



PROFILAN®



PE 1000 -UHMW- | PE 500 -HMW-



PERSONAL



BASED ON PARTNERSHIP



PROFESSIONAL



RELIABLE – FAST – GOOD

RISING TO THE CHALLENGES OF THE MARKET

Being successful means meeting the customers' daily needs and demands. For more than 20 years PROFILAN has stood for partnership, personality and professionalism and will continue to do so into the future. Every day more than 200 employees work towards this and look forward to every new challenge. Clients all over the world value our reliability.



PERSONAL

In our area the people are known for their directness and for getting down to business. This is particularly true if there is not much left to discuss. We are there for our clients; work in partnership and passionately on the individual needs of our customers.

Therefore, we discuss things personally with one another and look at things together in advance which are subsequently examined in detail later on.



BASED ON PARTNERSHIP

Many claim to communicate at eye level. We take this to mean maintaining a partnership. Indeed we don't just mean with our clients and suppliers but of course also with our employees. Only once we have done this is everyone working as one.

You can feel the positive effect on all levels of professional daily life, as projects are implemented as a team.



PROFESSIONAL

Good ideas are formed together. Along with our clients, we always strive for new, integrated solutions for a wide variety of fields. Our technicians and engineers know out of which materials a semi-finished or finished component can be produced.

A combination of passion and experience ensures that at the end of the day the product is not only thought out well but also well made.

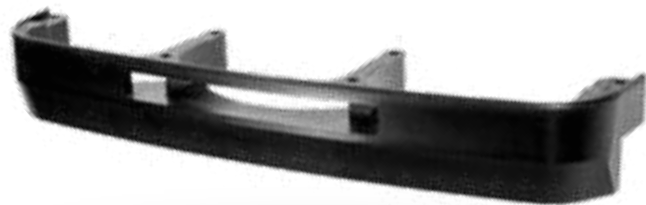
GETTING THE CHEMISTRY RIGHT

VALUES THAT CONVINC IN PRACTICE

Within a few years PROFILAN has developed into an important manufacturer of engineering plastics. We mainly process raw materials in UHMW and HMW grades. The most up to date production plants and material specific

expertise form the basis for quality on the highest level. Continuous developments and investments ensure success and build a reliable base for the future needs of our clients.





PROFILAN stands for modern machinery, the best raw materials and precise finished products. We manufacture semi-finished components, sheets and finished components to the highest standards on approximately 100,000 m² production area. Continuous improvement and the latest production technology ensure that PROFILAN will carry on producing quality plastic products on the highest level into the future from PROlen 9000 / 6000 -UHMW- and PROlen 500 -HMW-.



FROM SEMI-FINISHED TO FINISHED COMPONENT

WE KNOW EXACTLY WHAT COUNTS WHEN IT COMES TO PROCESSING

PROFILAN plastic semi-finished and finished components are manufactured from polyethylene - UHMW- and -HMW- using the latest sinterpress technology. Computer-monitored processes guarantee consistently high quality and a low stress base material that, from semi-finished to finished component, is ideal for use in many sectors of industry, engineering, automated and conveyor systems.

ABOVE AND BEYOND THE STANDARDS WITHOUT NEGLECTING THE BASICS

PRODUCT RANGE OVERVIEW FROM THE SHEET TO THE FINISHED COMPONENT

PROFILAN offers a wide range of semi-finished components for the most diverse range of uses. It is not unusual for our processors and customers to require a high level of flexibility as some orders are not ideally served by the standard program. Thanks to the most up to date production technology we can manufacture to special settings, special dimensions and special thicknesses. We would gladly advise you personally on this or we can send you an exact list of the technical specifications. The production takes place in line with the standards DIN EN ISO 15527 and DIN ISO 2768.



SPECIALISED IN THE WHOLE

As a manufacturer of semi-finished components you have to know exactly what counts when it comes to processing. Our customers and processors are expecting this in particular from us. We gain experience from close cooperation with our clients and their honest feedback and last but not least from our own production areas on site. Here Research & Development works hand in hand with the production department. Direct cooperation is indispensable in the product innovation sector.

In this way, new materials pass through numerous tests both in and outside of the lab. All under real conditions with genuine machines and quantities that provide reliable information as to when a new material is ready to go into series production.





The special services provided by PROFILAN:
If our customers experience capacity bottlenecks, we will take over a part of the production on our machines as a contract manufacturer. That is what comprehensive support looks like!



NOBODY KNOWS OUR MATERIALS BETTER THAN US

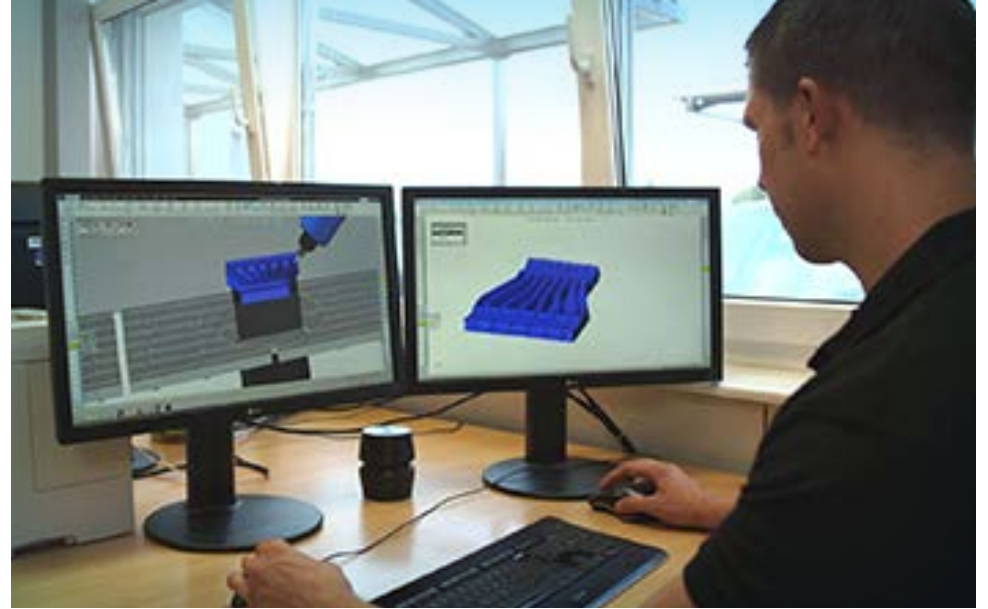
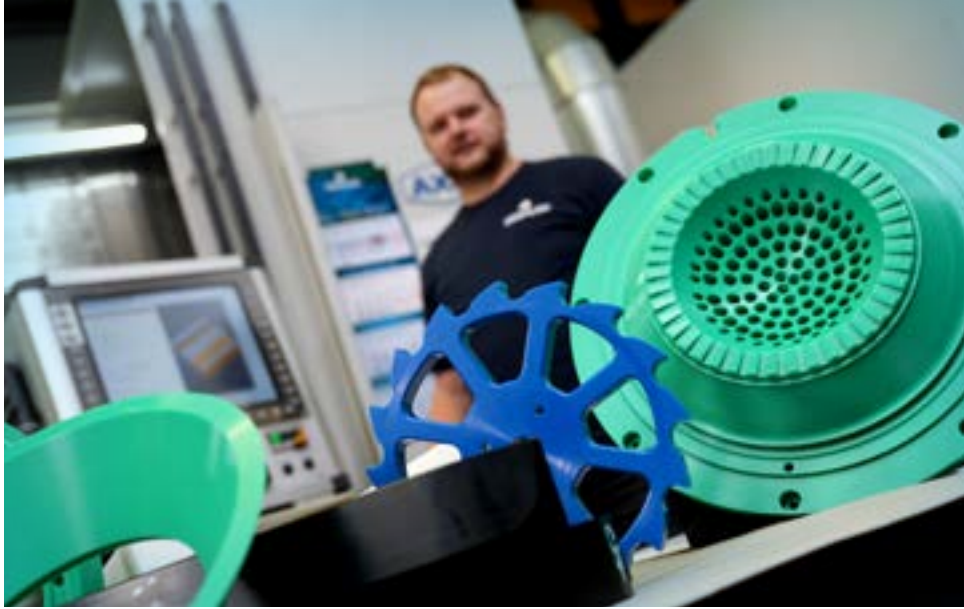


IF IT CAN BE DONE, WE CAN DO IT

More than 30 ultra-modern 3, 4 and 5 axel CNC machining centres make it possible to produce even the most difficult contours and groove patterns. Thanks to the CAD/CAM system link each and every client request can be quickly and precisely manufactured in any quantity desired.

PROFILAN will support you in developing new products. Single-component manufacturing, large series or prototypes developed to specific designs are in the best possible hands with us. Our team has many years of experience and is by your side all the way providing support.







ALWAYS EXACTLY RIGHT

A FANTASTIC MATERIAL FOR DEMANDING APPLICATIONS

Nowadays, UHMW and HMW polyethylene is used in all sectors of industry. Its special properties are vastly superior to those of many other materials. It is not unusual for these to be further intensified for niche applications where the material is modified.

MACHINE BUILDING INDUSTRY

Modern plastics are increasingly replacing significantly more expensive metals in engineering. Many components can be manufactured from UHMW to experience less wear.

The material's advantages are especially notable in the transport mechanism sector due to the high level of wear and abrasion resistance and low coefficients of sliding friction.





BOTTLING AND DRINKS INDUSTRY

Drinks crates are a simple example of how well plastic and glass can work in harmony. High levels of sound and impact damping as well as wear and abrasion resistance are just some of the advantages that PE has. In many sectors of industry and bottling plants components are manufactured from our materials. We are suppliers to some of the biggest manufacturers and bottling plant operators.



PACKAGING AND FOOD INDUSTRY

“Food safe” certification has a special relevance in the food and packaging industry. In this sector optimal production standards must be continually ensured.

Our materials have the ideal properties to be used in the production and processing sector as the plastics are physiologically harmless and are allowed to come into contact with food.



AGRICULTURAL TECHNOLOGY AND FARMING MACHINERY

Many sectors of agriculture also require a food-safe certification, just as in industry, e.g. for use in dairy plants. Or conveyor technology is needed that allows it to carry out its daily duties as wear-free and quietly as possible. UHMW can be easily used on the field and in the barn.





Unlike metals, our materials are acid-resistant. If surfaces should subsequently come into contact with aggressive solutions, plastics are often used in the machine building process. This is where the material has an extra advantage as it doesn't absorb water.



Nowadays, electro-mechanics are used in many different sectors. Correspondingly, the demands on electrical components are complex and manifold. Extremely low production tolerances are also important. Using our special plastics it is possible to manufacture components that are both, isolating and conductive. Our components are available as ATEX compliant upon request.



Conveyor belts and track systems look very different nowadays than they did a few decades ago. Seldom can one material combine so many advantages. Lower wear combined with lower noise levels make plastic conveyor systems the best choice.

**CHEMICAL AND PAPER
INDUSTRY**



**ELECTRONICS INDUSTRY -
ATEX STANDARDS**



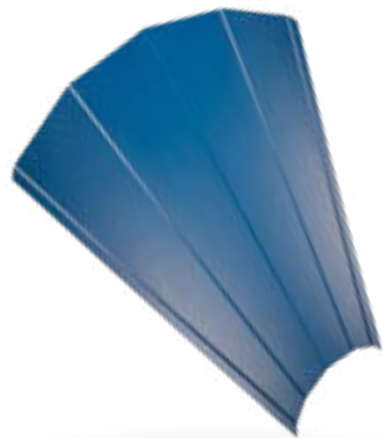
CONVEYOR TECHNOLOGY





**BULK GOODS- AND
MINING INDUSTRY**

The level of automatization in the bulk goods and mining industry continues to rapidly increase. Our PROslide is ideally suited to use in critical, gaseous environments if care is being taken to avoid flying sparks caused by abrasion. This increases the level of workplace safety and lowers operating costs. Outstanding gliding properties in combination with extremely low water absorption make our components especially efficient.



**OFFSHORE/
HARBOUR CONSTRUCTION**

Lock gate and port areas are shunted by wind and inclement weather. The ships shift thousands of tonnes that have to be intercepted by the ramparts. Plastic offers the best possible protection without causing deforming damage. The low water absorption and the high levels of wear and abrasion resistance ensure that PE gives the fenders and planks a long life span.



**LOAD AND
WORKPIECE CARRIERS**

Costly damages caused by transportation can be minimised by professional load carriers. The high and durable dimensional stability as opposed to conventional materials combined with the impact and anti-abrasion properties of our plastics can be used to make a workpiece carrier or a toothed strip to ensure the cargo is secure when in transport or in storage. The result is lower rejection rates and therefore less complaints



FROM A CHOPPING BOARD TO A HIGH-TECH COMPONENT

PE IS ALWAYS THE BASE

PROlen 9000 Premium -UHMW- and PROlen 6000 -UHMW- are amongst our core products. PROlen 3000 RCM -UHMW-, a regenerated and thereby affordable, economic alternative that can be used for many different purposes. PROlen 500 virgin -HMW- is a good material with a high level of technical functionality. PROFILAN offers a variety of special products that can be used in FoodClass and ATEX applications or that have enhanced properties for increased levels of gliding properties or temperature resistance.



FOODCLASS

ACCORDING TO: REGULATION (EC) NO. 1935/2004 AND (EU) NO.10/2011









The EU directives require more stringent controls on products and increased levels of checks for products that come into contact with food. PROFILAN takes responsibility for this and has its products tested in accordance with the above mentioned regulations. The products are tested by an independent laboratory at the corresponding migration values (OML and SML) and can subsequently be confirmed as adherent to the regulations.

The manufacturing process, the raw materials, semi-finished components/sheets and the final products are checked and documented at each stage of the manufacturing process. The entire manufacturing conforms to the regulation (EC) No.2023/2006-GMP-Good-Manufacturing-Practice.














MATERIAL OVERVIEW

STANDARD PROGRAM

PROlen 6000 PE 1000-UHMW- ~ 5,0 Mio. g/Mol 	PROlen 6000 Color PE 1000-UHMW- ~ 5,0 Mio. g/Mol 	PROlen 3000 RCM PE 1000-UHMW- 	PROlen Black MC PE 1000-UHMW 
PROlen 6000 EL PE 1000-UHMW- ~ 5,0 Mio. g/Mol 	PROlen 500 PE 500-HMW- ~ 0,5 Mio. g/Mol 	PROlen 500 Color PE 500-HMW- ~ 0,5 Mio. g/Mol 	PROlen Confetti PE 1000-UHMW / PE 500-HMW 

SPECIAL BLENDS

PROlen 9000 Premium PE 1000-UHMW- ~ 9,0 Mio. g/Mol 	PROstat 9000 PE 1000-UHMW- ~ 9,0 Mio. g/Mol 	PROslide 9000 EL PE 1000-UHMW- ~ 9,0 Mio. g/Mol 	PROlen 9000 GLB PE 1000-UHMW- ~ 9,0 Mio. g/Mol 
PROlen 9000 H.T.R. PE 1000-UHMW- ~ 9,0 Mio. g/Mol 	PROlen 9000 Mos₂ PE 1000-UHMW- ~ 9,0 Mio. g/Mol 	PROoil 9000 PE 1000-UHMW- ~ 9,0 Mio. g/Mol 	PROtec 9000 FR PE 1000-UHMW- ~ 9,0 Mio. g/Mol Flame retardent 
PROice PE 500-HMW- ~ 0,5 Mio. g/Mol 	PROlen 500 EL PE 500-HMW- ~ 0,5 Mio. g/Mol 	PROlen 500 BOR5 PE 500-HMW- ~ 0,5 Mio. g/Mol 	

PROIen SEMI-FINISHED COMPONENTS/SHEETS

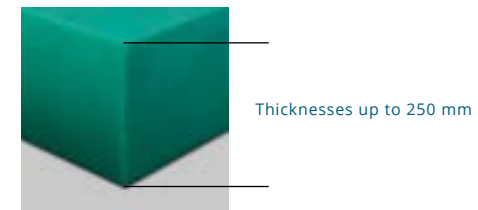


PRESS DIMENSIONS, LARGE SIZES, STANDARD SIZES

PRESS DIMENSIONS (MM)	LARGE SIZES (MM)	STANDARD SIZES (MM)	MAIN PROPERTIES
			<ul style="list-style-type: none"> • Very good wear and abrasion resistance (especially applicable to PE-UHMW) • High impact resistance even at low temperatures (especially applicable to PE-UHMW) • Low friction coefficient • Physiologically harmless, many grades are permitted to come into contact with food • Medium mechanical resistance, stiffness and creep resistance • Excellent chemical stability • Very low water absorption • Very good electrical isolation capacity and dielectric properties (except for static conductive material types) • Excellent machinability • Good resistance to gamma and x-rays • Not self-extinguishing (fire protection class HB)
		* core stock items	

Natural, Blue, Green and Black in many dimensions and thicknesses available from stock. Further specifications, colours and dimensions on request.

STANDARD THICKNESS (MM)				
6	8	10	12	15
20	25	30	35	40
50	60	70	80	90
100	120	150	200	250





**PROFILAN Kunststoffwerk
GmbH & Co. KG**

Zur Dinkel 27 - 31, D-48739 Legden
T +49 (0) 25 66 - 93 33 0
F +49 (0) 25 66 - 93 33 33
info@profilan.de

