

designed to work perfectly



Create something new



Electrosynthesis shortens processes, saves energy and reduces environmental impact. With ElectraSyn flow, IKA offers a smart system for continuous flow electrosynthesis in research and development and for production of smaller quantities.

Come and visit our application laboratory at the company headquarters in Staufen. Our experts will be happy to run customized electrosynthesis tests with you.

ElectraSyn flow

ElectraSyn flow basic is a system for continuous flow electrosynthesis. The heart of this system is the electrosynthesis flow cell – in short, the flow cell – ElectraSyn flow. It consists of two half cells, each equipped with an electrode. By combining similar and dissimilar half cells/electrodes, ElectraSyn flow provides maximum flexibility for research in the field of electrosynthesis. It also enables the laboratory scale production of a variety of products using electrosynthesis.

FEATURES OF THE ELECTRASYN FLOW BASIC:

- > Complete system
- > Combinable half cells
- > Product recirculation capability
- > Optional cell splitting by ions permeable membrane
- > Electrosynthesis current steplessly adjustable
- > Compact modular system, ideal for R&D





SCOPE OF DELIVERY

- 1 | Flow cell
- 2 | Half cells with accessories
- 3 | Storage case for small components
- 4 | Power supply adapter with cords
- 5 | Stand with cell holder and boss head clamp
- 6 | Hose pump with tubing

ElectraSyn flow basic (complete system)

Ident. No. 0020014266

ElectraSyn flow eco (without hose pump)

Ident. No. 0020014267

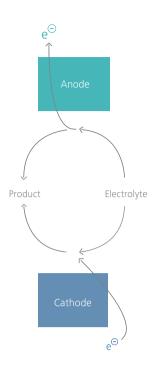
TECHNICAL DATA

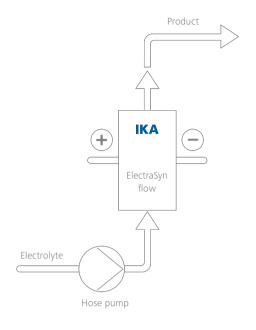
CONTINUOUSLY ADJUSTABLE POWER SUPPLY

Voltage	$0 - 35 \text{ V } (\pm 6 \text{ mV})$
Current	0 – 1 A (± 50 μA)
Mains voltage	100, 115 or 230 V (50/60 Hz)

HOSE PUMP

Flow rate per tube	0,004 – 14 ml/min
Overall flow rate	0,008 – 28 ml/min.
Inner tubing diameter	0,8 mm
Mains voltage	90 V – 260 V (50 Hz / 60 Hz)





SET UP

ElectraSyn flow basic contains three flow cells with electrodes made of graphite, glassy/vitreous carbon and nickel. There are additional combinations possible: three half cells with copper, lead and lead-bronze (15 % Pb) electrodes are also available. The flow and half cells along with all required tubings and power cords can be stored using the convenient carrying and storage case. In addition to the hose pump, the scope of delivery includes a stand, as well as a power supply adapter.

HOW IT WORKS

The hose pump transports the electrolyte through two flexible tubes to the flow cell. This is where the process of electrosynthesis takes place. Depending on the setup, the modular layout allows the operation of the flow electrolyser as either undivided or divided electrosynthesis cell. The even current running through the very narrowly arranged electrodes leads to ideal oxidation and reduction of substrates in the electrolyte - precisely according to the settings of the user.

Industries Research, Chemistry, Pharmaceuticals, Agrochemistry











Janke & Kunkel-Straße 10, 79219 Staufen, Germany Phone: +49 7633 831-0, Fax: +49 7633 831-907

eMail: process@ika.de







