



CHEMICAL REMOVING FROM LAB TO INDUSTRIAL PLANT

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SOFT CHEMICALS



Soft Chemicals specializes in the **supply of chemical products for the textile industry**. The special designs developed through our R&D encompass all process steps, whether pretreatment, dyeing or conventional and technical textile finishing. Soft Chemicals can meet any processing requirements for various fibres and textile items depending on their intended use and required performance.



LABORATORY CAPABILITIES



- Tailored Formulation
- Chemicals Control FT-IR Spectrum
- HPLC Flexar detector UV/VIS e ELSD
- Compounds Design
- Padding-Coating-Foaming Application Equipment
- Flame Retardancy's Evaluation
- Quality Control
- Water Proof Column up to 10mt

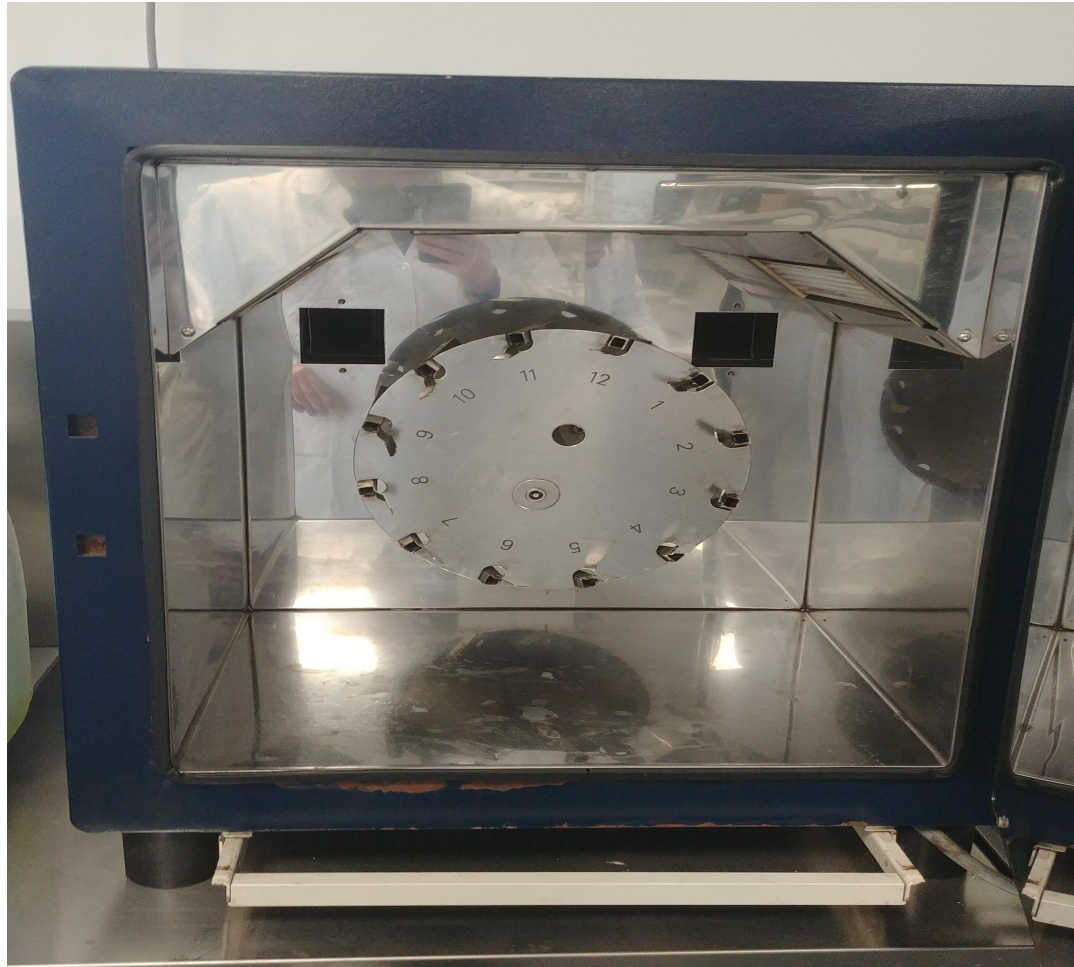


- Thanks to the collaboration of all other partners, our first goal will be to define methods and recipes to clean the waste acrylic textile material available for the recycling process.
- SOFT CHEMICALS will be involved to develop specific targeted machinery for industrial trials, activities, products and expertise thanks to the knowledge and network in the textile chain.

WATER COLUMN AND UNDER PRESSURE MACHINE

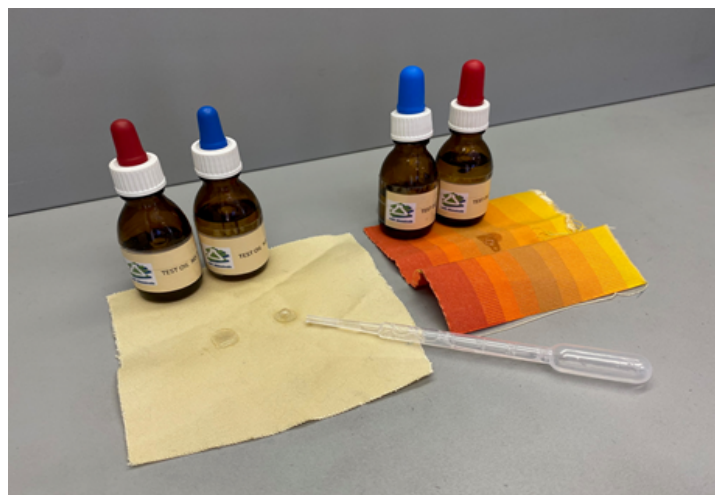


- On the left side, a **water column**, used to check idrorepellency performances
- On the right side, an **under pressure machine** in which apply recipes in exhaustion method, to remove hazardous chemicals from acrylic waste



Under pressure machine to maximizes treatment efficiency

- Units employ the latest heating technology for precise heating and temperature control.
- Manual dosing options for auxiliaries enhance correlation between laboratory and production processes.
- Programmable parameters accommodate many types of substrates for dyeing and testing procedures.



PILOT PLANT



- Under pressure machine
- Up to 130°C
- Liquor ratio from 1:5 to 1:10
- Max 20 kg of textile material
- Carrying capacity goal: 50 kg



- 2 containers available for different recipes
- Timed dosage
- It is possible to create a detailed treatment cycle by working on times and temperatures

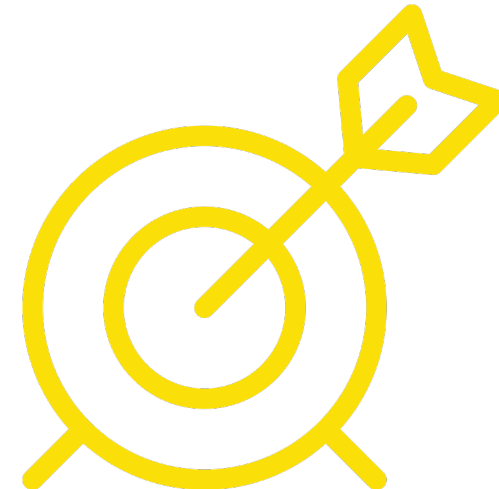


- **Currently:**
Industrial machine is working on wool tops
- **Under processing:**
Soft Chemicals is developing a system for opened fabrics or frayed acrylic textiles, using a specific container

FUTURE GOALS FOR THIS PILOT PLANT

Working at higher temperature under pressure, using:

- less time
- less chemicals
- less water





THANK YOU
FOR YOUR
ATTENTION

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