

Fluence Corporation

Industrial Wastewater & Biogas Solutions

STATEMENT OF QUALIFICATION

We deliver cost-effective water, wastewater, and reuse solutions that protect the environment and provide reliable water supplies that exceed our customers' expectations.



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Industrial Wastewater Solutions



The Fluence Industrial Wastewater team has more than 30 years of experience in the design, construction, and operation of wastewater treatment and anaerobic treatment plants for clients across a wide range of industries including: dairy, meat processing, wine, brewery, refreshments, confectionary, and more.

Our waste-to-energy solutions empower customers to gain control of their energy and water resources, while unlocking access to higher tax incentives for negative carbon intensity scores, along with valuable IRA/ITC tax credits.

By integrating Fluence's on-site renewable energy solutions, customers can generate energy from wastewater, while slashing sludge production by up to 70%. Fluence technology also produces nutrient-rich digestate that is ideal for land application, all while dramatically reducing the operation's carbon footprint.



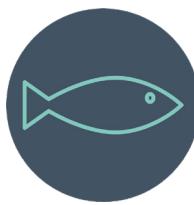
Common Industries Served



Dairy



Meat Processing



Fish Processing



Confectionary



Brewery



Refreshments



Pharmaceutical



Pulp & Paper



Distillery

Treatment Options



Water Treatment

- Ion exchange
- Sand filtration
- Activated carbon filtration
- Ultrafiltration
- Reverse osmosis
- Arsenic removal
- Biological filtration



Wastewater Treatment

- Primary treatments
- Dissolved air flotation
- Total nitrogen removal
- Digestate aerobic treatment
- MABR
- Industrial reuse tertiary treatment
- Shortcut nitrogen removal
- Wastewater aerobic and physical chemical treatment

Specialties



Anaerobic Digestion

- T-ARC solids digester
- AnDAF recuperative thickening
- EFC high-rate digester
- Chemical – biological desulphurization of biogas



Food and Beverage Processes

- Recovery of organic acids
- Bleaching/Discoloration
- Tartaric stabilization
- Demineralization
- Chromatography

Selection of Installations

From fruit processing, ice cream production, breweries, farms and slaughterhouse, to pharmaceutical companies and papermills, Fluence has a reputation for designing and delivering excellent solutions that optimize treatment based on an understanding of the customer's goals, a deep analysis of the specific wastewater characteristics, as well as years of experience with similar customers. We have over 45 anaerobic digestion projects around the world, totaling 23,206 kW of energy generated per day, averaging over 500 kW per day per plant. Here are a few examples of our projects. For references, please contact us.

Dolcissimo Milano



- **Client:** Dolcissimo Srl, Andros-Novandie Group
- **Industry:** Confectionary
- **Location:** Ossona (MI), Italy
- **Solution:** Anaerobic Digestion Plant
- **Technologies:** EFC anaerobic digester for soluble pollutants, CSTR digester for primary sludge
- **Capacity:** 600 m³/d
- **Energy produced:** 4800 kW/d

Dolcissimo, an Italian confectionery producer owned by Novandie, collaborated with Fluence to design an advanced wastewater treatment plant that efficiently handles high concentrations of soluble COD and fats, producing biogas while minimizing sludge. The solution involved a combination of technologies, including a flotator, a granular sludge rapid digester, and a CSTR digester, resulting in effective wastewater treatment with high purification yields and reduced sludge for disposal.

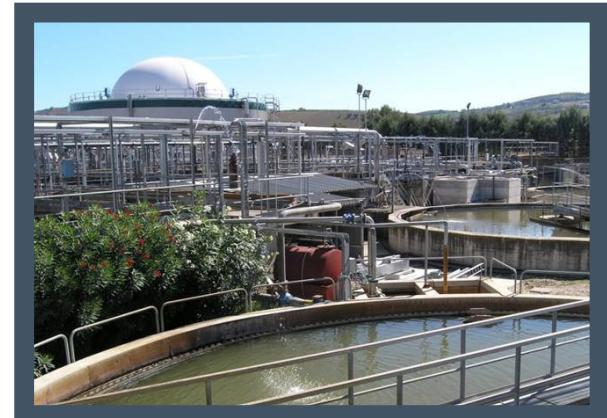
Birra Peroni Group



- **Client:** Birra Peroni Group
- **Industry:** Brewery
- **Location:** Italy
- **Solution:** Anaerobic Digestion Plant
- **Technologies:** EFC
- **Capacity:** 2500 m³/d
- **Energy produced:** 5280 kW/d

The Birra Peroni Group, part of SABMiller, needed to enhance its Bari facility's production capacity, but the existing 1996 wastewater treatment plant (WWTP) was outdated and inadequate. Fluence upgraded the WWTP by installing a new Expanded Granular Sludge Bed (EGSB) anaerobic reactor, which, alongside existing anaerobic digesters, produces thermal energy for the factory and includes aerobic treatment and final clarification to meet production demands without disrupting operations.

Amadori



- **Client:** Amadori
- **Industry:** Chicken Slaughterhouse
- **Location:** Teramo, Italy
- **Solution:** Aerobic Wastewater Treatment Plant and Anaerobic Digestion Plant
- **Technologies:** CSTR anaerobic digester, DAF, aerobic treatment of the digestate
- **Capacity:** 3,180 m³/d
- **Energy produced:** 15,000 kW/d

Amadori already had a wastewater treatment plant (WWTP) but needed to increase production while reducing disposal costs. The challenge was to build and activate the plant without disturbing the operation of the existing plant and slaughterhouse. Fluence restructured Amadori S.p.A's existing WWTP by adding anaerobic digestion and a Nitro-Denitro system to increase production and reduce disposal costs, while maintaining normal plant operations. The upgraded system processes poultry slaughterhouse wastewater and produces biogas for energy conversion.

Mater-Biotech



- **Client:** Mater-Biotech
- **Industry:** Biopolymers
- **Location:** Adria, Italy
- **Solution:** Well-Water Potabilization, Wastewater Treatment, Waste-to-Energy
- **Technologies:** Air Stripping, Sand Filtration, Double-Stage Nitrification-Denitrification, Membrane Bioreactor, CSTR Anaerobic Digester, Biogas Desulphurization
- **Capacity:** 2,100 m³/d
- **Energy produced:** 30,000 kW/d

To reduce environmental impact and disposal costs, Fluence added a waste-to-energy solution to Mater-Biotech's plant, incorporating innovative technologies to handle complex waste streams. Despite the complexity of characterizing these waste streams and a tight timeline, Fluence successfully developed three treatment trains, including a membrane bioreactor (MBR) and a continuous stirred tank reactor (CSTR) anaerobic digester.

Frigorífico Gorina



- **Client:** Frigorífico Gorina
- **Industry:** Cattle Slaughterhouse
- **Location:** Buenos Aires, Argentina
- **Solution:** Anerobic Digestion Plant
- **Technologies:** Wastewater treatment plant + Anaerobic digestion CSTR
- **Capacity:** 4,450 m³/d
- **Energy produced:** 36,000 kWh/d

Frigorífico Gorina S.A. is an Argentinian meat-packing plant in La Plata, Argentina, which produces and sells beef and by-products, primarily for international markets. In 2020, Gorina joined the RenovAr state incentives plan to support renewable energy development by building an anaerobic digestion plant for biogas production. The biogas will be used in a CHP to generate electricity for the grid. Fluence provided the wastewater treatment plant, and an anaerobic reactor fed by sludge and slaughterhouse by-products.

Services

- Preliminary Engineering Report (PER)
- Lab Analysis
- Pilot Testing
- Maintenance
- Remote Support
- Technical Assessment
- After Sales and Services



Financing

- Leasing options
- Packages to deliver water and wastewater treatment plants as a service, with Fluence assuming project risk and client paying a monthly fee
- Turnkey packages include financing, constructing and operating water assets under build-own-operate (BOO), build-operate-transfer (BOT), system leases, and reuse-as-a-service (RaaS)

Why choose waste-to-energy?

- ▶ On-site production of energy
- ▶ Production of high-quality, treated effluents
- ▶ Reduction of sludge volume by up to 90%
- ▶ Production of a high-quality digestate
- ▶ Reduction of greenhouse-gas emissions
- ▶ 100% reliability, and low operation and maintenance requirements

Team Experience



LEADERSHIP

Benjamin Fash

CEO and Managing Director

Ben Fash is the CEO and Managing Director of Fluence Corporation, bringing more than 20 years of water-industry and capital-markets experience. He combines deep operating expertise with a strong track record in M&A, financial management, capital raising, company building and strategic leadership. Mr. Fash joined Fluence in 2023 as CFO, where he played a key role in the company's strategic transition and turnaround. Prior to joining Fluence, he served as CFO of Dumas Mining and as EVP & CFO of Newterra, a global provider of modular water and wastewater treatment solutions. At Newterra, he partnered with private equity owners to double the size of the business through organic growth and M&A while dramatically increasing profitability and improving cash flow management, culminating in a successful exit in 2020.



LEADERSHIP

Richard Cisterna

Chief Growth Officer

As Chief Growth Officer at Fluence, Rick Cisterna leads strategies for revenue growth and market expansion in high-priority markets, focusing on market trends, competition, products, pricing, sales approach, and channel partnerships. He oversees Fluence's Global Water Services business unit, key account management, marketing, and rep and agent networks, while ensuring consistent reporting and incentives for the global sales team. Mr. Cisterna brings 30 years of leadership and business development experience in the water and wastewater sector, having directed more than US \$1 billion in projects across municipal, industrial, and commercial markets. Before joining Fluence, he was Founder and President of Renewable Organics Infrastructure, and served as Executive Vice President of Business Development at Natural Systems Utilities. He also spent nearly two decades at Hazen and Sawyer as a partner leading business development, strategic planning, and major project execution. Mr. Cisterna holds an M.S. in Environmental Engineering from Stanford University and a B.S. in Civil Engineering from the University of Nevada, Reno.



LEADERSHIP

Fabio Poletto

VP, Industrial Wastewater and Biogas

Fabio Poletto is the VP of Industrial Wastewater and Biogas division, and the GM of Fluence Italy BU. Fabio holds a Master's Degree in Chemistry and has over 18 years of global experience in water, wastewater & biogas business.

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Team Experience



BUSINESS DEVELOPMENT | NORTH AMERICA

Jason Bowman

Director, Industrial Wastewater & Biogas

Jason Bowman is the Director of Industrial Wastewater and Biogas, for Fluence North America. Jason holds a BS in Physics and has over 15 years of global experience in high-strength industrial wastewater solutions, research, and development. Jason specializes in biological wastewater treatment and was a former Level II operator.

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BUSINESS DEVELOPMENT | EUROPE

Alessandro Doma

Sales Manager, Industrial Water & Biogas

Alessandro is the sales manager of Fluence's Industrial Wastewater and Biogas division. Alessandro holds a master's degree in industrial chemistry and has over 23 years of global experience in the water, wastewater, and biogas business in multiple industrial sectors, including dairies, beverage and beer production, slaughterhouses, and paper mills.

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BUSINESS DEVELOPMENT | SOUTH AMERICA

Michele Ceccaroni

LatAm Sales Director, Industrial Wastewater & Biogas

Michele Ceccaroni is a Latin America Sales Director at Fluence Corporation where he specializes in wastewater and sludge treatment solutions for the food and beverage industry. He has experience providing solutions to leading food and beverage companies, including Arrebeef and Gorina, two of the largest cattle slaughterhouses in Argentina, BRF, one of the largest global food companies, and more. Prior to Fluence, Michele was a Proposal Engineer at Züblin Umwelttechnik. Michele holds a degree in Environmental Engineering from the University of Stuttgart.

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Team Experience



After Sales

Stefano Faggin

After Sales Manager

Stefano Faggin is the After Sales Manager of Fluence's Industrial Wastewater and Biogas division. He has over 30 years of experience in several sectors as an electronic and maintenance supervisor, and oversees the software development for control and automation, as well as the startup of the water and wastewater plants. Stefano holds a degree in Industrial Technology with a specialization in Electronics.



After Sales

Francesco Occhi

After Sales Technical Engineer

Francesco Occhi is the After Sales Technical Engineer for Fluence's Industrial Wastewater and Biogas division. He is responsible for laboratory analysis, pilot plant testing, and the after sales department, which includes assisting the operation of water and biogas treatment plants and monitoring the performance of the plants in order to mitigate any issues and develop new solutions. Francesco holds a bachelor's degree in environmental science and technology and has over nine years of experience in the water and wastewater business.



Engineering

Valentina Bernardini

Engineering Manager and SOA Technical

Valentina Bernanrdini is the Engineering Manager and SOA Technical Director for Fluence's Industrial Wastewater and Biogas division. Valentina holds a bachelor's degree in environmental civil engineering and a degree in Engineering for the Environment, with a specialization in Soil Defense. She has over 16 years of experience as a project manager in the water and wastewater sector for water treatment plants and biogas, with expertise in safety management systems.

Team Experience



Engineering

Paolo Farnese

Operations Manager

Paolo Farnese is the Operations Manager for Fluence's Industrial Wastewater and Biogas division. In his role, he is responsible for project management, the mechanical, electric, and automation technical office, and construction. Paolo holds a bachelor's degree in civil engineering and has a specialization project management. Paolo has more than 15 years of project management experience mainly for South American projects including contracts, construction sites, strategic projects, and customer management across several environmental sectors.



Engineering

Andrea Baccini

Process Engineer

Andrea Baccini is a Process Engineer for Fluence's Industrial Wastewater and Biogas division. He has extensive experience in process and automation design and commissioning of wastewater treatment and biogas plants, following Fluence's main projects in Europe, North and South America. Andrea has experience in the startup of aerobic and anaerobic treatment plants, ultrafiltration, reverse osmosis, ion exchange, GAC, and sand filters. Andrea holds a bachelor's degree in chemical and process engineering and has been working for Fluence for the past eight years as a process engineer.

About Fluence

Fluence is a leader in the wastewater treatment and reuse, high-strength wastewater treatment, wastewater-to-energy, industrial, and drinking water markets, offering custom solutions as well as pre-engineered packaged plants and units, retrofits, greenfield plants, and shortcut nitrogen removal. A number of solutions feature Fluence's proprietary MABR technology, which offers high nutrient removal with a small footprint and low energy consumption. In addition to rapid delivery and commissioning of solutions to meet a broad range of needs from smaller communities to city-scale systems, Fluence offers ongoing operation and maintenance support, Build Own Operate (BOO), and other recurring revenue solutions. Fluence is headquartered in Minneapolis, USA, and has a broad international footprint with experience in more than 70 countries worldwide.

Offices:

Jundiaí, São Paulo, Brazil
Shanghai, China
Caesarea, Israel
Karmiel, Israel
Padova, Italy
Buenos Aires, Argentina
Dubai, UAE
Victoria, Australia
Beijing, China
Jiangsu, China
Cairo, Egypt
Singapore
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