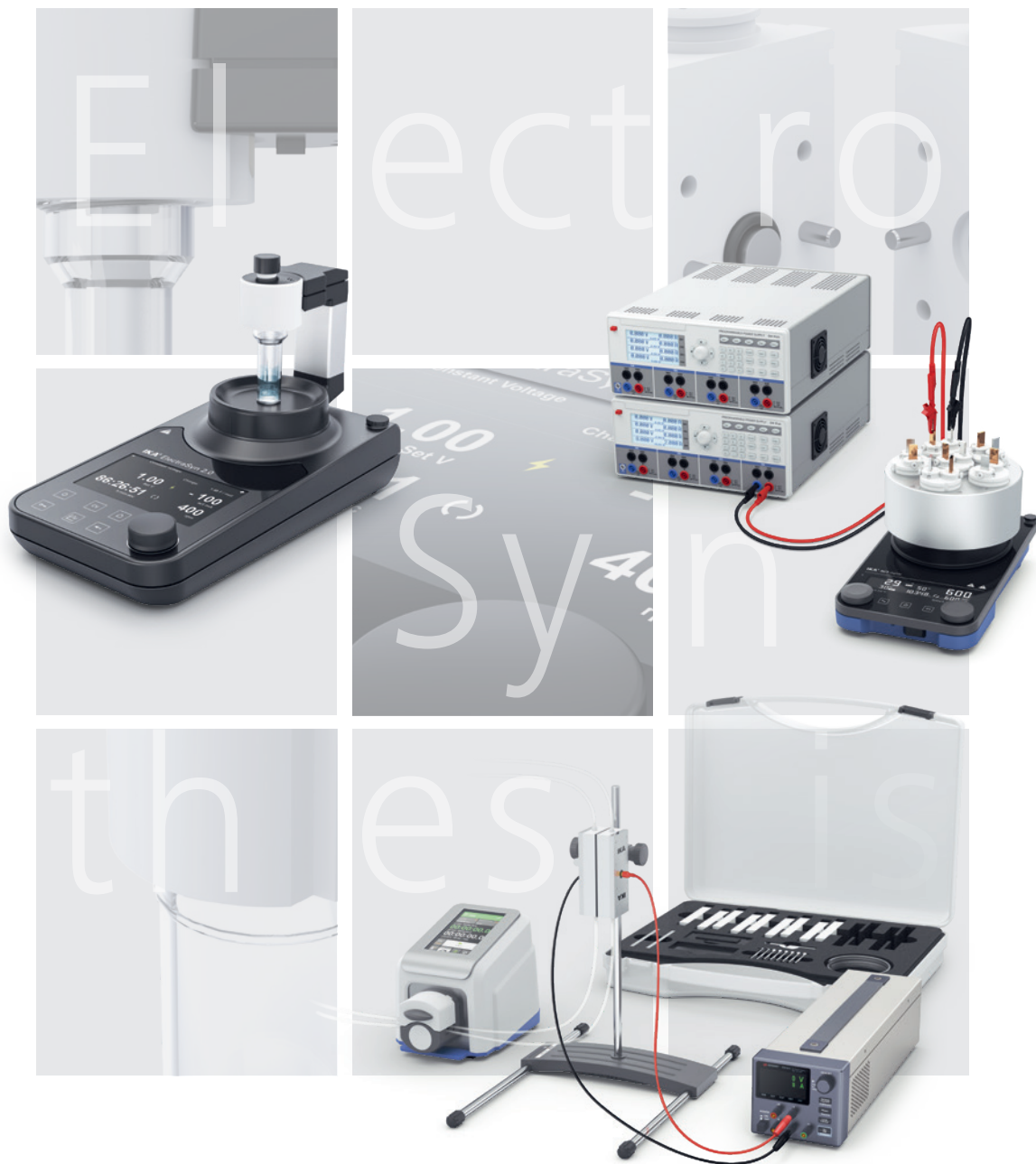




designed to work perfectly

EN



IKA ELECTROSYNTHESIS PORTFOLIO



ElectraSyn 2.0

The ElectraSyn 2.0 complete variable system enables the development of new electrochemical reactions or transformations on the laboratory scale.

Precise batch electroynthesis for users with or without previous experience:

- > Ideal test conditions thanks to Smart Assist
- > For use as a potentiostat / galvanostat
- > Analysis of samples via cyclic voltammetry
- > Digital recording of tests
- > Best reproducibility
- > Large selection of electrodes
- > Sustainable, cost-effective synthesis paths
- > Maximum process security
- > Mixing with the magnetic stirrer function
- > Control via Labworldsoft 6.0
- > Regular enhancement via software updates
- > A variety of accessories available



IKA Carousel complete
Ident. No.0040005427



IKA e-Hive
Ident. No.0040004945

ElectraSyn 2.0 Package
Ident. No. 0020008980

ElectraSyn 2.0 pro Package
Ident. No. 0040003261

ElectraSyn 2.0 pro starter Package
Ident. No. 0010003390

Create Something New



Electrosynthesis shortens processes, saves energy and reduces environmental impact. For batch equipment, screening systems or continuous flow cells with enhancement options - IKA offers complete smart systems for research and development and for production.

Please come and visit our application laboratory or the Technical Center at our company headquarters in Staufen. Our experts here will be happy to run customized electrosynthesis tests with you.

What do you want to achieve? You can find the solution here.

Technical System Overview

| Technical data | ElectraSyn 2.0 | IKA Screening System | ElectraSyn flow basic |
|---|--------------------------------|--|-------------------------------------|
| CONTINUOUSLY ADJUSTABLE POWER SUPPLY | | | |
| Voltage output | 0 – 30 V (± 10 mV) | 0 – 32 V (± 1 mV) | 0 – 35 V (± 6 mV) |
| Power output | 0 – 0,1 A (± 0,1 mA) | 0 – 10 A < 1 A (± 0,2 mA) ≥ 1 A (± 1 mA) | 0 – 1 A (± 0,05 mA) |
| Supply voltage | 100 – 240 V (50 Hz / 60 Hz) | 115 V / 230 V (50 Hz / 60 Hz) | 100, 115 / 230 V (50 Hz / 60 Hz) |
| INTERFACES | USB, WIFI, Bluetooth | USB, RS 232 | USB and LAN |
| OPERATING MODE | | | |
| Cyclic voltammetry | Yes | No | No |
| Constant voltage | Yes | Yes | No |
| Constant current | Yes | Yes | Yes |
| MAGNETIC STIRRER | | | |
| Speed | 0 – 1 500 rpm | 0 – 1 500 rpm | – |
| REACTION CELLS | | | |
| Volume | 1 – 20 ml | 3 – 16 ml | 0,6 ml – 3,6 ml |
| Material | Glass | PTFE | PTFE |
| Divided cells | Yes | Yes (6 System) | Yes |
| Divided cells | Yes | Yes (RT to 100 °C) | No |
| HOSE PUMP | | | |
| Volume flow per hose | – | – | 0,004 – 14 ml/min |
| Total volume flow | – | – | 0,008 – 28 ml/min |
| Hose diameter | – | – | 0,8 mm |
| Supply voltage | – | – | 90 V – 260 V (50 Hz / 60 Hz) |



IKA Screening System

The IKA Screening System is perfectly suited to galvanostatic electro-synthesis in “multibatch” mode. The combination of both divided and undivided batch cells enables you to carry out research on multiple probes at the same time. In addition, you can combine the system with other equipment in the laboratory

Parallel batch electro-synthesis using parameters predefined by you:

- > Up to 8 undivided or 6 divided cells simultaneously
- > Synthesize sufficient quantities for GC, LC or NMR analysis processes
- > Separate control for each cell
- > Easy testing of identical or differing samples
- > Fast identification of ideal process parameters
- > Digital recording of test parameters
- > Simultaneous mixing and heating
- > Full temperature control (PT 1000) using heat block
- > Control and automation via Labworldsoft 6.0
- > Time and resources savings



Screening System Package
(6 divided cells)
Ident. No. 0040003631

Screening System Package
(8 undivided cells)
Ident. No. 0040003642



ElectraSyn flow

ElectraSyn flow enables you to carry out continuous electro-synthesis based on the flow-through principle. The electro-synthesis flow cell can be used either individually or in combination, to research or produce very small quantities.



Ideal process parameters for the production scale with ElectraSyn flow:

- > Modular, compact complete system
- > Galvanostatic operating method
- > Continuous operation
- > Nine half cells that can be combined as required
- > Optional cell division via ion-permeable membrane
- > Adjustable electrode separation
- > Adjustable educt flow speed
- > Continuous adjustment of the electro-synthesis flow
- > Height-adjustable cell mounting
- > Practical component system in the carry case
- > Can be recirculated
- > Numbering-up easily possible
- > Upscaling to larger cell systems easily possible
- > Easy identification of ideal process parameters
- > Easy adjustment of parameters for research purposes
- > Control, automation and recording via Labworldsoft 6.0

Overview of Electrodes

| Electrode material | ElectraSyn 2.0 | IKA Screening System | ElectraSyn flow |
|------------------------------|----------------|----------------------|-----------------|
| Graphite | ✓ | ✓ | ✓ |
| Vitreous carbon | ✓ | ✓ | ✓ |
| Nickel | ✓ | ✓ | ✓ |
| Copper | ✓ | ✓ | ✓ |
| Lead | ✓ | ✓ | ✓ |
| Lead bronze | ✓ | ✓ | ✓ |
| Gold | ✓ | ✓ | ✓ |
| Platinum (plated) | ✓ | ✓ | ✓ |
| BDD (boron-doped diamond) | ✓ | ✓ | ✓ |
| Stainless steel | ✓ | ✓ | ✓ |
| Titanium | ✓ | ✓ | ✓ |
| Zinc | ✓ | ✓ | - |
| Tungsten | ✓ | ✓ | - |
| Niobium | ✓ | ✓ | - |
| Silver | ✓ | ✓ | - |
| Aluminum | ✓ | ✓ | - |
| Magnesium | ✓ | ✓ | - |
| Tin | ✓ | ✓ | - |
| Cobalt | ✓ | ✓ | - |
| Nickel foam | ✓ | ✓ | ✓ |
| RVC | ✓ | ✓ | ✓ |
| Ag/AgCl reference electrode | ✓ | - | - |

Industries Research, Chemicals, Pharmaceuticals, Agrochemistry



IKA-Werke GmbH & Co.KG

Janke & Kunkel-Straße 10, 79219 Staufen, Germany

Tel: +49 7633 831-0

Fax: +49 7633 831-98 // +49 7633 831-907

eMail: sales@ika.de // process@ika.de

www.ika.com // www.ikaprocess.com



www.ika.com

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