



SYSTEMS PRODUCT GUIDE

2023 - 2024



ECA Solution Generators

Introduction

CENTREGO ECA SYSTEMS

Centrego design, develop and manufacture ElectroChemical Activation (ECA) systems in the UK that generate disinfection and cleaning solutions from ordinary potable water and small amounts of salt. The systems, designed for in-situ use, have the benefits of ultra-low carbon emission footprints when compared with purchased synthetic chemicals, low operational costs, and improved health and safety for users and environments.

Solutions generated by Centrego's ECA systems include

- > Hypochlorous acid (HOCl) – a powerful but safe pH-neutral biocide with very rapid contact times and high efficacy
- > Mixed oxidant solution (MOS) – active substances of sodium hypochlorite (NaOCl) and hypochlorous acid a combined biocide and cleaning agent at pH8.2 – pH8.5
- > Sodium hydroxide (NaOH) – a cleaning agent and surfactant at pH13 – pH14

DECIDING WHICH SYSTEM IS OPTIMUM FOR YOUR BUSINESS

The first steps in choosing the optimum device for your organisation is establishing what applications are required, what solutions would deliver the efficacy and cleaning performance required, and deciding how much solution is needed on a daily, weekly, monthly basis.

Decisions should also take into account corporate initiatives to reduce carbon emission footprints and environmental impacts, Return on Investment and payback periods, and considerations of the health and safety of users, staff and the public.

Centrego and its partners are experts in assisting businesses to identify the best ECA system for the requirements, specifying the solution delivery mechanisms, providing installation, training and aftersales support, and quantifying the environmental and cost benefits of adopting the systems.

Centrego manufactures a comprehensive range ECA systems which meet the demands of multiple public and commercial sectors. In addition, we develop bespoke systems for specific applications and invest heavily in R&D to continue to expand the use of ECA technology.

CERTIFICATION AND APPROVALS

Centrego systems carry the appropriate biocides and safety regulatory listings and certifications in multiple countries. The solutions generated are tested by independent accredited laboratories to EN standards for efficacy performance on multiple microorganisms.

SYSTEM CATEGORISATION AND APPLICATION

SMALL DEVICES

e-Spray

- > Domestic
- > Home

Centrego Renew

- > Small offices
- > Small pubs and bars
- > Retail outlet
- > Studio
- > Bakeries
- > Coffee shops
- > Local shops
- > Dance yoga studios
- > Art galleries
- > Small schools and nurseries
- > Florists
- > Vehicles
- > Pet services

FLOW SYSTEMS

Flow-40, Flow-40 Plus, Flow-120

- > Larger office facilities
- > Cruise ships
- > Warehouses, sorting and fulfilment centres
- > Research centres
- > Schools and universities
- > Multiple-use facilities
- > Food processing
- > Supermarkets

Flow-200, Flow-400, Flow-600

- > Large multi-site, multi-use facilities
- > Schools and universities
- > Cruise ships
- > Food processing
- > Cleaning-in-place (CIP)
- > Laundry
- > Agriculture
- > Aquaculture
- > Horticulture
- > Water treatment
- > offshore platforms facilities

Flow-1000, Flow 1,200

- > Industrial process water
- > Cruise ships
- > Food processing
- > Cleaning-in-place (CIP)
- > Agriculture
- > Aquaculture
- > Horticulture
- > Water treatment

MEDIUM SYSTEMS

Toucan Active, Active Plus & Active Plus Auto

- > Medium-sized offices
- > Medium-sized retail spaces
- > Restaurants
- > Large pubs and bars
- > Small to medium-sized factories
- > Workplaces
- > Merchant ships
- > Small food processing and preparation facilities
- > Schools and nurseries

5K SYSTEMS

5K20, 5K40, 5K120, 5K200

- > Industrial process water
- > Water treatment
- > Cruise ships – water treatment and laundry
- > Merchant ships – hold cleaning for 'black cargo', agricultural products and fertiliser
- > Wastewater treatment
- > Fisheries – fishing and shell-fishing trawlers Fish and shell-fish processing
- > Aquaculture – hatcheries and growing farms
- > Agriculture – dairy, pig, poultry
- > Cleaning-in-place (CIP) – food processing, beverage production, yeast production
- > Offshore platforms facilities

CATHOLYTE SYSTEMS

NaOH-20, NaOH-155, NaOH-1000

- > Cleaning-in-place (CIP) – food processing, beverage production, yeast production
- > Aquaculture – pH balancing in fish-tank water
- > Water treatment – pH balancing

SMALL SYSTEMS

TOUCAN ECO E-SPRAY

Capacity: 350ml
 Active substances: mixed oxidant solution of hypochlorous acid (HOCl) and sodium hypochlorite (NaOCl)
 Concentration: 125-250ppm pH7.5-pH8.5
 Activation cycle: 5 minutes
 Salt consumption: 4g/l
 Power rating: 10W 5V 2A via USB port
 Stand-alone/desk-top
 Dimensions: H280mm x W90mm x D90mm
 Suitable for domestic use for general cleaning and disinfection applications



CENTREGO RENEW

Capacity: 2ls mixed oxidant solution
 Active substances: hypochlorous acid (HOCl) and sodium hypochlorite (NaOCl)
 Concentration: 125-250ppm pH7.5-pH8.5
 Activation cycle: 4 or 8 minutes
 Salt consumption: 4g/l
 Power rating: 33W
 Stand-alone/desk-top
 Dimensions: H320mm x W200mm x D230mm
 Suitable for small to medium-sized commercial facilities for general cleaning and disinfection applications



TOUCAN ECO BIO CARRY

Active substances: hypochlorous acid (HOCl) and sodium hypochlorite (NaOCl) Up to 10ls capacity
 Capacity up to 10ls
 Concentration: up to 250ppm
 Salt consumption: 1-2gm/l
 Power ratings: 240V mains or 12V solar-powered battery
 Dimensions: H350mm x W450mm x D120mm
 Portable Field unit for remote locations or emergency response and disaster relief generation of mixed oxidant solutions



MEDIUM SYSTEMS

TOUCAN ECO ACTIVE

Capacity: 10ls mixed oxidant solution
 Active substances: hypochlorous acid (HOCl) and sodium hypochlorite (NaOCl)
 Concentration: 100-200ppm
 pH7.5 – pH8.5
 Activation cycle: 20 minutes
 Salt consumption: 1-2g/l
 Power rating: 100W
 Dispensing via discharge tap
 Dimensions: H550mm x W550mm x D160mm
 Suitable for medium-sized commercial applications



TOUCAN ECO ACTIVE PLUS

Capacity: 5ls mixed oxidant solution
 Active substances: hypochlorous acid (HOCl) and sodium hypochlorite (NaOCl)
 Concentration: 350-600ppm
 pH7.5 – pH8.5
 Activation cycle: 40 minutes
 Salt consumption: 2-4g/l
 Power rating: 100W
 Dispensing via spray bottle and bucket/container fillers
 Point-of-use solution dispensing: 17ls @120ppm, 34ls @60ppm
 Dimensions: H550mm x W600mm x D160mm



TOUCAN ECO ACTIVE PLUS AUTO

Capacity: 5ls mixed oxidant solution
 Active substances: hypochlorous acid (HOCl) and sodium hypochlorite (NaOCl)
 Concentration: 350-600ppm
 pH7.5-pH8.5
 Activation cycle: up to 40 minutes
 Salt consumption: 2-4g/l
 Power rating: 600W
 Dispensing via spray bottle and bucket/container nozzle
 Point-of-use solution dispensing: 17ls @120ppm, 34ls @60ppm
 Dimensions: H650mm x W480mm x 250mmD



FLOW SYSTEMS

CENTREGO FLOW 40 - 120, 200, 400, 600, 1000 AND 1,200

Membrane cell system
 Active substances: Hypochlorous acid (HOCl) from the anode and sodium hydroxide (NaOH) from the cathode
 Outputs options: 40ls/hr, 120ls/hr, 200ls/hr, 400ls/hr, 600ls/hr, 1000ls/hr and 1,200ls/hr
 Concentrations: 500ppm HOCl pH 7.2, NaOH pH10.5
 Power ratings: 1.1kW-8kW
 Salt consumption: 2gm/l
 Full telemetry is available for remote monitoring, recording and control
 Range of ancillary equipment for solution storage, dispensing and dosing
 Dimensions: (Flow-40 and 120) H740mm x W550 x D330mm
 Dimensions for Flow 200 upwards on request, dependant on specification
 Suitable for large facilities, cruise ships and industrial process water



CENTREGO FLOW SERIES - WITH ANCILLARY EQUIPMENT

Membrane cell system
 Active substances: hypochlorous acid (HOCl) from the anode and sodium hydroxide (NaOH) from the cathode
 Outputs options: 40ls/hr
 Concentrations: 500ppm HOCl pH 7.2, NaOH pH10.5
 Power ratings: 1.1kW
 Salt consumption: 2gm/l
 Full telemetry is available for remote monitoring, recording and control.
 Suitable for large facilities, cruise ships and industrial processes.
 Range of ancillary equipment for water softening, solution storage, dispensing and dosing
 Dimensions for Flow series dependant on specification



CENTREGO FLOW 40 AND FLOW 120 PLUS

Membrane cell system
 Fully integrated system with water softener, holding tanks and dispensers mounted on 316-grade stainless steel frame.
 Active substances: hypochlorous acid (HOCl) from the anode and sodium hydroxide (NaOH) from the cathode
 Outputs options: Flow-40 Plus @ 40ls/hr, Flow-120 Plus @ 120ls/hr
 Concentrations: 500ppm HOCl pH 6.5-7.2
 Power rating: 1.1kW-1.8kW
 Salt consumption: 2gm/l
 Full telemetry is available for remote monitoring, recording and control
 Suitable for large facilities, cruise ships and industrial processes
 Range of ancillary equipment for solution storage, dispensing and dosing
 All-in-one integrated solution for ECA production
 Dimensions : H1840mm x W660 x D490mm



5K SYSTEMS

CENTREGO 5K20 5K40 & 5K120

Non-membrane cell system with inputs of either water + brine, sea water, or a combination
 Fully integrated system with water softener, holding tanks and dispensers, mounted on a 316-grade stainless steel frame
 Mixed oxidant solution
 Active substances: hypochlorous acid (HOCl) and sodium hypochlorite
 Outputs: 5K20 20ls/hr, 5K40 40ls/hr and 5K120 120ls/hr
 Concentrations: 5000ppm mixed oxidants
 pH8.2-pH8.5
 Power rating: 1.5kW-6kW
 Salt consumption: 20gm/l
 Full telemetry is available for remote monitoring, recording and control
 Dimensions : H1740mm x W860 x 530mmD
 Suitable for industrial process water, water treatment and CIP



CENTREGO 5K200 & 5K400

Non-membrane cell system with inputs of either water + brine, seawater, or a combination
 Fully integrated system with water softener, mounted on a 316-grade stainless steel frame
 Mixed oxidant solution
 Active substances: hypochlorous acid (HOCl) and sodium hypochlorite
 Outputs: 5K200 200ls/hr, 5K400 400ls/hr
 Concentrations: 5000ppm (adjustable) mixed oxidants pH8.2-pH8.5
 Power rating: 8kW-16kW
 Salt consumption: 20gm/l
 Full telemetry is available for remote monitoring, recording and control
 Dimensions : 800mmH x W1000 x D780mm
 Suitable for industrial process water, water treatment and CIP
 Suitable for marine applications using seawater



CATHOLYTE SYSTEMS

CENTREGO NAOH FLOW-20 GENERATOR

Membrane cell system with inputs of water + brine
 Active substance: sodium hydroxide and hypochlorous acid
 Outputs: Flow-20 20ls/hr NaOH, 0.1ls/hr HOCl
 Concentration: 3000ppm catholyte (NaOH) at pH13.0-pH13.5
 Concentration: 3000ppm HOCl at pH2.5-pH3.0
 Power rating: 1.8kW
 Salt consumption: 4gms salt per 1g NaOH
 Full telemetry is available for remote monitoring, recording and control
 Dimensions : H740mm x W550 x D330mm
 Suitable for industrial process wash-water, water pH balancing and CIP

CENTREGO NAOH FLOW-20 PLUS GENERATOR

Fully integrated system with water softener, holding tanks and dispensers mounted on a 316-grade stainless steel frame.
 Membrane cell system with inputs of water + brine
 Active substance: sodium hydroxide and hypochlorous acid
 Outputs: Flow-20 20ls/hr NaOH, 1ls/hr HOCl
 Concentration: 3000ppm catholyte (NaOH) at pH13.0-pH13.5
 Concentration: 3000ppm HOCl at pH2.5-pH3.0
 Power rating: 11.8kW
 Salt consumption: 4g salt per 1g NaOH
 Full telemetry is available for remote monitoring, recording and control
 Dimensions : H1840mm x W660 x D490mm
 Suitable for industrial process wash-water, water pH balancing and CIP



CATHOLYTE SYSTEMS

CENTREGO NAOH FLOW-155 GENERATOR

Membrane cell system with inputs of water + brine
 Active substance: sodium hydroxide and hypochlorous acid
 Outputs: Flow-155 155ls/hr NaOH, 1ls/hr HOCl
 Concentrations: 3000ppm catholyte (NaOH) at pH13.0-pH13.5
 Concentration: 3000ppm HOCl at pH2.5-pH3.0
 Power rating: 7kW
 Salt consumption: 4g salt per 1g NaOH
 Full telemetry is available for remote monitoring, recording and control
 Suitable for industrial process wash-water, water pH balancing and CIP
 Dimensions : H2000mm x W665 x D400mm



CENTREGO NAOH FLOW-1000 GENERATOR

Membrane cell system with inputs of water + brine
 Active substance: sodium hydroxide and hypochlorous acid
 Outputs: 1000ls/hr NaOH, 5ls/hr HOCl
 Concentrations: 3000ppm catholyte (NaOH) at pH13.0-pH13.5
 Concentration: 3000ppm HOCl at pH2.5-pH3.0
 Power rating: 380 VAC/3-Phase.
 Total power usage: 12V, 3600A. 43kW
 Salt consumption: 4g salt per 1g NaOH
 Full telemetry is available for remote monitoring, recording and control
 Dimensions : H2000mm x W2250mm x D400mm
 Suitable for industrial process wash-water, water pH balancing and CIP

NaOH flow 1000 generators are available in modular form adding 155 or 310 ls/hr capacity for each additional module.

Dimensions and overall design may vary dependant on applications.





SCAN FOR WEBSITE



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