



## OUR SERVICES

Application Center, Decoating Center,  
Water Technology Center and NGL Academy trainings.



ECOLOGICAL CLEANING SOLUTIONS



## OUR EXPERTS SUPPORT YOU

### OUR CLEANING EQUIPMENT :

- An industrial **spraying** machine.
- A dual-frequency (25 and 40 kHz) multi-tank **ultrasonic** line.
- A dual-frequency (40 and 100 kHz) 2CRD100 single-chamber machine.
- Multiple ultrasonic tanks (4L, 10L, 30L and 60L) and frequencies.
- UPC 3000 is available in English, French, Italian and German.

For our Swiss customers, our small cleaning equipment can be rented for short periods.



### APPLICATION CENTER WORLDWIDE :

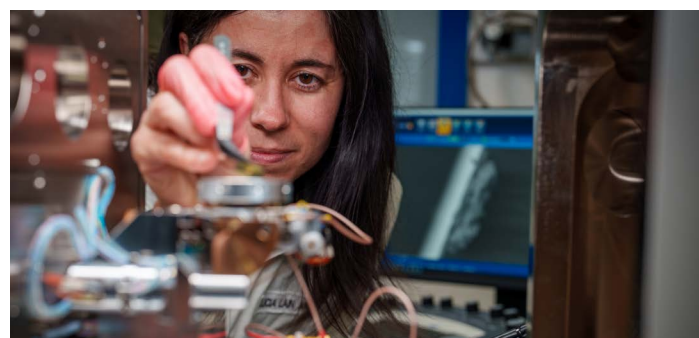
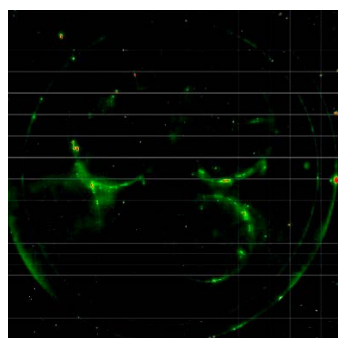
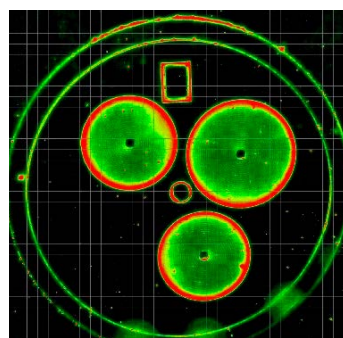


- Switzerland (Headquarters)
- Germany
- France
- Denmark
- USA



### OUR CHARACTERIZATION INSTRUMENTS:

- Contact angle measuring instruments - Krüss
- Digital microscope - Keyence
- Scanning electron microscope - Zeiss
- X-ray fluorescence analyzer - Olympus Vanta Gun
- Fluorescent grease detectors - Techtest S.R.O



## NEED LOCAL TECHNICAL SUPPORT?

Contact our experts to help you develop the right process or optimize an existing model using our products.

# 1

### Needs assessment

Understand specific cleaning requirements and customer needs. Define specifications.



# 2

### NGL Criteria & Concept

Identify customer cleanliness criteria and control methods. Present NGL solutions (test methodology, choice of washing and surface characterization equipment).



# 3

### Process development

Develop the cleaning process after receiving representative parts: preliminary tests, process development and verification of cleaning quality.



# 4

### Process validation

Check and validate the surface condition of parts cleaned during tests according to the criteria and methods defined in step 2 with the customer (efficiency, compatibility & compliance with standards).



# 5

### Implementation & Training

Implement the cleaning process in industrial plants. Make adjustments where necessary to improve process performance. Train employees in proper cleaning techniques, chemical use and equipment.



# 6

### Monitoring & Continuous Improvement

Document all aspects of the cleaning process and bath control monitoring methods. Identify opportunities for continuous improvement of the cleaning process (machine evolution, products, etc.).







## NEED TECHNICAL DECOATING?

THE DECOATING CENTER IN BOCHOLT, GERMANY

Our decoating processes are suited for PVD, CVD and PACVD deposited layers.

NGL develops and provides decoating solutions and services for small drill bits, to large pieces such as molds,



parts sizes up to 1.5m in diameter and weighing up to 5t. Our expertise extends to intricate and long parts, with blind holes and deep cavities.



### DECOATING POSSIBILITIES :

- Cutting tools
- Molds/dies
- PVD chamber parts
- PVD planetary and tube holders
- CVD graphite and CFC parts
- Ceramic components
- Decorative parts
- Special tools
- Recycling materials (carbide scrap)



### TANK CAPACITIES:

- 3 tanks: 20x30x20 cm
- 3 tanks: 50x60x45 cm
- 3 tanks: 140x25x50 cm
- 3 tanks: 145x145x50 cm
- 3 tanks: 280x80x70 cm
- 6 tanks: 45x60x45 cm
- 6 tanks: 145x70x70 cm

Over 15 different decoating processes in more than 50 different tanks available.

WEIGHT CAPABILITIES : UP TO 5T



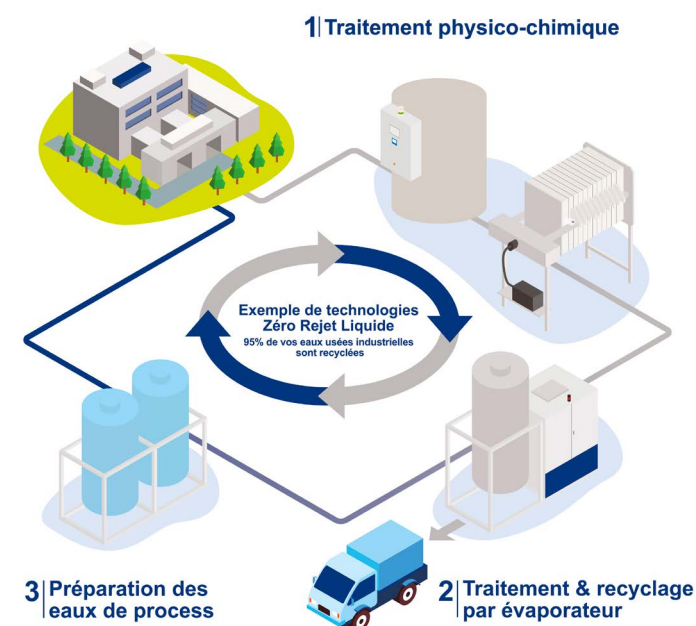
## NEED WATER TREATMENT EXPERTISE?

NGL is also an expert in industrial effluent treatment and process water recycling. Call on our WT Center for :

- An analysis of the conformity of your water
- A physico-chemical treatment feasibility test
- A study of the implementation of treatment equipment
- An audit of the operation of your existing plants



## ZERO LIQUID DISCHARGE

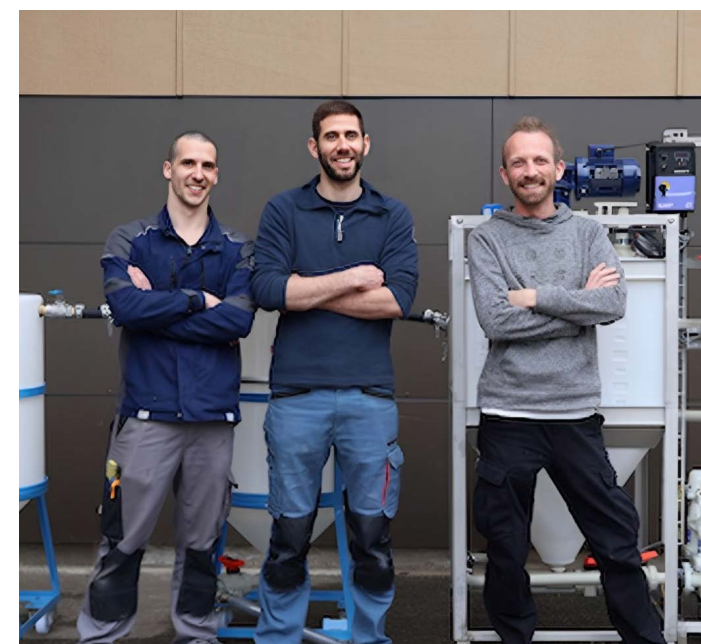


### OPTIMIZE THE USE OF YOUR INDUSTRIAL WATER :

- Water treatment expertise with operations in France and Switzerland
- Feasibility studies
- Consulting on request

Our team will design equipment to meet your specific needs, from controlling the quality of your process water, to reducing your water consumption and bringing your wastewater into compliance.

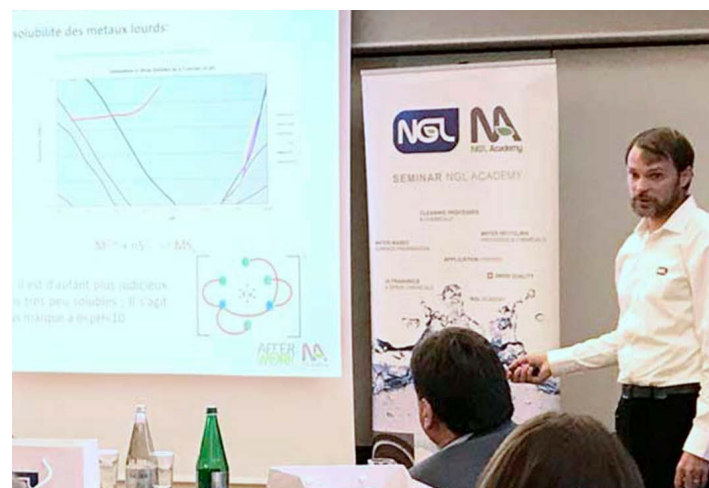
Our systems are modular and can be adapted to the space available on site, as well as to the evolution of your processes over time. From simple filtration to total zero-discharge treatment, our AQUA4D®, Nanoclean and Decofloc processes, as well as the evaporator, will meet all your needs.



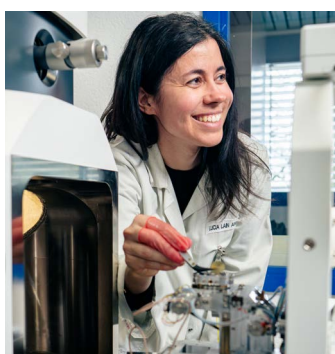


## NEED TO EXPAND YOUR KNOWLEDGE?

Your employees are at the heart of your value chain. Our engineers offer half-day theoretical or full-day theoretical and practical training courses, on site with your machines, or in our laboratory with our equipment.



Combining theory and practice on the machines, these sessions answer questions on how detergents work, the key stages in a cleaning process, advice on handling and positioning parts, identifying cleaning faults and their causes, etc...



These training sessions are organized at our various subsidiaries, directly at your site or online.

- THEORY - 1/2 DAY
- THEORY + PRACTICE - 1 DAY

In the event of difficulties with your cleaning processes, our NGL Academy can take the form of an on-site audit.



### GAIN PRODUCTIVITY THROUGH TRAINING

Cleaning and surface preparation processes require a good understanding of the physical and chemical mechanisms involved:

- Quality of water used to prepare baths or rinse rooms
- Substrate sensitivity
- Dosing and concentration measurement of chemicals



## NGL ACADEMY TRAINING SEMINARS

Theoretical part (1/2 day) or theoretical + practical part (1 day)

### MODULE A

#### GOOD PRACTISES IN WATER-BASED INDUSTRIAL CLEANING PROCESSES

- Introduction to cleaning
  - Why cleaning?
  - What is a clean part?
- Chemicals: water and detergents
  - Water property and quality
  - Chemical principles of cleaning, detergent families
- Cleaning techniques
  - Ultrasonic, spray, vacuum
  - Substrates, pollution and geometries
- Process & cleanliness control
  - Check cleanliness
  - Identifying malfunctions

### MODULE B

#### PROCESSED WATER TREATMENT AND RECYCLING IN WATER-BASED INDUSTRIAL CLEANING PROCEDURES

- Water supply
  - Types of water
  - Why pre-treat water?
- Process water
  - Process water types (hard, softened, osmosis and demineralized water)
- Pre-treatment
  - How to produce process water?
- Recycling
  - Why recycle?
  - Which water to recycle?
  - How to recycle process water?

### MODULE C

#### INDUSTRIAL WASTEWATER TREATMENT PROCESSES

- The industrial water cycle
  - Collect, supply, use, treatment, discharge
  - Environmental impact
- Regulations
  - Applicable standards and laws (FR and CH)
- Treatment methods
  - Which water to treat (tribofinishing, galvanoplasty, floor washing, etc.)?
  - How to treat them? (physical-chemical, advanced oxidation, evaporation)
- Zero liquid discharge
  - Optimizing water recovery

# OUR SUBSIDIARIES AROUND THE WORLD

## NGL FRANCE SAS

Parc Aktiland Bât E, 1 rue de Lombardie  
FR-69800 Saint-Priest  
france@ngl-group.com

## NGL CLEANING GMBH

Schlavenhorst 15  
DE-46395 BOCHOLT  
kontakt@ngl-group.com

## NGL NORDIC A/S

Industriskellet 10  
DK-2635 Ishøj  
nordic@ngl-group.com

## NGL SHANGHAI

Room 407, 4F, Building 3, No.3199 Jinhai Road,  
Fengxian District  
CN-201401 SHANGHAI  
shanghai@ngl-group.com

## NGL ASIA PACIFIC PTE LTD

28 Kallang Place #05-09 Kallang Basin Industrial Estate  
SG-339158 SINGAPOUR  
asiapacific@ngl-group.com

## NGL AMERICA INC.

747 North Church Road, Suite G-9  
Elmhurst, IL 60126 USA  
usa@ngl-group.com

25/04/2025



## NGL CLEANING TECHNOLOGY SA - ECOLOGICAL CLEANING SOLUTIONS

Chemin de la Vuarpillière 7 – CH-1260 NYON – SWITZERLAND  
+41 22 365 46 66 – contact@ngl-group.com – www.ngl-group.com

