# **GALVANIC POWER SOURCES**

#### FOR DIAMOND AND CBN TOOLS





Kirchner Galvanik GmbH specializes in electroplating power sources and software for electroplating and electrochemical processes.

We are your competent partner for all questions relating to electroplating power sources, process control and process monitoring.

Our devices and the associated software have been in use worldwide for over 20 years. Wherever high-precision parts, safety-critical components and complex assemblies are manufactured, our devices and our service are the first choice for you. Our portfolio includes

- Galvanic power sources
- Multi-channel power sources
- Production software



# Our services for your production

#### **GALVANIC POWER SOURCES**

Kirchner current sources offer functions that have been explicitly adapted to the requirements of galvanic processes. Extremely small ripple and exact constant current even with long process times.

#### PROCESS CONTROL

Our power sources are adapted to the production of electroplated CBN & diamond tools. We offer customized solutions for:

- Dressing rollers
- Positv tools
- Negative tools

#### PRODUCTION SOFTWARE

Process data acquisition, batch tracing and production planning for complex and safety-critical components



# **CONSTANT CURRENT SOURCES**

### **KSQ12XX-SERIES**



# Power supplies Voltage sources

Our current constants have been specially designed to meet the requirements for the production of electroplated dressing tools.

Our rectifiers offer functions as standard that support you in the production of superabrasive tools.

- High-precision current control accurate to  $0.5\%\,$
- Integrated ampere-hour counter ( Ah counter)
- Time-controlled current output
- Holding potential after time lapse
- Precise control of even small currents
- Warning message in the event of a short circuit or cable break
- Galvanically isolated analog interfaces
- RS232 interface
- PC control software
- Programmable voltage curves

# Kirchner KSQ power sources Performance data

#### KSQ1204

- 4 channel device
- 4 \* 0-400mA / 0-12V

#### KSQ1210

- 4 channel device
- 4 \* 0-2500mA / 0-7.5V

#### KSQ1216

- 4 channel device
- 4 \* 0-4000mA / 0-7.5V

#### KSQ1224

- 4 channel device
- 4 \* 0-6000mA / 0-7.5V

#### KSQ1225

- 1 channel device
- 1 \* 0- 25000mA / 0-10V

#### KSQ1250

- 1 channel device
- 1 \* 0- 50000mA / 0-10V

#### KSQ3025

- 1 channel device
- 1 \* 0- 25000mA / 0-30V



# **KSQ2180 COMPACT POWER SOURCE**

#### CONTINUOUS OPERATION ~ SAFETY ~ PRECISION



Ultra-compact programmable power source for grinding tools

The Kirchner KSQ2810 offers a wide range of functions such as

- Precise current & voltage regulation
- AH counter
- Line break warning
- Timer with automatic switch-off

It also has pre-programmed settings for current and time, automatic protection potentials after the end of coating and an ultra-compact console housing with touchscreen.

Unique KSQproduction software to create your flow programs and record process data for your production.

The KSQ2180 is the tool for the production of electroplated high-performance tools.

# Designed for electrochemical processes

Our latest power source for electroplating processes. This power source is the result of 20 years of experience in electroplating, electronics and software development. This power source is designed for use in an industrial environment.

#### BASIC DATA: 0-8A / 0-7.5V

Let the compact dimensions of this power source convince you. The KSQ2180 sets new standards in terms of:

- Security,
- Usability and
- Precision.

The KSQ2180 power source can be combined with our KSQproduction software. All the features of our KSQ12xx power sources are available to you in the ultra-compact housing directly at the coating bath.



# SOFTWARE FOR ELECTROPLATING AND ELECTROCHEMISTRY

**ERP SOLUTION KSQPRODUCTION** 



# Software for galvanic and electrochemical processes

The KSQproduction software offered for our power sources is designed for the production of galvanic/electrochemical products.

The KSQproduction software expands the range of functions of your Kirchner KSQ power sources and enables:

- Batch tracking
- Process data acquisition and
- Production order management.

The KSQproduction software enables complex current programs with ramps and steps and also includes adapted modules for the efficient machining of negative/positive electroplated grinding tools.

## Functions of the KSQproduction software

The KSQproduction software enables the following functions with the KSQ galvanic rectifier:

- Data acquisition
- Control of up to 24 KSQ units
- Flowcharts up to 12 individual steps
- Programs with ramps and steps
- Coating time up to 1000h per single step
- Batch management
- Creating and saving circuit diagram programs
- Presentation of production data in diagrams
- Tracking and documentation

Our software is suitable for the special features of the production of:

- Positively electroplated grinding tools and
- Negative electroplated grinding tools





# Our philosophy - your success

We have an in-depth understanding of processes and many years of experience in the production of electroplated products. This enables Kirchner Galvanik GmbH to offer products that exactly meet the requirements of our customers.

Our products are tailored precisely to the specific requirements of manufacturers of superabrasive tools.

We offer customers from the medical technology sector the option of documenting processes at batch level.

Customers from the precious metal electroplating industry can use our devices to precisely determine the layer thicknesses and consumption of gold and other precious metals.

## **ABOUT US**

Kirchner Elektronik has more than 20 years of experience in the field of constant current sources. The devices manufactured by Kirchner Elektronik are characterized by their consistent optimization with regard to the requirements of electrochemical processes.

Kirchner-Galvanik GmbH, based in Waldshut, Germany, works for customers in industry, research and development. electroplating and electrochemical coating requirements.

How to reach us: Kirchner Galvanik GmbH Tannenstrasse 51 79761 Waldshut Tel: +49(0) 1575 300 4049



info@kirchner-galvanik.de www.kirchner-galvanik.de

VAT ID no.: 270648212 HBR: 712807 Freiburg