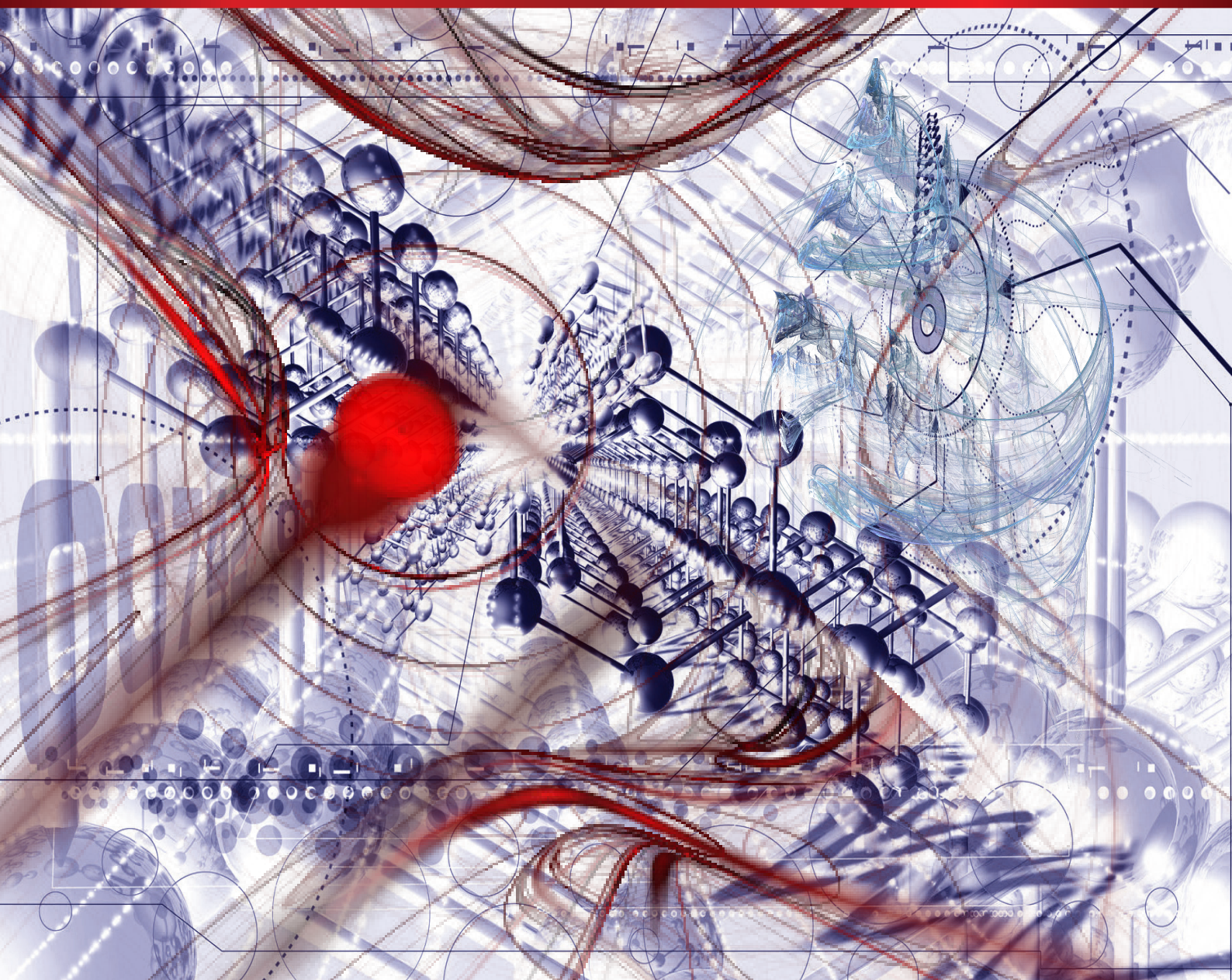


CIMA CHEMICALS®

Design and Production Chemical Plants



ABOUT US

CIMA was founded in 1976 by Leandro Magi one of the first three people in Italy who started welding the new polypropylene polymer in the early 1970s with the aim of building plants in antacid material in order to meet the requirements of goldsmithing, silversmithing and the galvanic industry.

After the first decade in Arezzo, the company moved in 1986 to its new and current headquarters in an industrial area covering over 2,500 m² with offices and manufacturing plants. Here we process plastic (Pps- Special Self-extinguishing polypropylene, PP, PE and PVDF) and steel, in compliance with the current safety regulations.

In 1993 Luca Magi, son of the founder, joined the company with the view of expanding the application of this method to new areas.

For 40 years, CIMA has been manufacturing products in plastic resistant to the corrosion of chemical compounds, specialising in customised plants and technological design.

The close cooperation with the end user has always been our key strategy in order to offer products and services valued by leading companies operating in various fields.

CIMA designs and manufactures exhaust, ventilation, waste gas abatement, dust filtration, deodorization, stripping and insulation systems; we also build a wide range of products ranging from goldsmithing treatment and processing plants, to tanks and storage tanks for the containment of chemical substances.

Over the years, CIMA has expanded its business through its experience since the production of its chemical plants meet the requirements of multiple industries: pharmaceutical, chemical, petrochemical, plating, steel, food processing, textiles, jewellery, foundries, waste and water treatment.

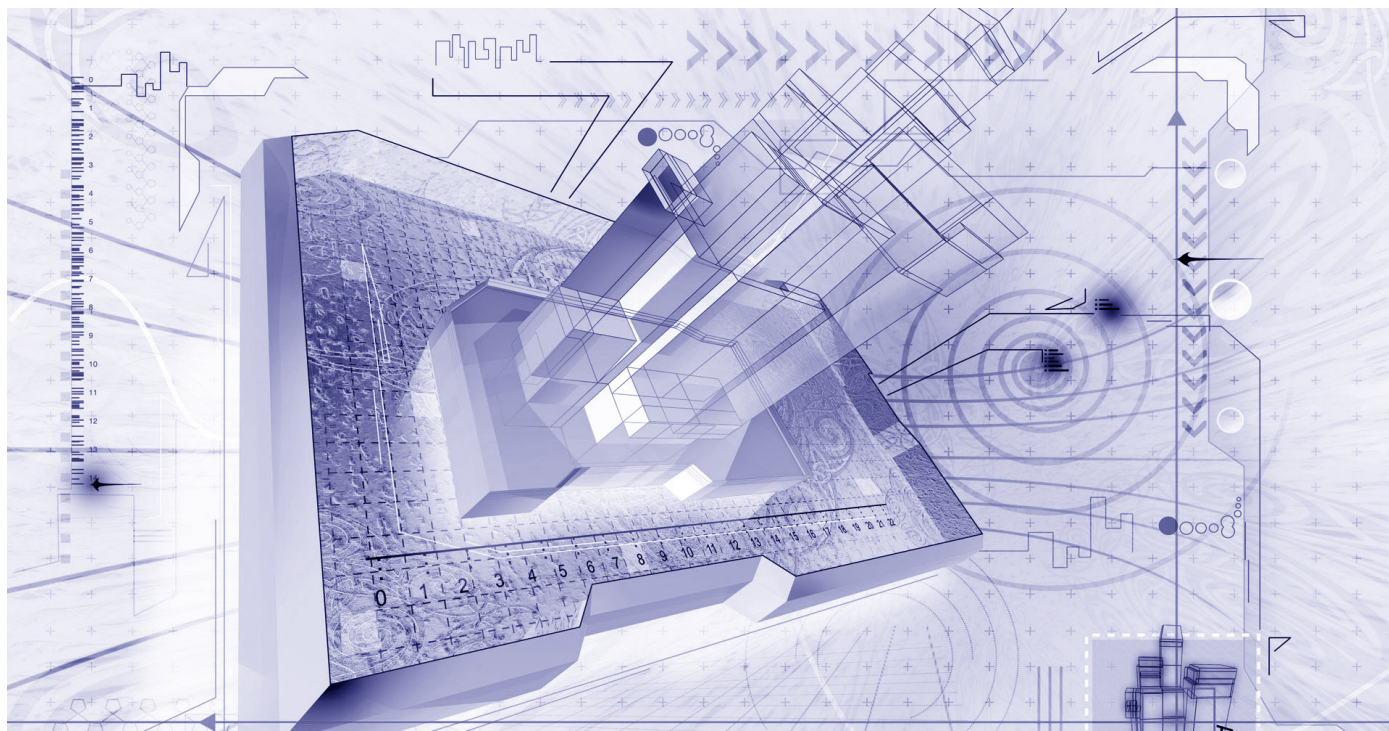
Many years of experience and reliability, combined with the high professional level of its employees, has made CIMA one of the top firms in the sector working for major domestic and foreign companies.



RESEARCH AND INNOVATION

CIMA has always considered Research and Innovation key words for competitiveness which over the years have guaranteed the manufacturing of high quality products.

- CIMA is the first company in Italy to use the “Rita” software combined with its own work experience;
- Since 2011 we fully comply to DVS 2212 regulations - qualification testing of plastics welders (PP/PE/PVDF), keeping the professional development of our employees continuous with training courses;
- The production line was updated in 2011 with state of the art machinery and Wegener automated welding systems, available so far only to few other companies;
- The new 73,92 kw photovoltaic system was installed in June 2012 alongside the renewal of coverage inside and outside the plant which not only has an impact on energy saving but improves also working conditions and has a very low environmental impact;
- In February 2015 the lighting outside and inside the plant was completely replaced with a unique state of the art LED lighting, with considerable reductions in fuel consumption and better lightening.
- Since April 2015 all standard manufacturing is now made exclusively by a high quality polymer of new generation the Self-extinguishing polypropylene PPS, fully replacing the gray polypropylene PPH now reserved only to manufacturing on request. The exclusive use of a PPS polymer with chemical, mechanical and weldability new generation features, in collaboration with a major international partner, guarantees the best conditions of use of our products.
- On February 29th, 2016 C.I.M.A. becomes CIMA Chemicals®, extending its horizons towards new trade markets in constant evolution and progress.



SILVER REFINING

Electrolytic silver refining plant:

Material:

Pps (Special Self-extinguishing polypropylene) for cells, tanks and reactors;
STAINLESS STEEL 316L for supporting structures and barriers.

The silver refining plant has a capacity for single unit from 16 to 40 Kg/Ag in 24 hours.

It is a modular system which allows to increase the daily yield according to the number of units. Furthermore, the plant is equipped with a system which automatically cleans the silver deposited in the cathode.

Turnkey plant complete with:

- mould for the anodes to be refined;
- uninterrupted high frequency power supplies;
- filtration and recycling pumps;
- electrical control panels with PLC option.



Silver refining plant



Electrolysis plant for silver refining



COPPER REFINING

Copper refining plant:

Material:

Pps (Special Self-extinguishing polypropylene) for cells, tanks and reactors;

STAINLESS STEEL 316L for supporting structures and barriers.

The copper refining plant has a capacity for single unit from 10 to 40 Kg/Cu in 24 hours.

It is a modular system which allows to increase the daily yield according to the number of units.

Turnkey plant complete with:

- cast iron brackets of the anodes to be refined;
- uninterrupted high frequency power supplies;
- filtration and recycling pumps;
- heating system for the recycling solution;
- electrical control panels with PLC option.



Copper refining plant

GOLD REFINING

Gold refining plant:

Material:

PP (Polypropylene) or PVDF (Polyvinylidene fluoride) for the reactors;
STAINLESS STEEL 316L for supporting
structures.

The gold refining plant has a production capacity, for each individual reactor, ranging from 7 to 250 Kg./ refined Au; multiple reactors can be set up at the same plant as well as precipitators and other accessories.

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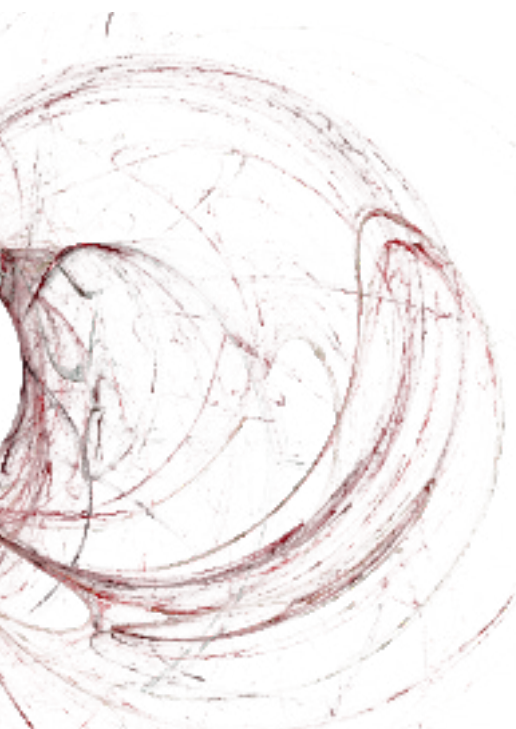
Turnkey plant complete with:

- filtration and recycling pumps;
- heating system for the chemical solution;
- cooling system for vapour cooling exchangers;
- electrical control panels with PLC option.

This plant can be supplied with electrolytic gold refining cells 1000/1000 with a capacity for each unit of 20 kg in 24 hours.



New gold refining
7 - 20kg



Gold refining

CHEMICAL AND GALVANIC PLANTS

Material:

Pps (Special Self-extinguishing polypropylene), PP (Polypropylene), PVDF (Polyvinylidene Fluoride) or PE (Polyethylene) for tanks and reactors;

STAINLESS STEEL 316L for supporting structures and barriers.

The chemical and galvanic plants are built in plastic and the welding of the products complies with DVS regulations; for all stages and types of process we use the latest generation systems from software design and automatic welding machines, to the supply of accessories and related duration and tear tests.

Square or rectangular products:

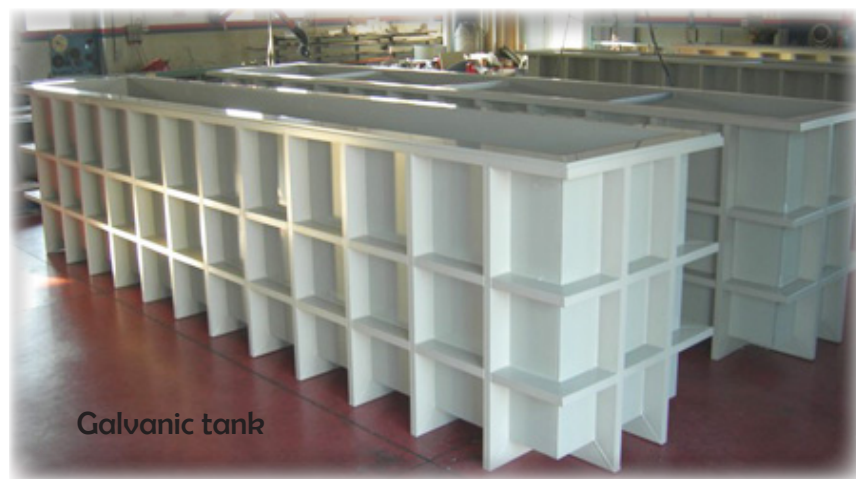
Sizes from 500 mm to 13,000 mm. length x 500-2200 mm. width x 2500 mm. height.

Circular products:

Sizes from 500 to 3,000 mm. diameter x 500 mm. up to 10,500 mm. in height.

Turnkey plant complete with:

- axes covered in Pps or PP;
- uninterrupted high frequency power supply for electrolytic tanks;
- filtration and recycling pumps;
- heating systems for the solutions with PTFE/INOX heaters or steam with PVDF coils;
- electrical control panels with PLC option.



Galvanic tank



Treatment tank compartments



Galvanic plant

ELECTROFORMING MACHINE

Material:

Pps (Special Self-extinguishing polypropylene) for piping and hoods;
Ppn (Natural polypropylene) for tanks and mixers;
Pph (High polypropylene) for fittings, valves and filters;
STAINLESS STEEL 316L for structure.

Turnkey plant complete with:

- filtration and recycling magnetic pumps and pneumatic dosing pumps;
- heating system for chemical solution with heaters in PTFE BLACK;
- platinum-titanium anodes;
- storage tanks for chemical additives and demineralized water;
- object handling system and a precision balance;
- suction system;
- high frequency DC voltage power supply;
- control panel with stainless steel cabinet, with PLC management software.
- quadro di comando, software di gestione e PLC.



SAFETY STORAGE CABINET FOR CHEMICALS COMPLETE WITH FILTRATION SYSTEM.

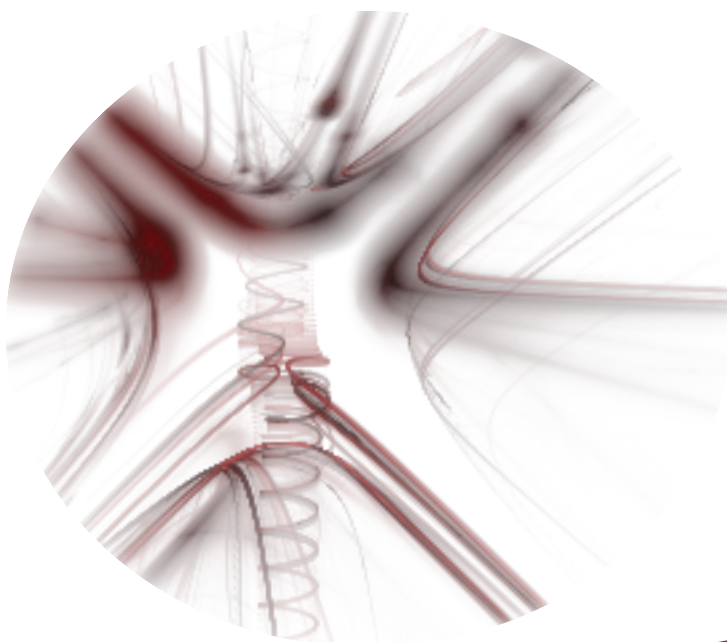
Material:

Pps (Self-extinguishing Special Polypropylene) or Ppn (Natural Polypropylene) if destined for the food industrymentare

DESCRIPTION AND FEATURES:

The machine consists of a cabinet in Pps with internal double back slotted chamber, complete with separation shelves in Pps, front door in Pps hinges in ABS, timed safety switch for the opening, stainless steel safety hinges and fan. The cabinet can be connected to a treatment plant consists of a filter realized in Pps in double or triple cell filled with active carbon.

The fan is controlled by inverter in order to allow an aspiration from minimum with closed door, to maximum with open door; the suction speed is about 1.5 m/s. The electrical control panel from which you can activate the suction and open the cabinet is installed in an easily accessible and ergonomic position and it's complete with light and sound warning that activate at the state of open closet. The cabinet can be installed complete with wheels as the purchaser's request. It's possible to configure cabinet depending on the application, with filter on pressure or on depression, already filtered air inlet, sliding shelves, pH indicator or other physical quantities monitoring devices.



ECOLOGY AND DEPURATION

Wastewater evaporator

Material:

Pps (Special Self-extinguishing polypropylene).

The plant treats the liquid pollutant resulting from industrial processes in order to allow the emission of only water vapour, recovering at the same time the semi-solid material in the waste liquid.

The yield can vary from 200 to 450 Lt. for each column based on the salt concentration of the liquid to evaporate.

Turnkey plant complete with:

- control panel with or without PLC;
- boilers or boilers already integrated.

Available models: evaporator with 1/2/3 or 6 columns or multiples of 3 columns.



Evaporator Mod EV6 CS



Evaporators for chemical and
food industrial waste waters

SCRUBBERS

Material:

Pps (Special Self-extinguishing polypropylene) or PP (Polypropylene).

The scrubbers are built entirely in solid Pps or PP without addition of metal, so that the products result unaffected by any steam produced by chemical reactions, such as nitrous vapours, chlorine fumes, vapours of nitro-hydrochloric acid from metal refining, foundry vapours, fumes coming from the food industry, etc. Air flow rates from 50 to 100,000 Nmc/h.

Size 500 mm. to 3000 mm. diameter x height 2,000 mm. 10,500 mm.

Turnkey scrubbers complete with:

- filtration and recycling pumps;
- vacuum cleaners in Pps or PP;
- dosing system and Ph control;
- cooling system for vapour cooling exchangers;
- electrical control panels with PLC option.

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Suction system for reduction in 3 stages
(packed column scrubbers)



Plant in Pps for reducing gas

FOOD

Knowledge and decennary experience in plastics and metals, allowed the company to expand field of manufacturing sectors, up to food. Using a non-toxic polymer of natural color, therefore, no added colors, Cima Chemicals designs and produces equipment and components as preparation tanks, storage systems and filtered and washing systems, intended for contact with food.



Portable transfer unit
for food and chemical fluids

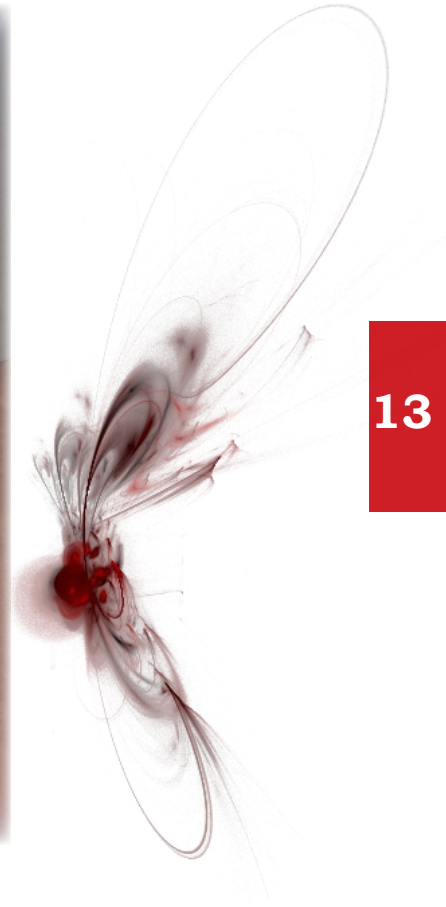


Safety storage cabinet



Washing and filtering system
for food industry

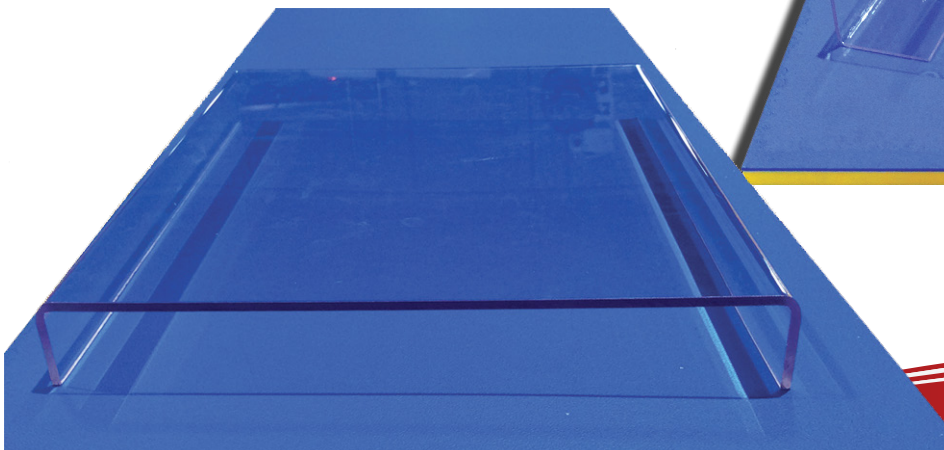
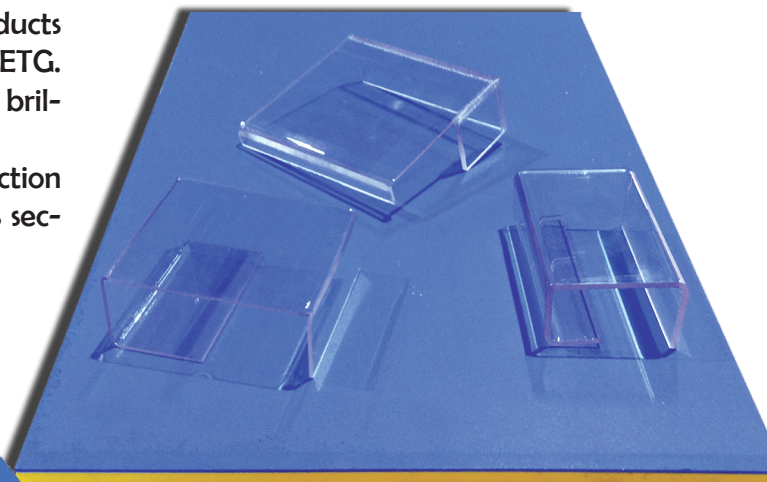
PREPARATION TANK



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PROCESSING OF AMORPHOUS

Thanks to the introduction in the production system of new technology machinery, Cima Chemicals realizes products in amorphous materials such as Polycarbonate and PETG. These thermoplastic materials with characteristics of brilliance and transparency and good impact resistance, can be used, among other things, to the production of machine guards, systems and equipment in various sectors, from food to electronics .



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NOTES



Ed. 01/2016

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