

# LAB ESSENTIALS FOR PHARMACEUTICAL INDUSTRY



- > Dissolving powders, facilitating chemical reactions and ensuring uniform heat transfer with a real-time temperature monitoring function
- > Range of impeller designs to support different mixing applications



- > Measure viscosity changes in pharmaceutical formulations for vaccines, ointments and suspensions
- > Quality control of liquid pharmaceutical products after formulation and production



- > Moisture removal from granules, wet powders or herbs prior to extraction and production
- > Heat sterilisation to remove microorganisms from raw materials and glassware



#### Tube Mill 100 control

- > Grind dry samples such as active pharmaceutical ingredients (APIs), bulk pharmaceuticals and excipients to optimise drug delivery and performance
- > Gamma-sterilised disposable grinding chambers available



- > High-shear homogenisation and/or emulsification of liquid pharmaceuticals products (suitable for cleanroom use)
- > Safety temperature setting to prevent degradation of temperature-sensitive APIs during the process



- > Programmable cooling rate for crystallisation
- > Support organ baths with a temperature stability of +/- 0.01 °C

## ElectraSyn 2.0: Modern breakthrough in drug synthesis

### /// Electrochemistry for synthetic chemists

#### GERMAN TECHNOLOGY. AMERICAN DESIGN.

- > 3-in-1: potentiostat, analytical device and a stir plate
- > Automated data logging and data transfer with the ElectraSyn app
- > Compatibility with new accessories with a simple software update

PATENTED LIFE-TIME WARRANTY



### **MODULARITY WITH ACCESSORIES**



#### E-Hive

- > High throughput screening platform
- > Drug screening and early stage drug discovery



#### GOGO Module

> Run reactions under external reaction conditions



#### Carousel

> 6 concurrent reactions> Easy scale up



#### Pro-Divide

> For divided cell reactions

## A complete system for your pharmaceutical formulation

/// Heating, cooling, mixing, dispersing, vacuum control, real-time pH, temperature and torque trend measurement in a closed vessel



#### Benefits of using IKA LR 1000 Lab Reactor system for pharmaceutical formulations

- Mixing to ensure mixture is uniform and homogenous (support up to 150,000mPa.s)
- Incorporating with high-shear disperser to form stable emulsion/suspension
- > Heating and cooling function
- > Strong vacuum for defoaming even while mixing

- > Real-time pH measurement
- > Torque trend measurement to indicate viscosity changes
- › Optional documentation and control via labworldsoft software
- > Ensuring reproducibility and repeatability
- > Easier scale-up with clearly defined parameters

#### **EXAMPLES OF APPLICATIONS IN PHARMACEUTICAL**

Ointments, gels, eyes drops, eyes ointment, cough mixtures, sugar/salt solutions, suppository masses, coatings, antiseptics, lipid emulsions