

# CORPORATE BROCHURE



# That is Colubris

Across the globe, resource scarcity and contamination threaten ecosystems and industries alike. Regulations are tightening, and sustainability is no longer optional—it is essential. Colubris delivers advanced waste and wastewater treatment and resource recovery solutions that ensure compliance, protect the environment, and create value from what was once considered waste.

## Our mission

Waste and wastewater are not just a cost – it is an opportunity to strengthen your competitiveness and sustainability goals. It is Colubris' mission to collaborate with and help you to close the waste and water loop in a sustainable way both environmentally and financially.

## Who we are

Colubris is a privately owned company from the Netherlands specializing in waste and wastewater treatment technologies including:

- Separation technologies
- Purifying technologies
- Recovery technologies

## What we do

Colubris is an Original Equipment Manufacturer (OEM) delivering single product solutions and/or designing, engineering, manufacturing, integrating and constructing integrated turnkey projects for:

- Treatment and recovery of industrial and municipal wastewater.
- Separation and recovery of solid waste from municipal solid waste to industrial.
- Recovery of high value nutrients, proteins, fibers, and glucose from organic waste streams.





## “ Mission statement

To accelerate the transition to a circular global economy by bundling unique knowledge to offer the best possible solutions in the field of water, waste recycling and bioresources. ”

### Water Solutions

Solutions for reducing wastewater problems, reusing water and purifying water. Solutions to recover energy from wastewater.

### Waste Solutions

Solutions that allow waste flows to be separated so they can be reused and upgraded.

### Bioresource Solutions

Solutions for upgrading residual flows from the food and vegetable processing industry.

These solutions help us to offer answers to the complex issues encountered in today's world. No two waste flows are alike and standard solutions are often insufficient. That is why we develop, engineer and construct systems that meet your specific needs and challenges.

### Our experience

With more than 4.000 plants built worldwide over the last 40 –years around our biggest asset is our unique expertise to deliver effective and efficient solutions at the lowest operating costs for many industries.

- Consultancy, feasibility study, engineering design
- Greenfield (turnkey) or brownfield (upgrading or expansion)
- System & technology integration, optimization, monitoring, and maintenance
- In-depth processes knowledge of industrial processes in food and non-food industry.





“ We take full responsibility. ”



### Our customers

#### Commercial/Industrial

- Meat & fish processing
- Petfood production
- Dairy processing
- Vegetable processing
- Soft drinks, breweries, distilleries
- Convenience & food processing
- Paper & pulp processing
- Mining
- Petrochemical
- Textile
- Waste treatment

#### Domestic/Municipal

- Water districts
- Industrial zones
- Smart cities
- Hotels
- Resorts
- Communities

### Our solutions

We provide compact, efficient, and modular systems. Our solutions are designed to remove pollution and recover valuable resources where possible.

- Screens
- Coagulation/flocculation & Dissolved Air Flotation
- Aerobic and anaerobic biological treatment
- Water polishing for reuse/recycling
- Sludge and brine treatment
- Energy recovery solutions
- Nutrient recovery solutions
- Waste separation equipment
- High quality food grade ingredient recovery solutions

Based on your business drivers and needs whether regulatory, financial, or operational, Colubris will recommend the best-fit configuration.



# Colubris Water

The world is facing a water challenge like never before. Scarcity, contamination, and rising costs are reshaping how industries operate. Colubris is here to lead the way with smart, sustainable technologies that turn wastewater into a resource, helping businesses thrive in a circular future.

Colubris water delivers solution to treat and recover valuable resources from your wastewater. Based on over four decades of experience and our wide range of solutions can design, engineer, build and implement the best solution for your exact needs and business drivers.

Our focus is optimization of your system such that you achieve compliance at the lowest possible operating cost to improve your financial sustainability.

We have experience with wastewater from domestic and many different industrial sources. We have implemented solutions in 80+ countries for companies ranging from small and medium sized local companies to multinational conglomerates.

## Our water solutions portfolio

We possess a comprehensive team of experts capable of addressing the most complex issues in the field of water purification. We have been producing and installing wastewater purification installations since the late Eighties. Our installations are able to purify even the most heavily polluted wastewater, thus allowing clean water to return to its natural cycle. Our installations are suitable for primary, secondary (biological) and tertiary wastewater treatment.

- Filters, coarse & fine screen
- Sand/grit separator
- Flocculator & mixing tank
- DAF chemical/non-chemical
- Poly make-up station
- Aeration rack
- Surface aerators
- Aerobic FBR
- Aerobic MABR
- Aerobic MBR
- Aerobic SBR
- (Flotation) Clarifier
- Containerized biological WWTP Anaerobic UASB
- Anaerobic EGSB
- Oil water separator
- Lamella settler
- Active sand filter
- Media filters (sand, glass, active coal)
- MF/UF/NF/RO membrane systems
- UV/Ozon disinfection
- Sludge treatment: dewatering screw, screw press, decanter, digestion systems
- Flume system for vegetable industry

## “ Active worldwide

We have gained experience in a wide range of sectors where an important role is played by (waste) water treatment, waste recycling and separation of components from green raw materials. All across the globe. This is one of the reasons why we will always find the best possible solution for your specific situation. Your production process will continue to run at full speed and your wastewater will be purified efficiently at the lowest possible cost. ”





# Colubris Waste

Like water, solid waste is a resource. Reusing and recycling is solid waste reduces our demand for more raw materials. Effective sorting of waste streams helps to extract more value.

## Tailor-made solutions for your waste flows

Colubris provides tailor-made solutions to separate waste flows. Over the past decades we have built >120 waste sorting lines for mixed municipal solid waste, commercial/industrial waste, electronic waste, rubber waste, and construction & demolition waste.

Our robust sorting plants help you recover more value from the waste downstream by efficient sorting of organics, plastics, paper, wood, metal, etc.

Solutions for solid waste management also include treatment of manure and organic waste (biogas and bioresources) through combinations of water and bioresources. Value can be derived from ammonia and other nutrient recovery, or the proteins, fibers, glucose and other valuable resources like biogas or heat contained in these waste streams.



“ The more effectively these materials are sorted, the higher their reuse value and the higher your efficiency. ”



“ We would like to contribute to a biobased economy; an economy that no longer depends on fossil fuels, but uses renewable or green raw materials from crops. ”

# Colubris Bioresource

There is a concealed value in the organic residue and in side-streams from fruit and vegetable processing. Essential nutrients can actually be recovered, for example protein and fibres. With Colubris Bioresource Solutions adding value to your side-streams is possible. This will improve your revenue, while actively contributing towards the circular economy.

## Tailor-made Biorefinery

Thanks to our research and development work through our in-house biochemists and food- and nutrition scientists team we have been able to extract valuable oils, fats, proteins, fibers, and glucose water from otherwise discarded wastewater and vegetable waste streams. After extraction, these high-quality food grade ingredients can be reused or sold immediately.

After testing and proving commercial viability, we can design and build the complete commercial scale biorefinery. From feasibility study via construction to actual commercial operation, we are here to guide you through this process and maximize revenue at the lowest operational costs.

We have tested various crops for extraction possibilities already and are able to test new crops with you. Interested in our pilot and commercial bioresources projects?



# Solutions and service



## Our solutions

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## Our services portfolio

- Treatability & feasibility studies
- Pilot testing & laboratory studies
- Consultancy & advisory for system optimization
- Basic & detailed process design
- Engineering & manufacturing OEM
- Electrical hardware & software design
- System integration
- Brownfield upgrading/expansion
- Greenfield turnkey project delivery
- Project management
- Installation & commissioning
- Operator training
- Online equipment/project monitoring
- Spares management & service
- Preventive maintenance contracts
- Remote or on-site technical assistance & troubleshooting
- Short & long term equipment rental



### Passion for innovation

Continuity is an objective because we want to further improve our products and remain innovative. //



## Bringing value to you

Waste and wastewater are not just a cost – they are an opportunity to strengthen your competitiveness and sustainability goals.

Whether you are building a new facility or want to upgrade/expand your existing plant, our proven solutions bring value to you by:

- **Ensuring compliance legitimizing profit.**
- **Operational cost reductions through system optimization.**
  - Water intake reduction through reuse/recycling of water
  - Chemical and energy usage reduction
  - Effluent, sludge and brine discharge reduction
  - Higher levels of automation
- **Recovery of resources.**
  - Reuse/recycling of water (process, drinking, or irrigation)
  - Recovery of nutrients (Nitrogen/Ammonia, Phosphorus)
  - Recovery of energy (biogas, heat, electricity)
  - Recovery of high-quality food grade ingredients (salts, glucose, fibers, protein)
  - Separation of organic waste, recyclables and RDF
- **Upgrading/expansion of your treatment plant.**
  - Increasing your plant up-time/availability
  - Providing a reliable source of fresh water
  - Lowering maintenance needs
  - Footprint reduction
- **Achieving emission reductions.**
- **Solid waste valorization through separation of organics and RDF**

Colubris is your trusted end-to-end solution partner delivering reliable and compliant waste and wastewater treatment and recovery solutions at the lowest possible operating costs!

“ Process control reduces failure. ”

# Our in-house capabilities

Colubris is your one-stop shop for project execution. We partner with you from project origination all the way through operation.

## Engineering

No waste or wastewater is the same and many variables interact with each other in coming to the best solution for you. Colubris has an experienced team of commercial, process, and detailed engineers to design the best fitting solution based on your specific case, needs, and business drivers.

## Project management

At Colubris we have a professional team of Project Managers, dedicated to support in projects for wastewater treatment, waste recovery and bioresource. Our PM's have years of experience with realizing successful projects, worldwide, and with a hands-on mentality. The PM's will work with you to complete the project in time, according to specification, within budget, and make sure you are satisfied.

## Laboratory testing

In our recently setup laboratory, we can test your wastewater samples to determine the best possible process to treat your effluent up to compliance specification or combine various process treatment steps to recover more value from the stream.

## R&D

Ever changing societal demands require solutions adapted to the needs of the market. Colubris has a dedicated R&D team located in Wageningen, the Netherlands. In close cooperation with the Wageningen University and other educational and branche representation institutions we cooperate to develop new approaches to tackle societal problems and provide you with advanced state-of-the-art solutions.

## Production

Your unit or complete processing line will be produced, assembled and tested in our own production facilities in Winterswijk. This is possible thanks to our extremely modern machinery and highly skilled employees. Our ISO certificates and the implemented LEAN principles make sure the highest quality norms are implemented when producing your unit.

## Installation, Testing, Commissioning

Our team of qualified machinal, electrical, and general maintenance engineers will assist you once your new equipment arrives on site and is ready to be installed and connected to (the locally built) civil and utility works. They will supervise these processes and guide your people or civil contractor(s) such that the project is delivered in a timely manner.

## After sales process/operation monitoring

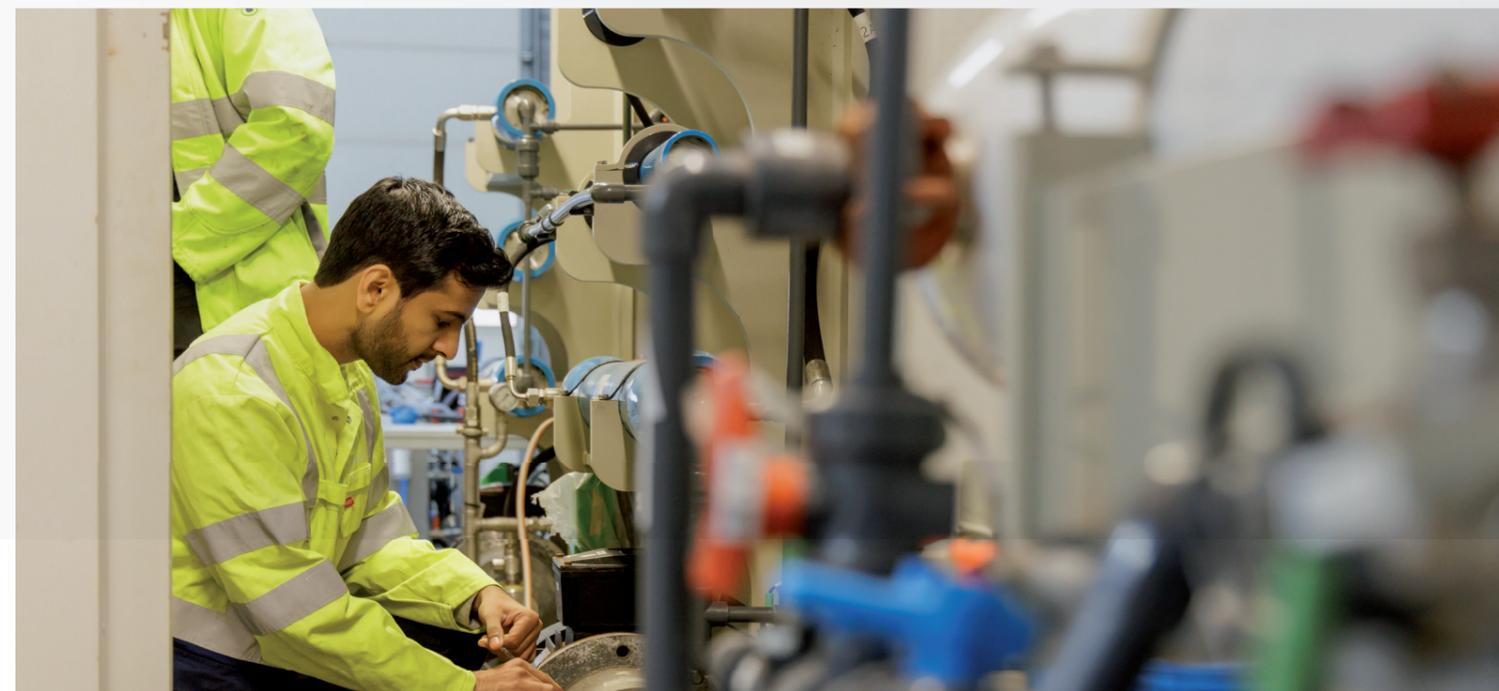
Using remote monitoring, Colubris can help you monitor and optimize the operation of your wastewater treatment plant. In this way we can help you make sure effluent performance remains well within set discharge limits, energy and chemical usage is optimized, and we can detect possible issues early making sure that your wastewater treatment plant performs as it should keeping your business going.

## After sales spare parts, maintenance, and repairs

Our installations are designed for >20 years of reliable operation. Proper operation, regular cleaning, and preventive maintenance help to keep the installation run smoothly. Of course, parts can wear out, break, or fail. Our service team can assist you in these cases with spare parts, remote advice, (preventive) maintenance and repair visits.

## Training/Academy

Colubris has its inhouse training center: the Colubris Academy. In the Colubris Academy we conduct our internal and external trainings and work on applied research in close collaboration with higher education and universities in the Netherlands and abroad. Colubris works with your operations team during installation, testing and commissioning. During this period, Colubris will provide training how to best operate your WWTP, how to interpret the dashboards, which adjustments to make (if not automated), in order to run the WWTP effectively and smoothly achieving good effluent quality or recovery results at the lowest operational cost.



**Colubris is your reliable partner for your waste and wastewater treatment and recovery needs.**

- Wide product range: from affordable end-of-pipe systems to advanced resource recovery solutions.
- Focus on the lowest treatment cost, not just the lowest upfront investment. Aiding your bottom line.
- Unique expertise in turning waste-water into valuable products, energy, reusable water.
- Proven track record globally in various industries with 4,000+ references over four decades.

Do you want to learn more about us, have a potential project, or need our advice, connect with us !

That is **COLUBRIS**

**Colubris**

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