CSA  Customer Specific Assembly
Portfolio and Brochure Presentation

- Introduction
- Portfolio of Services
- Local Success Stories
Introduction

In the current market place, the pressure on time, costs and quality are increasing day to day. To cope with them you need partners you can rely on. Konekface counts with more than 50 years of experience in connection technology, being the market leader and the worldwide reference in its field. Specially for the customers who need case-specific solutions, Konekface created a portfolio of customer specific services. Through it, the experts of Konekface deliver their extensive know-how to the customer in the shape of tailor made products. The product portfolio includes:
Terminal Blocks

A 100% tailor made, and ready to install product is supplied. It is possible to choose the type, size and holes of the Mounting rail and the sequence of components to be assembled with the possibility to include internal connections and identification as required. It can even include products of other manufacturers. The design of the Terminal Block can be done using the software from Konekface Rail Designer®. Furthermore, there are interfaces for CAD/CAE Tools to transfer project information direct to your CAD platform. This allows a faster and easier design task and simplifies the ordering process a great deal.
Assembled enclosures

It is possible to select the material and desired post treatment for the box, that is mechanized according to the requirements of the customer. The end product can be provided containing the terminal blocks according to specification, cable glands found appropriate, labels of identification and certification. We have experts in ATEX regulation for hazardous areas that design the box according to standard guaranteeing the certification wished by the customer.
Portfolio and Brochure Presentation

Electronics

Konekface performs the design, sourcing and purchasing of components, manufacture, quality control and shipment of the finished good according to requirements of the customer, who receives one complete article, ready to install. These assemblies can include design interfaces with PLC's, terminals with diverse systems of connection and assembly in PCB's, relays, A/D converters specially calibrated, and any other products from Konekface or other manufacturers specified by the customer.
Germanyring and hoses

Konekface can do the optimized design and manufacture of the connection between the devices of the customer. In addition to being able to choose any type of interface for the terminals, it is also possible to define the location of each signal in the poles to simplify the circuit where they will be connected. The marking in each cable can be defined, enabling an easy identification when installing.
Customized Kits

Normally the customer need to make an order of multiple articles, each one in its minimum amount, that will have to be distributed in the warehouse, later to be extracted for the manufacture of an equipment. Konekface offers the possibility of requesting a set that already includes only the necessary amounts of each article for the manufacture of the customer’s equipment. This way, the customer only purchases the necessary amounts, and simplifies its logistic process, having a direct relation between the number of equipments to make and the number of required kits. The customer can also request products already marked according to his specification, to simplify the installation.
CSA Benefits for the final customer

- Costs Saving
- Time Savings
- Fixed Costs converted into Variable Costs
- Subcontracted Quality and certification
Local Success Story 1

XX is a US$150 billion company, with diversified technology, media and financial services, dedicated to creating products that make life better. From aircraft engines and power generation to financial services, medical imaging, television programming and plastics, GE operates in more than 100 countries and employs more than 300,000 people worldwide. Konekface supplied to XX business in Italy a range of Stainless Steel and Plastic junction boxes with ATEX certification. These were modified to include the cable glands and terminal blocks required, so that the customer received the box ready to be connected at his site.
## Current issues and action plan

### FishBone analysis

**Y - Reliable lead time in ATEX orders**

<table>
<thead>
<tr>
<th>Machines</th>
<th>Men &amp; Women</th>
<th>Materials</th>
<th>Method</th>
<th>Measurements</th>
<th>Mother Nature</th>
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</thead>
<tbody>
<tr>
<td>Assembly capacity</td>
<td>Quality Control</td>
<td>Lead time for materials from WI</td>
<td>Control on subcontractors workload</td>
<td>%Budget</td>
<td></td>
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<tr>
<td>Drilling capacity (2)</td>
<td>Storage</td>
<td>Stock in BCN</td>
<td>Control on subcontractors priorities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rail cutting capacity (1)</td>
<td>Certification</td>
<td>WI 90%RM</td>
<td>Control on subcontractors lead times</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wire conduct cutting and assembly (1)</td>
<td></td>
<td></td>
<td>Definition of articles in Offer</td>
<td></td>
<td>100% Outsourcing</td>
</tr>
</tbody>
</table>

- **Drilling capacity (2)**:
  - Storage
  - Stock in BCN
  - Lead time for materials from WI
- **Assembly capacity**:
  - Quality Control
  - Control on subcontractors workload
- **Rail cutting capacity (1)**:
  - Certification
  - WI 90%RM
  - Control on subcontractors lead times
Current issues and action plan - Logistics

- **Lead time for materials from Konekface**

<table>
<thead>
<tr>
<th></th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orders locked</td>
<td></td>
<td></td>
<td>Truck leaves Germany</td>
<td>Truck in BCN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orders locked</td>
<td></td>
<td></td>
<td>Express leaves Germany</td>
<td>Express in BCN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orders locked</td>
<td></td>
<td></td>
<td>Truck leaves Germany</td>
<td>Truck arrives in BCN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If in Delay, Express shipment free of charge
Current issues and action plan

- Control on Subcontractors Work Load

All orders which can’t be delivered on time sent to Germany
## Current issues and action plan

### Definition of articles in offer

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>160851</td>
<td>Terminal ZDU 2,5</td>
</tr>
<tr>
<td>1</td>
<td>160874</td>
<td>Cover ZDU</td>
</tr>
<tr>
<td>1</td>
<td>954000</td>
<td>Earth Terminal ZDU</td>
</tr>
<tr>
<td>18</td>
<td>1609801044</td>
<td>DEK. 5 MULTICARD WHITE</td>
</tr>
<tr>
<td>0.20</td>
<td>12280</td>
<td>RAIL TS 32 W/o HOLES (m)</td>
</tr>
<tr>
<td>1</td>
<td>951028</td>
<td>POK 8 BOX EX CERTIFIED</td>
</tr>
<tr>
<td>1</td>
<td>950524</td>
<td>EARTH STUD SS M6</td>
</tr>
<tr>
<td>3</td>
<td>M8790</td>
<td>SEALING STUD M40 EEX E SS</td>
</tr>
<tr>
<td>3</td>
<td>173627</td>
<td>SEALING RING M40 NP EXE</td>
</tr>
<tr>
<td>3</td>
<td>M9812</td>
<td>LOCKNUT M40 SS</td>
</tr>
<tr>
<td>1</td>
<td>1824390000</td>
<td>BREATHER DRAIN 2 SS</td>
</tr>
<tr>
<td>1</td>
<td>M9703</td>
<td>KLIPPON POK CERTIFICATION LABEL</td>
</tr>
<tr>
<td>1</td>
<td>M8869</td>
<td>TAG 120X40X1,5 BL/NG</td>
</tr>
</tbody>
</table>
Current ATEX CSA Production

Konekface

100% of the material is taken from Stock

Can happen in both sequences

Terminal block is assembled on Rail

SC 1

Box and Plates are drilled

Rail is cut

Rail is mounted on MP

Cable conduct is cut and assembled on MP

SC 2

Box and Plates are drilled

Boxes are certified

Current issues and action plan - Process Flow

CSA – Customer Specific Assembly
New ATEX CSA Production

TIMELINE

Konekface
- Sub-assembly of terminal block is launched in parallel with complete box.
- Terminal block is assembled on Rail
- 100% of the material is taken from Stock
- Boxes are certified

SC 1
- Rail is cut
- Box and Plates are drilled
- Rail is mounted on MP
- Cable conduct is cut and assembled on MP
- MP is assembled on Box
- Cable glands are assembled on Box

SC 2
- Rail is cut
- Box and Plates are drilled
- Rail is mounted on MP
- Cable conduct is cut and assembled on MP
- MP is assembled on Box
- Cable glands are assembled on Box

Current issues and action plan - Process Flow

CSA – Customer Specific Assembly  Page 16
Future ATEX CSA Production

Konekface
- Sub-assembly of terminal block is launched in parallel with complete box.
- Terminal block is assembled on Rail
- 100% of the material is taken from Stock
- Boxes are certified

SC 1
- Rail is cut
- Terminal block is assembled on Rail
- Box and Plates are drilled
- Rail is mounted on MP
- Cable conduct is cut and assembled on MP
- MP is assembled on Box
- Cable glands are assembled on Box

SC 2
- Rail is cut
- Terminal block is assembled on Rail
- Box and Plates are drilled
- Rail is mounted on MP
- Cable conduct is cut and assembled on MP
- MP is assembled on Box
- Cable glands are assembled on Box

Current issues and action plan - Process Flow
## Current issues and action plan

<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
<th>Solution</th>
<th>Status/When/Who</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead time for materials from Germany</td>
<td>Last orders locked on Wednesday afternoon, truck arrives next Monday and is finished unpacking on Thursday.</td>
<td>&quot;Express price&quot;. Extra +% saving one week of lead time. If in delay, Express shipment free of charge</td>
<td>Under evaluation</td>
</tr>
<tr>
<td>Control on subcontractors work load</td>
<td>Weak control on the lead time to start each order. Impact on reliability of lead times</td>
<td>Tool to calculate work load ahead of each order. All orders which can’t be delivered on time sent to Germany</td>
<td>Tool design under evaluation/ST/FW26</td>
</tr>
<tr>
<td>Clear description of product on offer</td>
<td>Depending on the workload, sometimes the offers are sent only with the article name and price</td>
<td>Automatically generate a table of contents with description in english of components per box face</td>
<td>Missing description in english of each article number/ST/FW24. First list obtained, pending a more specific one</td>
</tr>
<tr>
<td>Rail cutting capacity</td>
<td>Only one Subcontractor - Bottle neck</td>
<td>Launch 2nd subcontractor for this task</td>
<td>Machine sold. Start-up in June</td>
</tr>
<tr>
<td>Wire conduct cutting and assembly</td>
<td>Only one Subcontractor - Bottle neck</td>
<td>Second Subcontractor hired for this task</td>
<td>Machine available. Start-up in June</td>
</tr>
<tr>
<td>Access to box sizes not mentioned in catalog</td>
<td>Forces to go for the next biggest box in the catalog, more expensive than the intermediate solution</td>
<td>Allow access to all box sizes</td>
<td>List of all available boxes requested/ST/FW23</td>
</tr>
<tr>
<td>Prices of materials from Germany</td>
<td>Due to material costs, final price is higher than Germany</td>
<td>Agreed with Germany to update the list of items with special price regularly</td>
<td>List sent. Should be implemented on FW24.</td>
</tr>
<tr>
<td>Special CSA stock in Germany</td>
<td>Long lead time to get boxes</td>
<td>Box sizes with special stock for CSA in Germany. Make list available and try to design using these box sizes</td>
<td>List sent. Already Implemented</td>
</tr>
<tr>
<td>Lead time for offers</td>
<td>Long time invested in searching prices from AS400 to make offers</td>
<td>Database created, process automatic</td>
<td>Implemented</td>
</tr>
<tr>
<td>Final Assembly</td>
<td>Capacity problem for certified ATEX Enclosures</td>
<td>Outsourcing</td>
<td>Implemented. First success story of 48 K boxes without cable glands for LL done in 10 days</td>
</tr>
</tbody>
</table>