

ASSEMBLY OF LI-BASED CELLS CELL PACKAGING

For years, Jonas & Redmann has been automating complex assembly and production processes for innovative products with highly sensitive components. Our owner-operated company brings its expertise and industry-tested technoligies to the lithium-ion batteryindustry with our pouch and prismatic cell production lines. We have developed and delivered equipment for all the production steps after coating, including lines for complete module assembly.

At Jonas & Redmann, we know that we can not be succeed unless our customers are successful. Therefore, our goal is to develop long-lasting partnerships with our customers. We accomplish this by understanding our client's needs and adapting the equipment to their specific requirements. Together, we work with our customers throughout the project, which does not end with equipment delivery. We continue by offering the support and service to deliver the best partnership possible. Jonas & Redmann doesn't measure success by the project. We measure it by the strength of the partnership.

Features:

- innovative pouch forming process for excellent process results
- high quality sealing seam distinguished by its resistance and uniformity
- qualified for clean rooms and dry room
- very gentle pouch handling



Cell Production

Stack Assembly Tab Welding Pouch Packaging

Electrolytefilling

Formation

Degassing

Final Test Discharge

Features:

MATERIAL	POUCH FORMING	WELDING	SEALING PROCESS	MATERIAL
INPUT	PROCESS	PROCESS		OUTPUT
pouch foil from: magazine, cut from coil cell stack: magazine, interlinking from production line	deep-drawing plunger with parallel guidance cutting of final pouch half	multi-function gripper: connects pouch half and stack and positions pouch pack within the sealing station	thermal sealing ultrasonic sealing others on request	pouch pack in: blister, magazine direct interlink to production line





- large variety of adaptable deep-drawing parameters (e.g. immersion depth, speed, plunger, fixing power of shaping die
- adaptable sealing parameters (e.g. temperature, pressure, time)
- developed for high capacity production lines
- constant process quality
- complete assembly line integration
- inline process control and customized quality check

Options (others on request)

INPUT	POUCH FORMING PROCESS	SEALING PROCESS	GENERAL
automatic coil change, automatic splicing measurement of pouch foil thickness	simultaneous heating of deep-drawn material inspection of deep-drawn material deep-drawing plunger with	3-sided sealing 1-sided sealing	standard HMI, operator languages English, Chinese, others MES connection, e.g. Secs GEM, XML according Semi PV02
	servo drive deep-drawing in several steps		