**XRHCount**

Automatic SMD-Counting

- 95% reduced counting overhead
- Global component database
- Integration to warehouse system
- Less than 10 seconds per reel
- Industry 4.0 and traceability support
- Zero programming effort
**XRHCount – Contactless counting**

Today, mass-market electronics are manufactured almost exclusively on high-performance assembly machines. Time is literally money. Therefore, two aspects are of particular importance: maximum throughput and minimum changeover time. VisiConsult, as a specialist for X-ray systems and automation, developed the XRHCount in order to speed up this time-consuming process.

The counting results are directly transferred to MES or ERP systems. Common solutions, like FUJI Trax, Nexim, Cogiscan, SAP, BaaN and many more are already pre-implemented, while custom systems can be easily connected through an open database interface. Barcode scanners, label printers, smart cameras and local networks can be easily connected.

**Why is it necessary to count?**

In times of decreasing margins, manufacturers have to streamline their production. This includes the avoidance of inventory overhead and a reliable just-in time order strategy. An uncertainty in the component stock results in safety overheads up to 30%. Obvious consequences are a lot of bound capital, wasted material and a loss of precious stock space. With accurate inventory knowledge, it is possible to do an exact feeder pre-planning and less production-line stops. Every time a reel is used the uncertainty increases, if no counting is performed.
**Simplicity is the key**

A huge advantage of the XRHCount is the simple operation principle. The operator just has to place a reel in the drawer and to press one button. The result will be shown immediately. A sophisticated validation scheme delivers a warning in the unlikely case of an uncountable reel. These reels can either be counted manually or submitted to the Counting Cloud. Therefore, this system does not need any regular engineer support and is maintenance free. Operators can be trained in a few minutes due to the simplicity.

This makes a prior type selection and a maintained type database obsolete. Even on new types the system will just detect the similarity and automatically use the best solution. In case of a completely new type a warning is shown and the reel can be submitted to the Counting Cloud. With every new type the system efficiency increases.

**Industry 4.0: The Counting Cloud**

To maintain flexibility and increase utilization VisiConsult developed the online Counting Cloud. Therefore, new component types do not have to be trained locally by engineers. Instead the new reels are directly submitted to our development team. Every system receives an automatic update on a regular basis. The extensive type database is continuously growing through a huge installed base of units worldwide. This leads to a constant improvement of the internal artificial intelligence and accuracy. This service also delivers new software updates and is completely free of charge.

The system fulfills the demanding German safety standards, it is certified by the German TÜV, has a CE certification and the NF C 74-100 certification.

**Hard and soft benefits:**

<table>
<thead>
<tr>
<th>Continuous Improvement Culture</th>
<th>Quality</th>
<th>OEE Improvement</th>
<th>Cost Reduction</th>
<th>Integration to MES/ERP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robust &amp; lean process</td>
<td>Leading to zero defects (contactless process)</td>
<td>Increase uptime</td>
<td>Waste free process</td>
<td>Industry 4.0 (Integration to MES/ERP)</td>
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<tr>
<td>Continuous flow material</td>
<td>Reduce quality related costs</td>
<td>Fast reaction time, problems get obvious fast</td>
<td>Reduced effort and head count</td>
<td>Integration into renown industry systems (FUJI trax, cogniscan etc.)</td>
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<td>Define and keep standards</td>
<td>Reduce failures on field</td>
<td>Increase customer quality and delivery</td>
<td>Reduced cycle time against old approach process</td>
<td>Alternative native export to Excel/CSV possible</td>
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<tr>
<td>Simplify process</td>
<td>Customer satisfaction</td>
<td>Generation of statistics and KPI’s to measure performance</td>
<td>Inventory reduction</td>
<td>Counting-Cloud solution connects all systems worldwide online</td>
</tr>
<tr>
<td>Transparency within entire supply chain</td>
<td>Yield increasing</td>
<td>More accurate post-production calculation (accuracy of 99.9%)</td>
<td>Reduced space</td>
<td>Paperless process</td>
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10 seconds

And many more...
The XRHCount revolutionizes the efficiency of SMD-Counting through X-ray technology

**XRHCount - technical specification**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component exposure</td>
<td>&lt; 1.25 μSv</td>
</tr>
<tr>
<td>Electrical connection</td>
<td>110V/230V (Dual Voltage), 50Hz/60Hz, 16A</td>
</tr>
<tr>
<td>System size (L x W x H)</td>
<td>1250 x 850 x 2200 mm</td>
</tr>
<tr>
<td>System weight</td>
<td>600 kg</td>
</tr>
<tr>
<td>Cycle time</td>
<td>&lt; 10 seconds</td>
</tr>
<tr>
<td>Max. reel diameter</td>
<td>400 mm</td>
</tr>
<tr>
<td>Max. reel height</td>
<td>100 mm</td>
</tr>
<tr>
<td>Mean Accuracy</td>
<td>99.9 %</td>
</tr>
</tbody>
</table>

- Fast Plug and Play setup in less than an hour
- Scan reels in moisture or ESD packaging
- Coverage of small component types like 01005
- Compact footprint and easy handling
- Integration of scanners and label printers
- Open warehouse-system interface
- Ergonomic touch-panel operation
- Short Return of Investment (ROI)
- Global online component database
- Designed and produced in Germany
- Trained first-line service worldwide
- Many successful installations globally
- Industry 4.0 solution for lean production
- Replaces old fashioned manual counters
- Multilanguage available

VisiConsult is a family owned company located in Northern Germany and is a specialist for customized and standard X-ray systems. All our products are developed and produced locally and delivered as turn-key solutions. This leads to cutting edge performance and a high flexibility. Our goal is to solve our customers’ problems with tailored systems and guarantee a premium post-sales service.

More than 25 years of expertise in Security and classic Non Destructive Testing (NDT) markets like aerospace, automotive and many more lead to an unmatched experience in X-ray technology and result in a superior global service network.