



Chemical
processing
equipment

**POWDER COATINGS
PVDF, E-CTFE, ETFE, PTFE,
PFA DISPERSIONS, PAINTS**

Dear customers,

you are looking at the catalogue of products and services which our company offers.

Allow me to introduce the company. The company operates in the Cinkarna Celje company, a well-organized company, which has been active on the international outlets for more than ten years. It is situated near Celje, in the direction towards the east. Its business area are chemical and metallurgical processes demanding high-quality technology and durable materials.

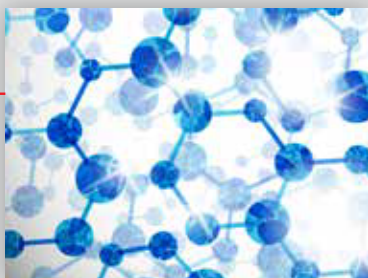
The business outlet is called POLIMERI. Its primary business area is servicing the production and ensuring the aggressive agents decantation systems and protection of metal delivery and reinforced concrete systems. We are used to extreme conditions which the production processes are exposed to. We gain know-how and experience from solving our own problems.

We are proficient in rubber and polymer which is best known as Teflon®. We have developed the products shown in the catalogue which provide answers for many questions. Hopefully they can also answer some of your questions. We are a responsible team striving for development and testing for the products which we produce. The development departments of our suppliers enable us to be connected to the outside European knowledge which is an important and successful supplement to our experience.

Some of you probably already know us since our products are useful in many production areas. Therefore I greet our old acquaintances, and for the ones who have come across our trademark for the first time: we recommend you to have a look at the catalogue. Hopefully you'll find some of the answers to the tasks and objectives pursued.



Chemical industry



Pharmaceutical industry



Power plants



Petrochemical industry

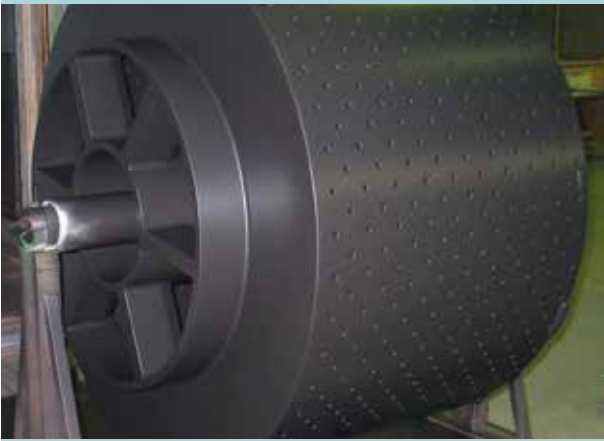


Food industry



HALAR, E-CTFE, non-conducting

It has excellent chemical resistance, good isolation properties and abrasion resistance in the temperature range up to 150°C. It is used in the chemical, pharmaceutical, and petrochemical industries. The coating is applied using the electrostatic process and is composed of a basic and a final layer, with the total thickness of up to 800 µm. It may be used for the protection of items with the following dimensions: 1900 (L) × 1700 (W) × 1700 (H). Available in dark green.



HALAR-C, E-CTFE, conducting

It has excellent chemical resistance and good conducting properties in the temperature range up to 150°C. It is suitable for the use in explosion hazardous areas. It is used in the chemical, pharmaceutical, food, and petrochemical industries (FDA, Atex-certified). The coating is applied using an electrostatic process and the total thickness is up to 800 µm. It may be used for the protection of items with the following dimensions: 1900 (L) × 1700 (W) × 1700 (H). Available in black.



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ETFE conducting and non-conducting

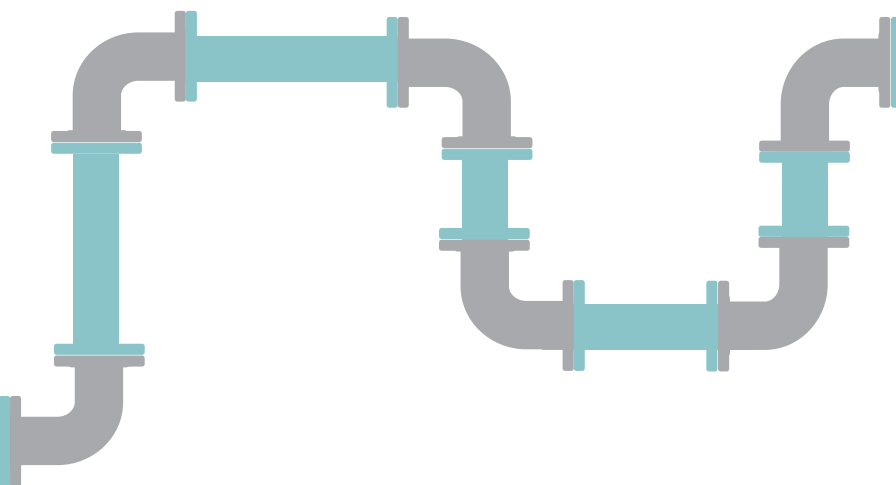
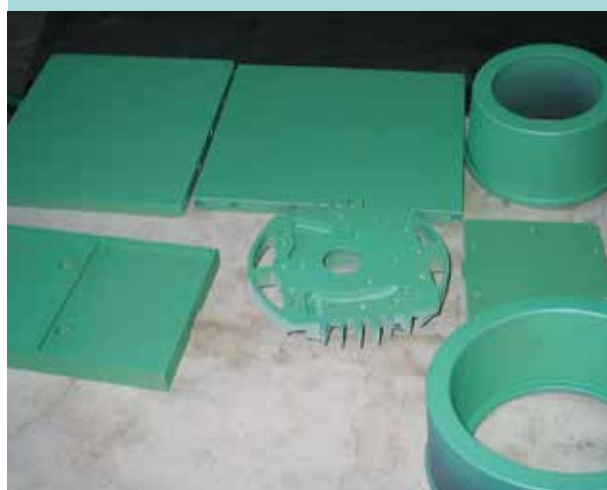
This coating has good abrasion resistance as well as mechanical and chemical resistance in the temperature range up to 140°C. Due to excellent physical properties and impact/tear resistance, the coating is mostly used in the chemical and pharmaceutical industries (FDA, ATEX-certified). It is applied using the electrostatic process and is composed of a basic and a final layer, with the total thickness of up to 800 µm. It may be used for the protection of items with the following dimensions: 1900 (L) × 1700 (W) × 1700 (H). Available in black.



PVDF-REPCOAT

The REPCOAT coating has strong mechanical resistance, excellent tear and ageing resistance; it is also resistant to UV and gamma rays in the temperature range up to 130°C.

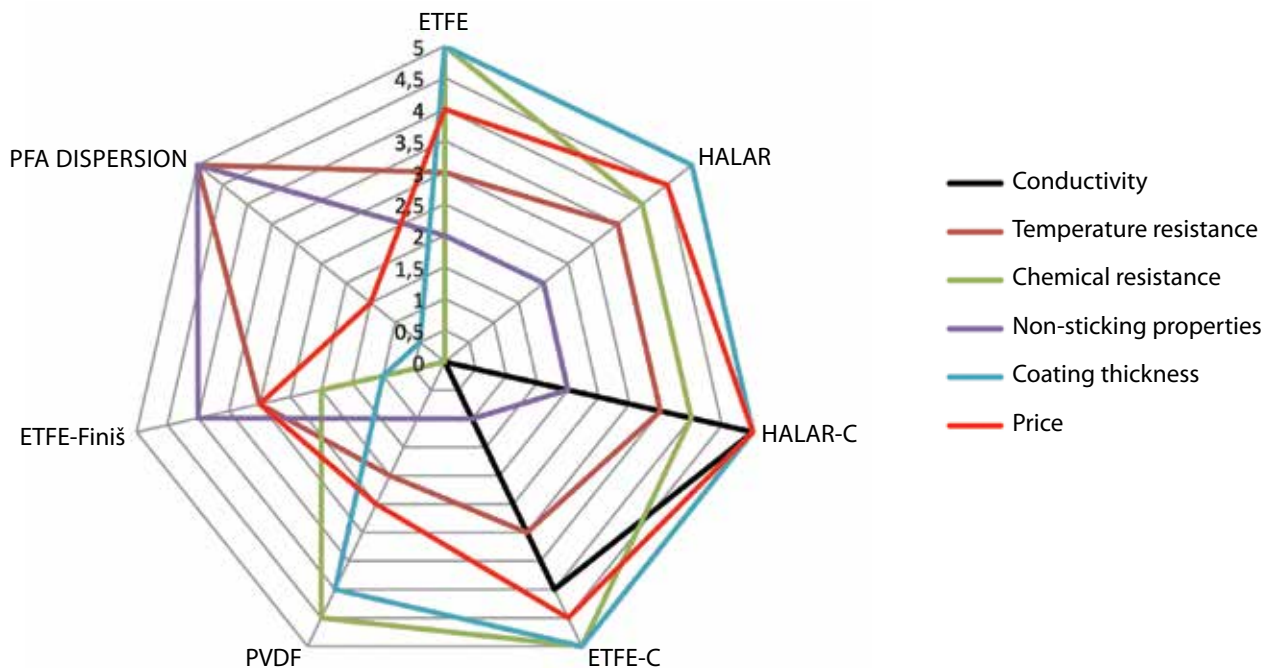
It is RESISTANT in most organic and inorganic acids and bases, depending on the temperature and the concentration of the medium, as well as in aliphatic and aromatic hydrocarbons, alcohols, and solvents. The coating is applied using the electrostatic process and consists of a basic and final layer, with a total width of 500 µm. It may be used for the protection of items with the following dimensions: 1900 (L) × 1700 (W) × 1700 (H). Available in dark red.



PFA DISPERSIONS

The application of PFA dispersions is known for excellent anti-adhesion (non-stick) and sliding properties. They have great tear resistance which is extremely important for the protection of models. The PFA dispersion coating is very microporous, so it is not intended for chemical protection. PFA dispersions are used in the food industry as well as in other industries. They are resistant in temperature ranges up to 260°C, and the coating thickness is 60 µm. It may be used for the protection of items with the following dimensions: 1900 (L) × 1700 (W) × 1700 (H). Available in black and green.

Comparative diagram of thermoplastic coatings



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Powder coating properties

Coating material	Unit	ECTFE	ETFE	PFA dispersions	PVDF
Recommended maximum coating thickness	[μm]	800	800	60	500
Permanent thermal load	[$^{\circ}\text{C}$]	150	160	260	130
Thermal load during application	[$^{\circ}\text{C}$]	290-310	290-310	420	260-280
Thermal load during the removal of coating	[$^{\circ}\text{C}$]	420	420	550	400
Specific gravity	[g/cm^3]	1,68	1,76	2.5	1.78
Dielectric strength	[kV/mm]	80	76	80	130
Strength	[ShD]	75	73	83	77
Tensile strength	[N/mm^2]	30	32	28	54
Elongation at fracture	[%]	220	240	170	80
Friction coefficient	Stat; Dyn	0.8; 0.7	0.24; 0.3	0.7; 0.6	0.4; 0.3
Deformation under load, water 95 $^{\circ}\text{C}$, 600 μm	[h]	144	144	>400	180
Thermal conductivity	[W/mK]	0.151	0.154	0.257	0.172
Tear resistance		Good	Good	Good	Very good
Non-sticking		Good	Good	Very good	Good
Sterilization capability		Good	Good	Very good	Very good
Sliding properties		Good	Good	Very good	Good
Resistance against solvents		Very good	Very good	No	No
Suitability for the use in food		Partial	Partial	Yes	Yes
Chemical resistance		Very good	Very good	No	Very good



Other products:



THE PROCESSING OF FLUOROPOLYMERS

PTFE processing
PTFE piston rings
Thin wall PTFE tubes
Veflex tape
PTFE seals



POWDER APPLICATIONS PVDF, E-CTFE, ETFE, PTFE DISPERSIONS, PAINTS

PVDF application – Repcoat
ETFE application
E-CTFE application – Halar
PTFE dispersions
Powder coating



RUBBER LINING PROCESS EQUIPMENT

Rubber lining
Diaphragm valves
Elastic couplings



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