Excillum AB

Disruptive High End X-ray sources: Design, Development, Manufacturing

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Company at a glance

• Based in Stockholm, Sweden
• Founded 2007
• 80 employees, 55% in R&I
• Sales: 12 M€
• R&I expenses: 25% of sales

• Partner in collaborative projects:
  KDT JU & ECSEL JU (HICONnects, 14ÅCMOS, MADEin4),
  EUREKA CLUSTERS (FA4.0), EUROSTARS, Horizon2020, EMPIR,
  SME instrument, FP7, National grants (VINNOVA)

• AENEAS board
Competences & Products

 Entirely devoted to advanced microfocus and nanofocus X-ray sources

**MetalJet**
World’s brightest microfocus X-ray source *(see white paper)*

Liquid metal-jet anode & advanced electron beam technologies

**NanoTube**
World’s smallest X-ray nanospot

Advanced electron beam technology
X-ray sources for 3D challenges in Advanced Packaging

State of the art X-ray source

Image copyright
X-ray sources for Battery cell & cathode inspection

10µm Al cathode

LiCoO2 Cathode (50 µm per side)

Electron-Microscopy image

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X-ray sources for Battery cell & cathode inspection

10µm Al cathode

LiCoO2 Cathode (50 µm per side)

X-ray image from nanoCT with Nanotube

Electron-Microscopy image

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## Collaboration Expectations

<table>
<thead>
<tr>
<th>Collaborative project of interest to you</th>
<th><em>Chips JU, Eureka clusters, Eurostars/Globalstars, Horizon Europe or other</em></th>
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<tbody>
<tr>
<td><strong>Scope</strong></td>
<td>Technology development and new market access</td>
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<td><strong>Project idea</strong></td>
<td><strong>High-speed, high-resolution X-ray inspection</strong></td>
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<td><strong>Project impact</strong></td>
<td>Enable fail safe electronics, Quality assurance</td>
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<td><strong>Project consortium</strong></td>
<td>Searching to partner with <strong>OEMs and components providers:</strong></td>
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<td>• <strong>FEOL/BEOL</strong> – Epitaxial layers (µHRXRD), Contamination &amp; Composition (µXRF), Crystallinity (µXRD), Critical dimensions (CD)</td>
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<td>• <strong>Advanced packaging metrology</strong> (NanoCT, Laminography)</td>
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<td>• <strong>Electronics manufacturing</strong> – Electronics inspection</td>
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<td><strong>Interested to participate in Pilotlines.</strong></td>
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[https://www.excillum.com/](https://www.excillum.com/)
Thank you!

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