Fascination
Fastening Technology

Bossard Ltd
Bossard Profile

Bossard in
- America
- Asia / Pacific
- Europe

Head Office Bossard Ltd in Zug / Switzerland
Bossard Profile

Global Provider of Fastening Solutions

Founded: 1831
Family-Enterprise: in 7th Generation
Public since: 1987

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>USA</th>
<th>Europa</th>
<th>Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (in USD million)</td>
<td>519</td>
<td>153</td>
<td>280</td>
<td>86</td>
</tr>
<tr>
<td>Employees</td>
<td>1’812</td>
<td>301</td>
<td>961</td>
<td>550</td>
</tr>
<tr>
<td>Business Units</td>
<td>62</td>
<td>13</td>
<td>22</td>
<td>27</td>
</tr>
</tbody>
</table>

Core Competences: Systems, Elements and Methods

February 2013
Bossard Profile

Your profit – our goal:

We support your economic and technical requirements by offering customer made solutions, helping you to a better and stronger competition position at higher safety – worldwide.
Your Economic Requirements

Increasing the ROI (Return on Invest) =

- Cost reduction
- Higher productivity

= «Lean-Consumption»
Your Challenge

Your product must be
- modern,
- reliable and
- available

and at the same time
- fast,
- flexible and
- cost-efficient producible
The Logic Result

Your product must be
- modern,
- reliable and
- available

and at the same time
- fast,
- flexible and
- cost-efficient producible

→ Intensify R&D
→ Cultivate quality
→ Improve logistics

→ Optimize own production and cooperation with suppliers
The Logic Result: «Lean-Consumption»

«Lean-Consumption» is a principle for all processes within a company.

- Intensify R&D
- Cultivate quality
- Improve logistics
- Optimize own production and cooperation with suppliers
«Lean-Consumption»

1. Cost reduction
2. Error reduction
3. Optimizing processes
«Lean-Consumption»

«Lean-Consumption» is …

- analysing the flow of processes
- eliminating the cost of the complexity
- reducing the rate of errors
- maximising the speed of the processes

At least 50% of all processes are activities with no added value

![Diagram showing 50% added value and 50% no added value]
«Lean-Consumption» with Bossard

- **Intensify R&D:**
  - Modern products for modern fastening technique
  - Simultaneous Engineering

- **Cultivate quality:**
  - Worldwide quality standards acc. to ISO 9001 / 2
  - Certified test laboratories

- **Improve logistics:**
  - Approved logistics systems
  - Automated supply chain
«Lean-Consumption» with Bossard

Fastening elements, the world of Bossard

- You do not waste your time, because we deliver ...
  - what you need
  - as you need it
  - where you need it
  - when you need it
  - from one source
  - at competitive prices

➔ Your needs are our core competence
The Core Competences

The three comprehensive services

- **Products**
- **Engineering**
- **Logistics**

- **conventional**
- **electronic**
- **global**

Comprehensive, support, everywhere and locally
1st Core Competence

The three comprehensive services

- Products
- Engineering
- Logistics

conventional

- electronic

global

Comprehensive, support, everywhere and locally
Products

Procurement:
- a global procurement network
- of highly-qualified manufacturers
- with a special eye for quality
- with an absolute guarantee of supply

for all Standard and Special items
When faced with a challenge, there are usually two ways you can react to it: You can take it on or let it be. However, we at Bossard opted for a third way: We turned the challenge into an opportunity.

With the «ecosyn» line of products we developed innovative fastening solutions. These high-quality screws and fastening elements are economical and in sync with the needs of our customers.

Smart, safe and efficient high-quality products borne from innovative engineering – our «ecosyn» line of fastening solutions will make it simple for you to turn challenges into opportunities. This is what we call simplicity at work. This is what we call «ecosyn».
ecosyn® line of products

- ecosyn®-drill
- ecosyn®-fix
- ecosyn®-lubric
- ecosyn®-MRX
- ecosyn®-grip
- ecosyn®-plast
2nd Core Competence

The three comprehensive services

Products  Engineering  Logistics

conventional  electronic  global

Comprehensive, support, everywhere and locally
Total Cost of a Fastener Element

- Development
- Construction
- Purchasing
- Preparation
- Production
- Assembling
- Controls
- Fastener

Finished fastening element

Potential for cost savings

85%

15%

low

high
These calculators are available online:

- Length Converter
- Torque Converter
- Pressure Converter
- Force Converter
- Cost Savings Calculator
- Thread Engagement Length Calculator
- Torque and Preload Calculator
- Drill hole size for tapped threads
Bossard Fastener Expert Tools

CAD Online Portal

Speed up your prototype design with nearly 40,000 Bossard catalog articles as 2D and 3D data.

Bossard Calculator App for your Smartphone

Direct-Link

www.bossard.com/expert-tools
Simultaneous Engineering

- Technical tests
- Material analysis
- Application technology
- Recommendations
Simultaneous Engineering

- Consulting & Training
- Seminar at customer location
- Individual advices
- Support for costs savings
3rd Core Competence

The three comprehensive services

- **Products**
- **Engineering**
- **Logistics**

**conventional**

**electronic**

**global**

Comprehensive, support, everywhere and locally
Beschaffungskosten: ABC-Analyse

A-parts:
- high value
- small amount
- low purchasing cost

C-parts:
- low value
- big amount
- high purchasing cost
Purchasing Process

Flow of data:
- Demand: inquire → evaluate → order → follow-up

Flow of goods:
- Assembly: deliver → store → check → receive

Potential for rationalization:
Purchasing Process

Demand

Assembly

Bossard Logistics Systems
Purchasing Process

Demand

Assembly

Bossard Logistics Systems
Total Support

The three comprehensive services

- Products
- Engineering
- Logistics

conventional

electronic

global

Comprehensive, support, everywhere and locally
Worldwide Consistent Quality

Bossard products and services have the same high level worldwide:

The basis to guarantee the quality of the products is the standard ISO 3269.
Worldwide Consistent Quality

- Worldwide: ISO 9001
- USA / Switzerland: Test laboratories acc. to ISO / IEC 17025
- Switzerland: Environment certificate ISO 14001
Bossard worldwide

- America
- Asia / Pacific
- Europe
e-Solutions

**Bossard e-Shop**
online catalogue

**Bossard CAD**
CAD library on fastening technology

**Partner-Page**
Extranet for customers

**Bossard SmartBin**
fully-automatic logistic system

**Bossard Inventory Management**
comprehensive C-part management
Statements

«Engineering enhance competitiveness»
Bossard AG (Switzerland) with Schulthess

«Quality is the main issue »
LPS Bossard (India) with APC

«guaranteed supply at all times»
Bossard Inc. (USA) with John Deere

«Global Account Management»
Bossard Holding with Schweiter
Profile
Lean Consumption
Products
Engineering
Logistics
Total Support

Bossard Ltd