged and strengthened our craftsmanship. Get in touch to find out more.



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