



H 2500 x W 1000 x D 1000
dimensions:
system repeatability: < 0,3%

AUTOMATION FOR BATTERY RESEARCH PRODUCTION

R&D POUCH FORMING TOOL

In contrast to hard case battery cells, foil cells (also coffee bag or pouch cells) made of aluminium composite foils offer advantages when it comes to gravimetric energy density as well as a high degree of battery format flexibility thanks to the relatively easy processability of the housing materials. To implement an industrialized, stable and high-quality deep drawing process, the largely unknown behavior of multiple layer composite foils in deep drawing processes must be evaluated in prototype and material testing and examinations on the optimum parameter settings of the forces applied to the blank. Jonas & Redmann offers a semi-automatic, modular laboratory system for these tasks.

- array of adaptable process parameters and optional expansions
- customizable and easy to swap deep-drawing punch and die
- control with open design enables customer-specific expansion of functions
- interval for each parameter is freely programmable via the HMI
- easy to handle thanks to compact, modular design equipped with rollers
- easy and convenient to operate/ data management system

Configuration

INPUT	PROCESS	OUTPUT
<p>format flexibility</p> <p>single sheet of composite foil</p> <p>manual or automatic</p> <p>optional: thickness measurement</p>	<p>plunger with parallel guidance</p> <p>customized die size</p> <p>customized adaption of: immersion depth, forming speed, deep-drawing punch force, blankholder force,</p> <p>optional: defined temperature setting (room temperature up to 120°C) of blankholder, deep-drawing punch and die</p> <p>optional punching tool (hole punch) makes it possible to index deep-drawn half shells</p> <p>servo-electric spindle press</p> <p>customized quality check</p>	<p>single sheet of shaped composite foil</p> <p>manual or automatic</p>

