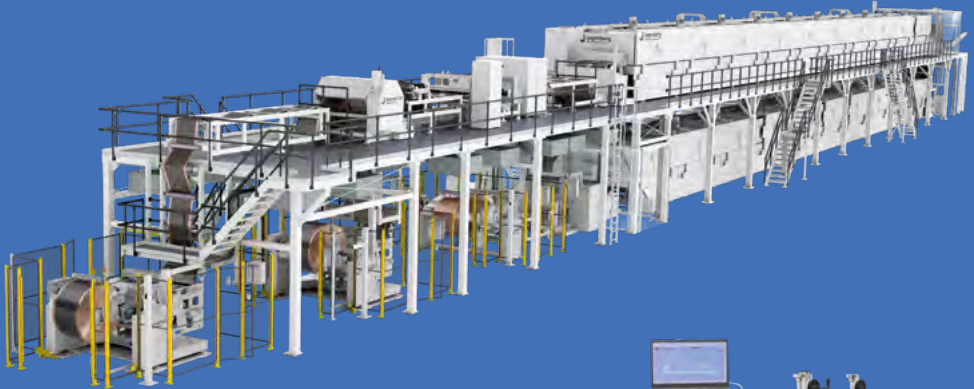




Slot Die Coating

Unlocking your
Battery Electrode
Coating Potential.

Jagenberg Converting Solutions GmbH offers you complete solutions from a single source: systems, contract manufacturing, and automation. From lab to pilot plant to full-scale production, from Wh to GWh - we support you every step of the way!

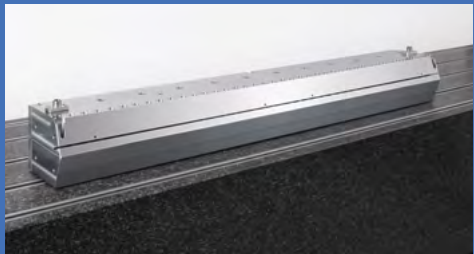


YOUR COATING, OUR EXPERTISE.

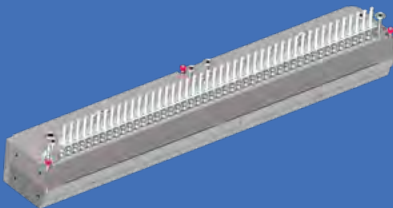
We provide a wide range of Slot Dies, including fixed and adjustable types like T-Bar and Flexlip, with the option for full automation. Additionally, JCS offers tempering solutions using either electrical heating elements or water. Our experts support you throughout the selection process to ensure the best possible solution for your specific application and requirements.



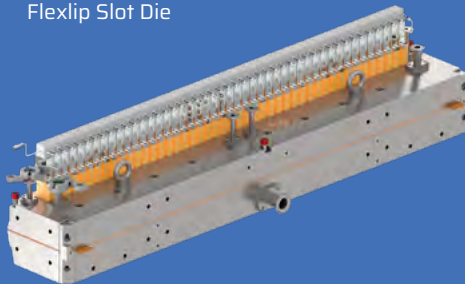
Fix lip Slot Die



Flexlip Slot Die



T-Bar Slot Die with micrometer screws



T-Bar Slot Die with automatic drives

Everything you need for Slot Die Coating success from a single source - optimized for battery production:

- Fluid dosing systems
- Coating stations
- Service Trolleys
- Shims
- Customized tools
- ... and much more



Slot Die Coating



OPTIMIZE EFFICIENCY WITH TAILORED SLOT DIE COATING!

Harness the Potential of your Battery Production with Slot Die Coating

Experience peak electrode battery coating with our Slot Die Technology, enabling utmost process control and stability. With 20+ years of expertise, we tailor solutions to your needs, ensuring flawless, uniform coating results. Elevate your production quality and efficiency with our gold standard solutions.



Slot Die Coating Key Features

- Application: Li-Ion Battery Anode or Cathode coating
- Coating width: Up to 2,500 mm
- Coating speed: Up to 100 m/min.
- Wet loading: 50-400 g/m²
- Coating types: Full-surface, stripe or intermittent coating
- Slot Die type: Flexlip, manual adjustment via differential screws
- Material: AISI 630 or AISI 316L
- Cross web distribution: +/-1%
- Lip straightness: $\leq 3 \mu\text{m}$
- Manifold chamber: Infinity-Half shell
- Lip and manifold design method: Tailored to your application through rheological analysis, analytical process window calculations and CFD & FEM simulation
- Finish: Inner surfaces and lip precision ground and manually lapped, flow surfaces polished
- Alignment system Die: Guide Blocks
- Alignment system Shim: Pins & Shim offset screws
- Ventilation: 2 holes as standard

Why Choose Slot Die Coating for Your Gigafactory?

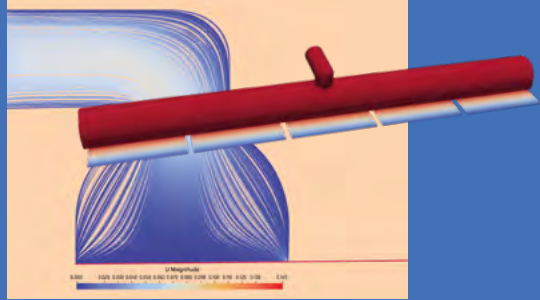
Our specialty is Slot Die Coating, the gold standard for battery electrode applications. This technique ensures exceptional uniformity in thickness and precise control over the coating process. Benefits include pre-metering, excellent coating performance, robust process stability, and a closed slurry supply system, all contributing to superior reliability.

A Customized Approach to Precision

With over 20 years of experience, we provide customized solutions tailored to your specific needs. Our team of expert engineers designs Slot Dies using a rigorous process that includes rheological characterization, analytical calculations, computational fluid dynamics (CFD), and finite element method (FEM) simulations. This ensures perfectly homogeneous coating results.

Precision Engineering for Optimal Performance

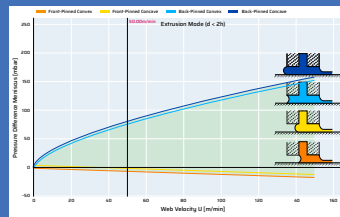
We follow a thorough manufacturing process, which involves precise adjustments and rigorous testing to guarantee exceptional performance. Partner with us and experience the gold standard in coating technology, tailored to your needs. Our Slot Die solutions help you to increase the quality and efficiency of your Li-Ion battery production.



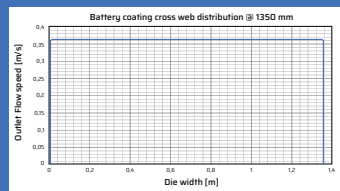
CFD simulation of a customized JCS Slot Die

up to
 **2,500 mm**
Coating width

up to
 **100 m/min.**
Coating speed

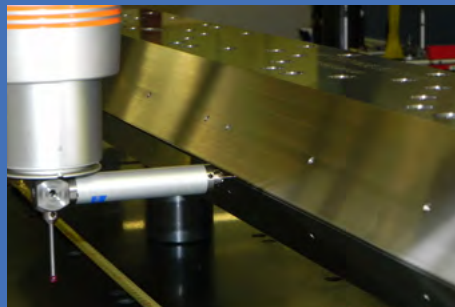


Process window calculation for Slot Die Coating.



Unlock < +/-1% cross web distribution by Slot Die Coating.

Elevate Your
Battery Performance
Today!



Technical Data

Coating width

Up to 2,500 mm

Coating speed

Up to 100 m/min.

Wet loading

50-400 g/m²

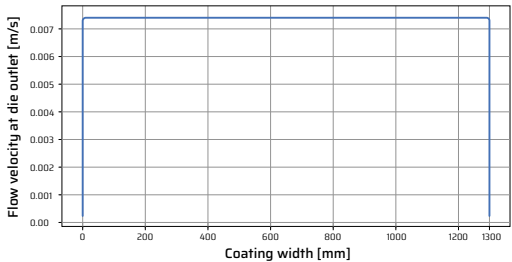
Cross web distribution

+/-1%

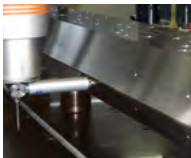
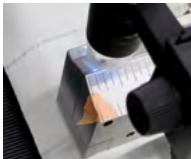
Slot Die type

Flexlip (manual adjustment via differential screws) or T-Bar (manual with micrometer screws or automated with drives)

Cross web homogeneity right from the start! Our rigorous quality assurance process has been honed to perfection through 20+ years of experience. Meticulous attention to detail is paid to guarantee your coating success!



**We have never
commissioned
a Slot Die this
fast!"**





If you are interested or have any questions
about Slot Die Coating, please contact

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