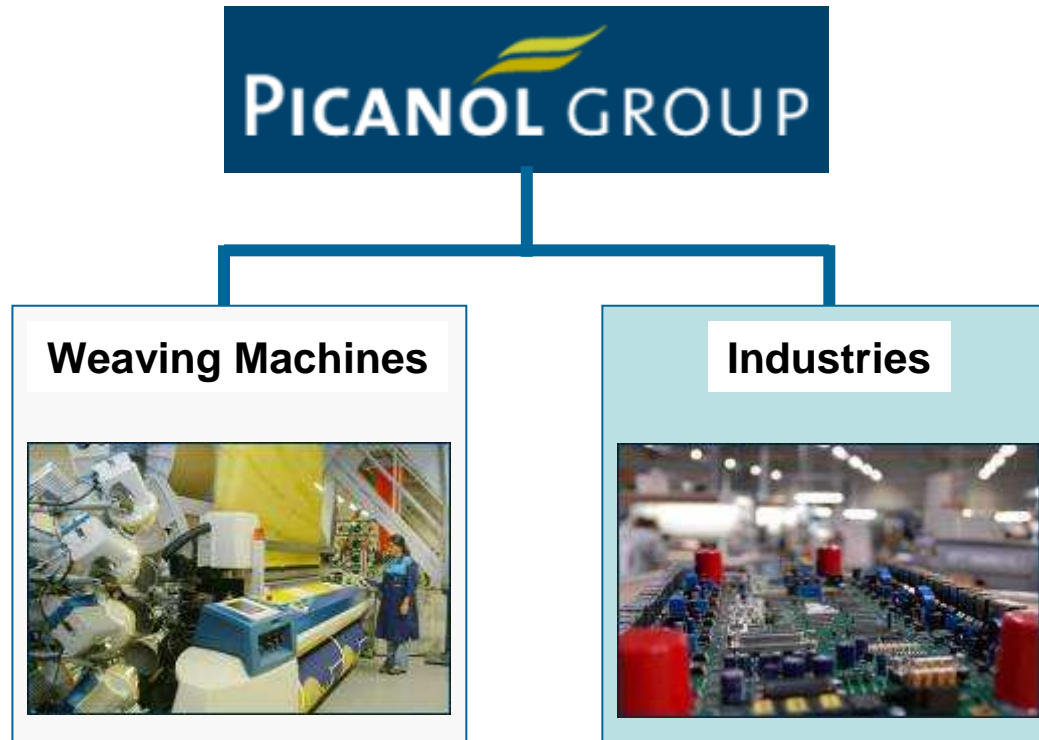




PsiControl Mechatronics Electronic Manufacturing Services (EMS)



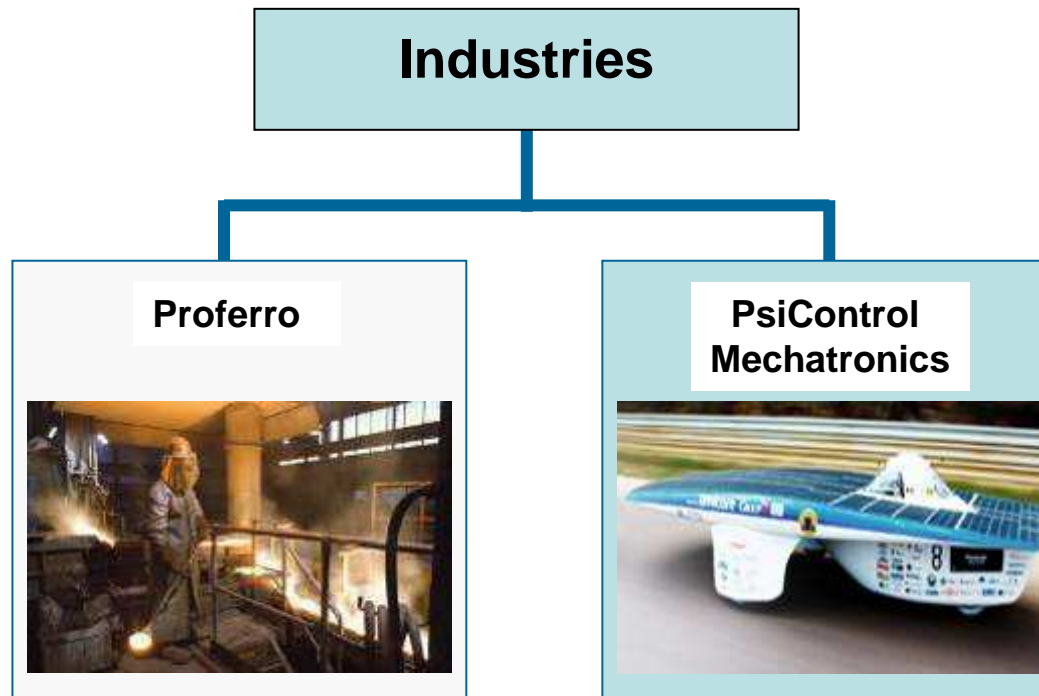
Organization



“to create excitement by providing integrated solutions that move industry forward”



Organization



“to create excitement by providing integrated solutions that move industry forward”



Organization



Sales 2008:
24 million euros

People:
> 200 employees,

Worldwide presence:
HQ in Ypres-Belgium
3 sites worldwide



Main sites

Ypres (Belgium)

- 105 employees
- Headquarters (a.o. Sales, Sourcing, HR, IT,...)



Brasov (Romania)

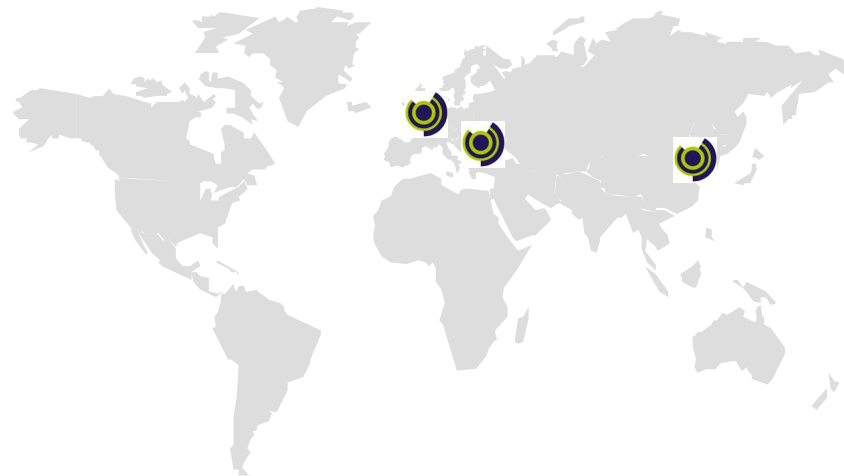
- 75 employees
- Cable assembly, PCB assembly and product engineering
- Sourcing



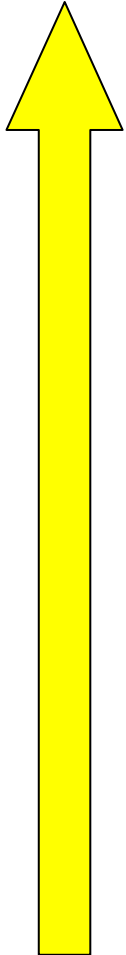
Main sites

Suzhou (China)

- 27 employees
- Sourcing & production of mechatronic parts



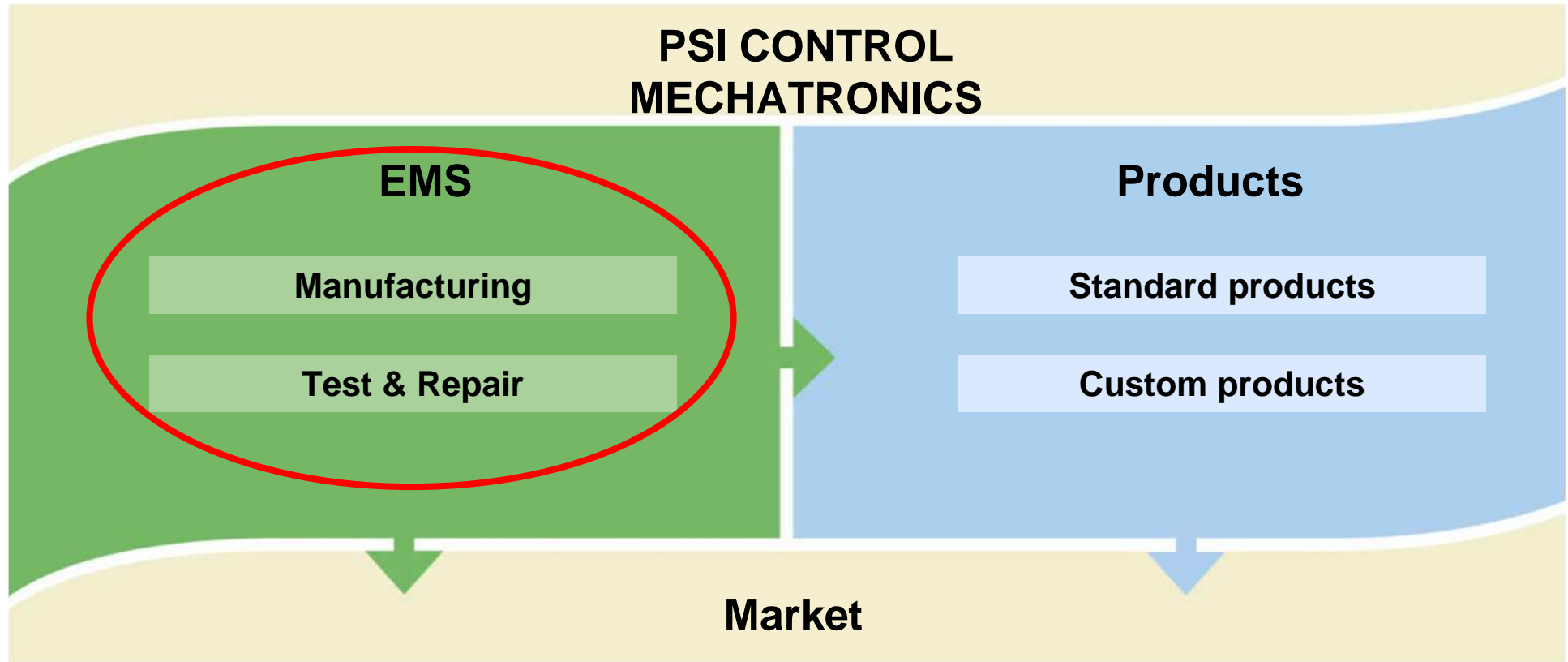
History



Year	Event	Employees	TO
2009	Expansion in Romania	105 p @ Ieper 75 p @ Rasnov 27 p @ Suzhou	24 M
2006	Startup Protronic Romania (Feb) Protronic becomes PsiControl mechatronics (July)	116 p @ Ieper	20 M
2002	Business Unit Mechatronics from Picanol nv to Protronic nv (Feb)	70 p (30 R&D)	10 M
2001	Expansion PCBA activities	40 p	4 M
2000	Acquisition by Picanol (Sep)	25 p	1.5 M
1989	Foundation as electronic assembly company (PCBA)		



Activities



PsiControl Roots

Development & production of all electronics for Picanol Weaving Machines:

- Tough industrial environments (dust, humidity, temperature, vibrations,...)
- High life time > 50.000 hrs (>20years - 7d/7d - 24h/24h)
- Cost efficient design (in high competitive textile market)
- Worldwide field presence & network
- Annual production series: 4000 to 7000 weaving machines per year

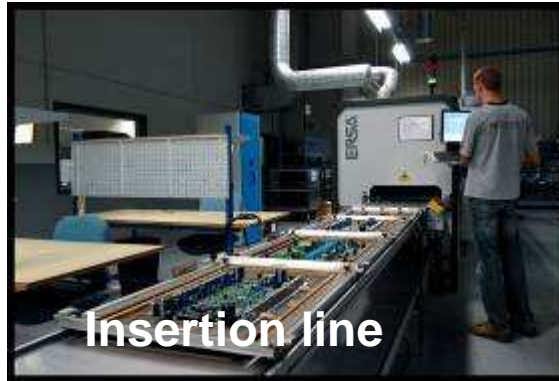
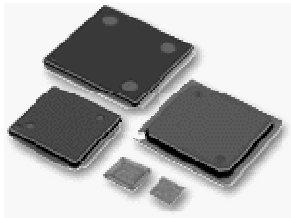


Operations



SMD line

- Load PCB
- Screenprint
- Picking & Placing
- Reflow
- Inspection: AOI, 3D-AOX



Insertion line

- Place Insertion Components
- Wave solder - RoHS
- Cleaning
- Assembling
- Testing



Full Custom Assembly

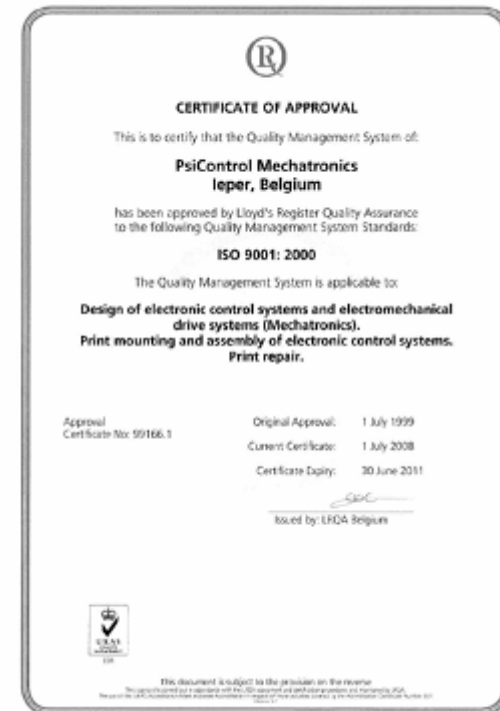
- Small/Big Housings
- Wiring
- Fastening
- Mounting
- Testing



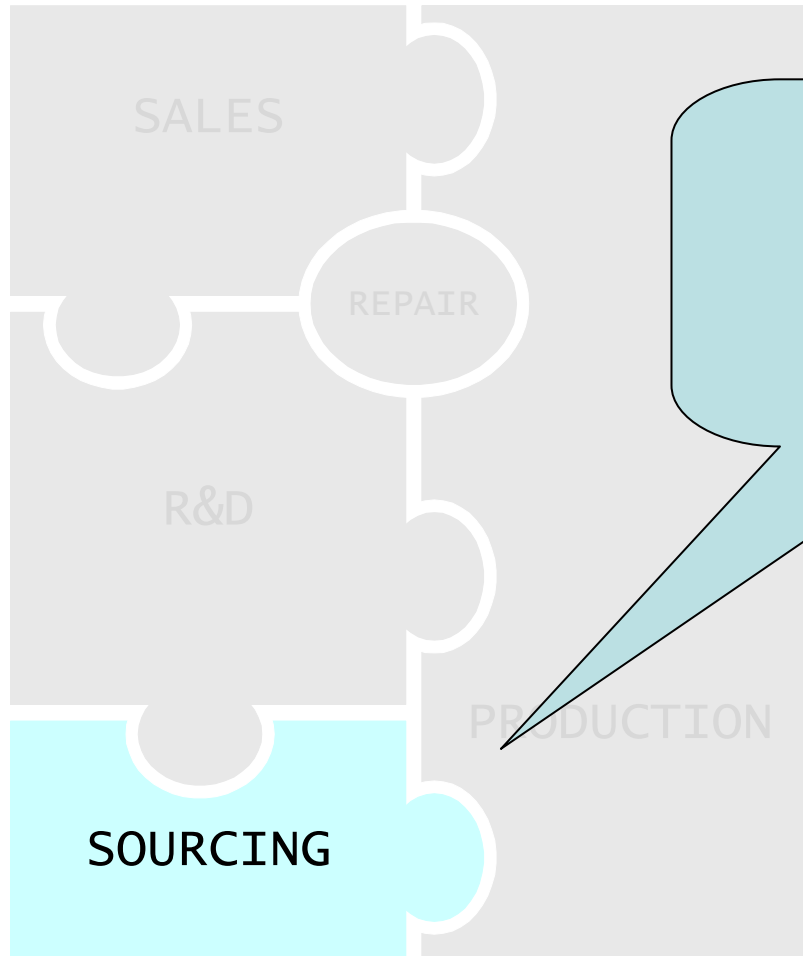
Operations

Quality Assurance

- ISO 9001:2000 certified since '99 by Lloyd's Register QA
- Quality assurance in R&D
- Quality assurance in manufacturing
- Quality assurance at suppliers
- Quality assurance at customers



Operations



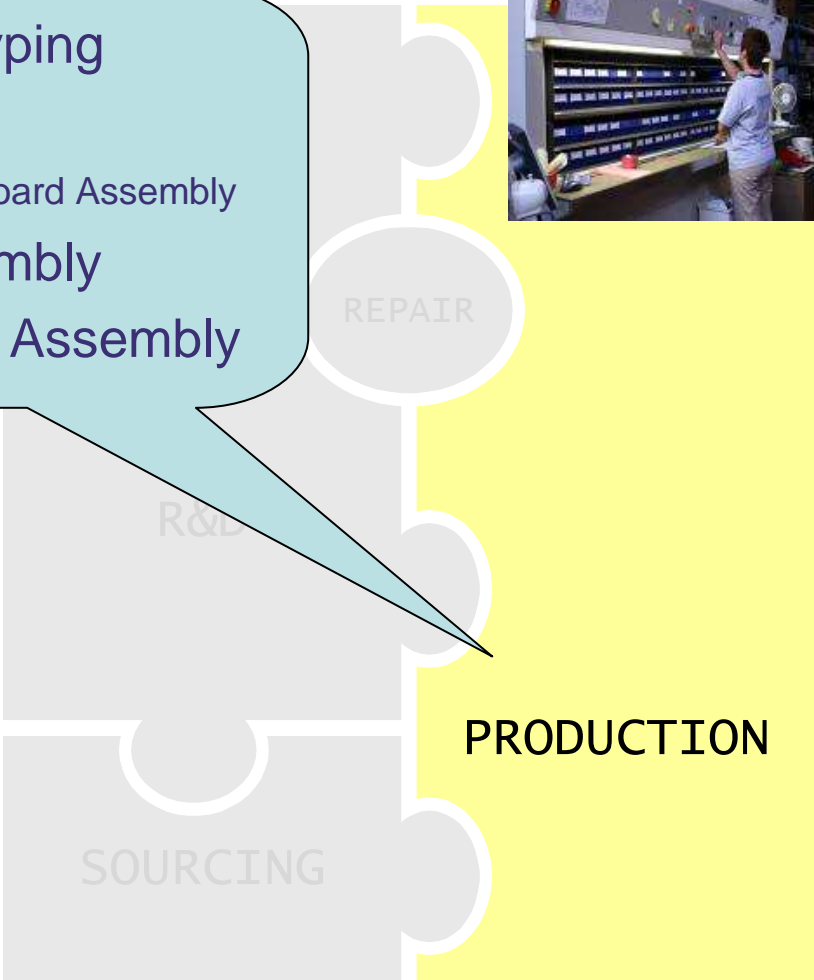
- Global Sourcing
 - Ieper, Belgium
 - Brasov, Rumania
 - Suzhou, China



Operations



- Fast Prototyping
- PCBA
Printed Circuit Board Assembly
- Cable Assembly
- Full System Assembly



Operations



▪ Fast prototyping

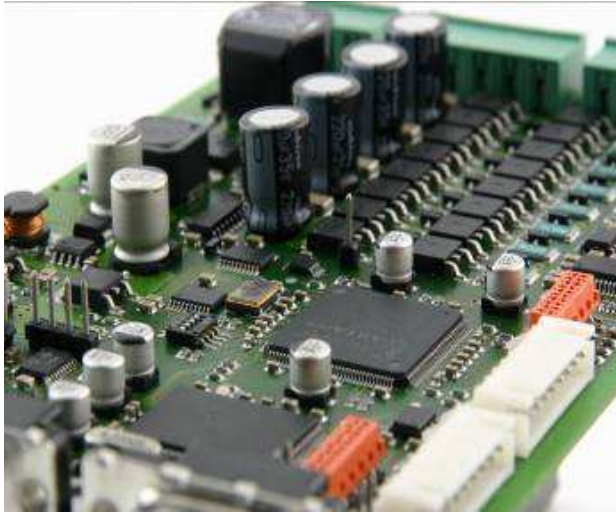
- Close collaboration with customers
- Short time to market
- Delivery within days
- Checking product's production viability

PRODUCTION

SOURCING



Operations



■ PCBA - Printed Circuit Board Assembly

- PTH (Trough Hole)
- SMD
- Lead based
- RoHS compliant

PRODUCTION

SOURCING



Operations



▪ Cabling & Wiring

- Cable based assembly
- Wire based assembly
- ...

PRODUCTION

SOURCING



Operations



- **Full System Assembly**
 - Just In Time assembly
 - Flexible
 - Test before delivery

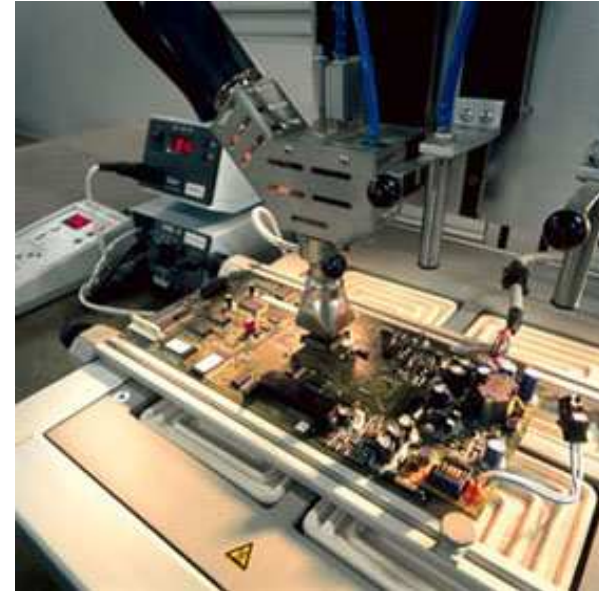
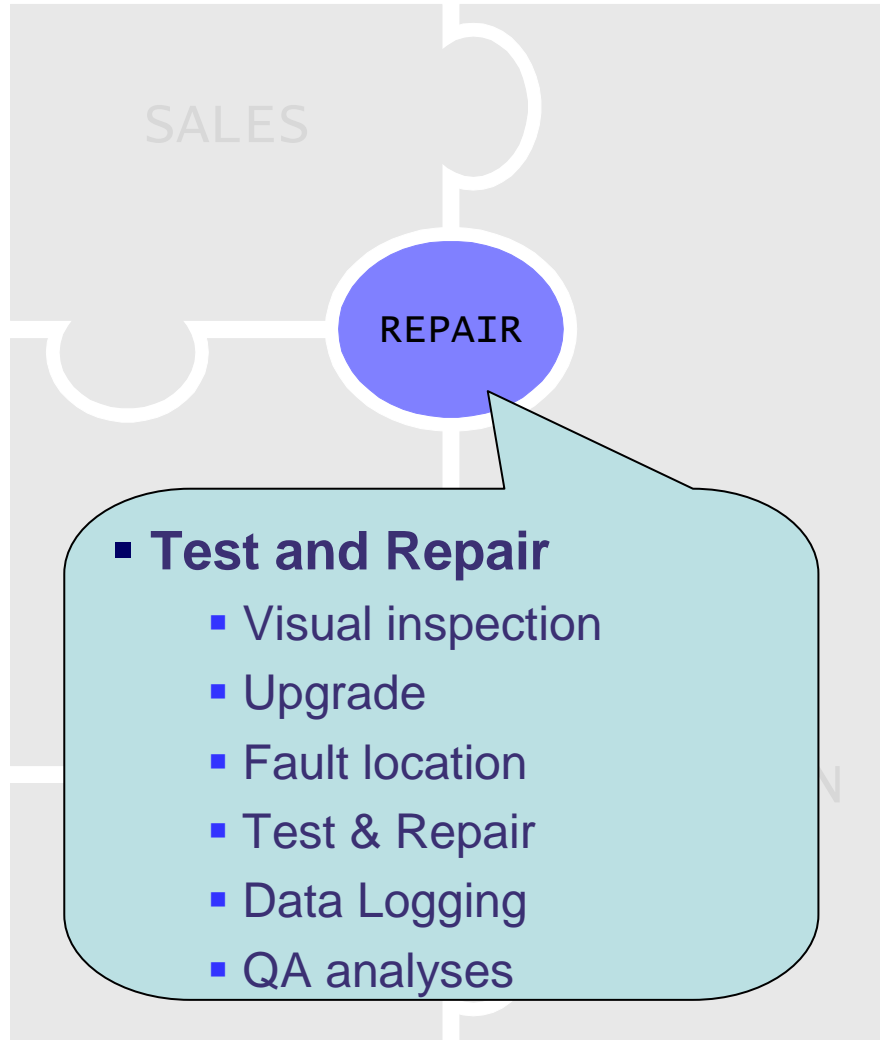
R&D

SOURCING

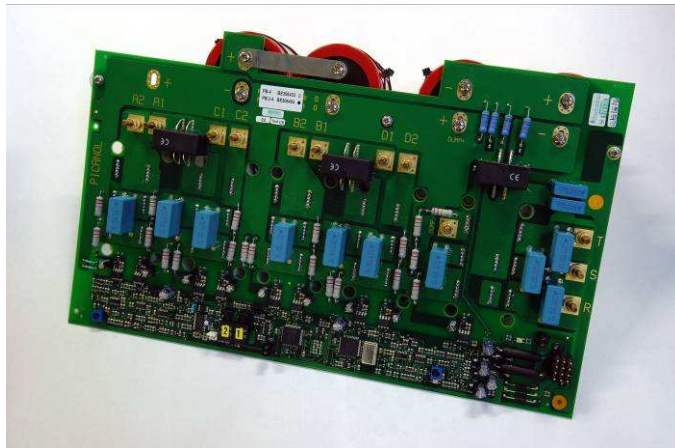
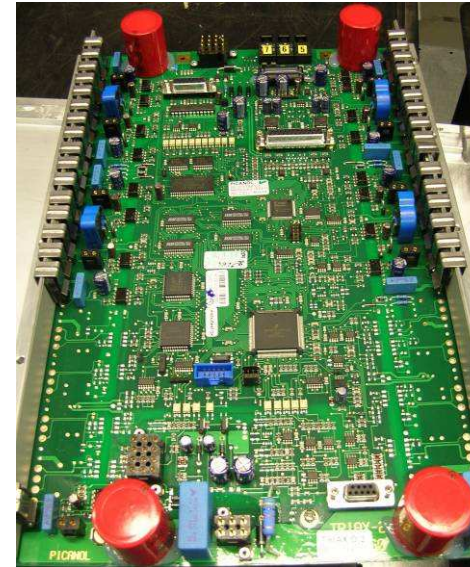
PRODUCTION



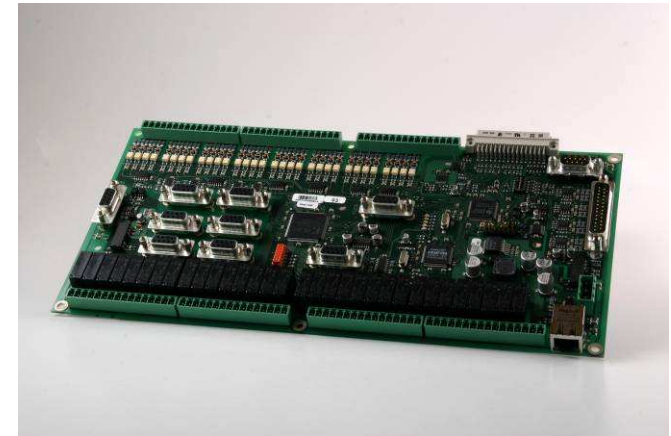
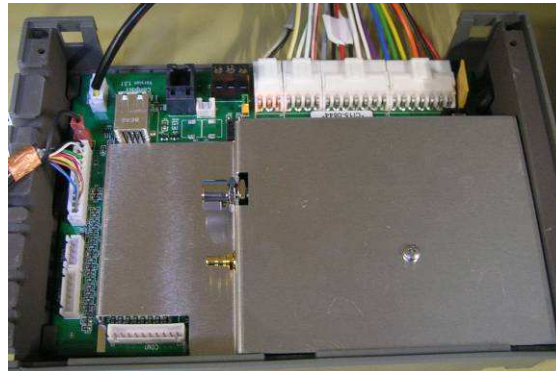
Operations



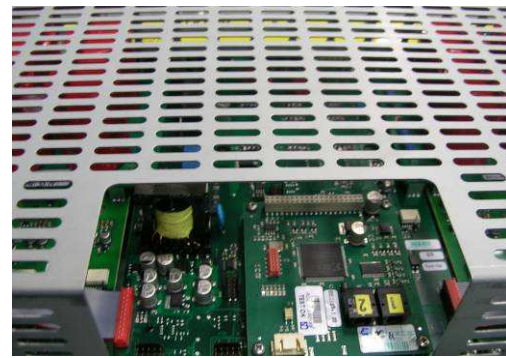
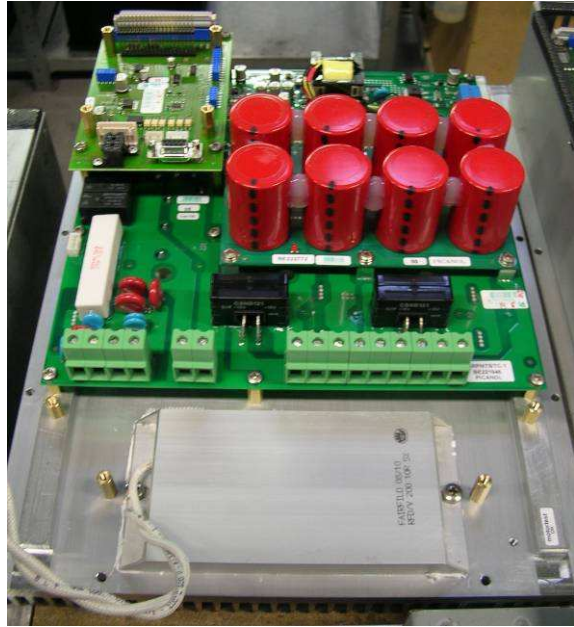
Realisations



Realisations



Realisations



Realisations



Robust Electronic Production: Testing

- PCBA functional and stability testing
- Pre-compliance HALT (Highly Accelerated life testing) testing
- Pre-compliance EMC



Robust Electronic Production: Testing

- In-house Environmental testing
 - Oven testing
 - IEC 60068-2-1 Cold test
 - IEC 60068-2-2 Dry heat test
 - IEC 60068-2-14 Test Nb: gradual change of temperature test
 - IEC 60068-2-30 Damp heat, cyclic (12 + 12h cycle)
 - IEC 60068-2-78 Damp heat, steady state
 - Vibration tests
 - IEC 60068-2-6: sine vibration
 - IEC 60068-2-27: shock
 - IEC 60068-2-64: random vibration
 - Salt Mist tests
 - IEC 60068-2-11: salt spray



Testing for big and small production series

- In-house Production Tests

- Board is DFT (Design for Testing) ready
- Boundary scan test
- Functional testing
- In-line programming of firmware



More information:

www.PsiControlMechatronics.com

