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Available for transfers

Design & Engineering

New Products Development and Existing Products Improvement according to Lean paradigms through Design For Six Sigma (DFSS) with the guarantee of objective measurable results.

Complete project management from concept to industrialisation with attention to **materials, manufacturing and mechanical components** of the product.

Development of components and assemblies from concept to executive with 2D drawings, 3D models and BOM management via Product Lifecycle Manager (PLM) / Product Data Manager (PDM).

Ability to objectively analyse products using Quality Function Deployment (QFD).

Innovative inventive design solutions using the TRIZ method.

Use of Design Of Experiment (DOE) and statistical method to optimise complex components and systems using Robust Design paradigms.

CORE COMPETENCIES

New Products Design

Old Products Optimisation

Objective Product Analysis

Mechanical Design

Solidworks / Creo / Autocad

Finite Element Analysis (FEA)

Design To Cost (DTC)

Product Creativity and Innovation with subsequent Patenting

Products Lean Project Methodology with Design For Six Sigma (DFSS)

3D Model, 2D Drawings, Bill Of Material (BOM)

Product Lifecycle Management / Product Data Management (PLM-PDM)

Result, Customer and User Orientation

Design For Assembly (DFA)

Design For Manufacturing (DFM)

PROFESSIONAL EXPERIENCES

09.2009 - Today

Senior Designer / Product Engineer - Microelettrica Scientifica SpA - Buccinasco

For a leading firm in **electromechanical and electronic components** I was involved in the following activities:

- Design of contactors, disconnectors, breakers and other electromechanical devices to manage direct current on trains.
- Design of boxes (systems) containing the company's products in electrical circuits for train operation (engine, air conditioning, sliding doors, etc).
- Design of electromechanical cabinets for electrification of overhead lines or tracks in railway substations.
- **Design of catalogue and customer-specific products.**
- Design according to Lean paradigms with **objective measurable results** through Design For Six Sigma (DFSS).
- **Objective product analysis** through Quality Function Deployment (QFD).
- **Innovative solutions** using the TRIZ inventive problem-solving method.
- Use of **Design Of Experiment (DOE)** and **statistical method** to optimise complex components and systems with Robust Design paradigms.
- Experience with **materials** (aluminium, steel, copper, thermosets, thermoplastics, ceramics).
- Experience in **manufacturing** (laser cutting and sheet metal bending, transfer moulding, injection moulding, die casting, extrusion, machining by removal, additive manufacturing).
- **2D drawings, 3D models** and BOM management using Product Lifecycle Manager (PLM) and SAP application.
- **Tolerance Analysis** using Worst Case (WC) Root Sum Square (RSS) or Monte Carlo technique.
- Adherence to delivery dates and customer satisfaction.
- Supplier management and evaluation; Scouting for new suppliers; Collaborative relations with suppliers.
- Oriented towards achieving commercial (turnover, Design To Cost DTC), innovation (patent) and teamwork goals.
- Knowledge of industry regulations.

Results obtained :

- Design, mechanical analysis, 3D modelling, 2D executions and realisation of two patents for a modular system for the composition of electrical circuits on board trains.
- Analysis, design, realisation of a modular system of DC electrical cabinets in railway substations for ABB with subsequent industrialisation at ABB's factories in Xiamen (China).

04.2008 - 08.2009

Designer - BLS group SRL - Milano

For a leading company in the production of **respiratory protective devices** I was involved in the following activities:

- Design of half-face, full-face and disposable gas masks. Design of new products or parts of them.

- Market research with study of competitor products. Observation and interviews with product users.
- **User-Centred Design (UCD)**, choice of materials (polymeric), ergonomic requirements, standards.
- **Prototyping** with 3D printing, pre-series, product engineering, production technology choice, mould design.
- Production of 3D and 2D executive technical drawings.

Results obtained :

- Design of a new half-face gas mask and participation in the patenting of a quick release filter with analysis of ergonomics and user-centred functionality.

11.1998 - 12.2006

Network Manager - Axa Assicurazioni SpA - Milano

Development and maintenance of the TLC infrastructure in Italy for AXA Assicurazioni. Programming and configuration of routers, switches, firewalls. Management of critical TLC security issues. **Internal** (3 people) **and External** (3 companies) **Team Management** on the three Italian sites. Achievement of objectives in terms of TLC service availability and in terms of IT security.

5.1997 - 10.1998

Systems Engineer - GiPa SRL - Firenze

System consultancy to the network infrastructure of "La Fondiaria Assicurazioni SPA". On-site support to local networks of 500 agencies throughout Italy. Support to the TLC infrastructure of La Fondiaria Assicurazioni.

1991 - 1997

IT - Various Companies

Responsibility for and management of IT assistance (hardware and software) contracted to companies and individuals. Hardware assistance for office automation (photocopiers, fax machines and printers). Customer management and retention (companies and private individuals). Sale and repair of mobile telephony.

EDUCATION AND TRAINING

2023 - **Black Belt Six Sigma certification** - Master DFSS (Design For Six Sigma) - Festo Academy - Assago

2009 - Master Degree "**Industrial Product Design & Engineering**" - Faculty of Design - Politecnico di Milano - grade 110L/110

2007 - Degree "**Industrial Product Design**" - Faculty of Design - Milan Polytechnic University - grade 110/110

2003 - Cisco Certifications: CCNA, CCNP, CCDA, CCDP - Cisco System and Microsoft networking specialisation courses - Algor College of Milan

1989 - Computer Technician Diploma - State Industrial Technical Institute "Galileo Ferraris" of S.Giovanni V.no (AR) - grade 40/60

HARD SKILLS

Modelling : PTC Creo, DS Solidworks, Alias Studiotools, Autodesk Autocad, PTC Windchill (PLM-PDM)

FEM calculation : DS Solidworks Simulation, PTC Creo Simulation, Minitab (Statistical Software)

Multimedia : Adobe Illustrator, Photoshop, Indesign, Premiere, After Effect, Audition

Rendering : Keyshot, Blender

Languages: English B2 (TOEFL 69/100); Italian

Design : Use of Design For Six Sigma (DFSS) including tools:

Design For Manufacturing (DFM); Design For Assembly (DFA); Design To Cost (DTC); Quality Function Deployment (QFD); Design Of Experiment (DOE); Value Analysis Value Engineering (VA/VE); Functional Analysis Screening Tool (FAST); Analytical Hierarchy Process (AHP); Failure Mode and Effects Analysis (FMEA); Theory for Inventive Problem Solving (TRIZ); Design Structure Matrix (DSM); Module Identification Matrix (MIM) and its Generational Variance Index (GVI); Variance Reduction Programme (VRP); Tolerance Analysis (TA) with Worst Case (WC) Root Sum Square (RSS) or Monte Carlo technique; Life Cycle Design (LCD).

SOFT SKILLS

Rapid adaptation to novelty

Search for effective and innovative solutions and methods

Collaborative, Empathic and Reliable

Versatility with individuals and groups

Skilled in the role of leader and member

Approach everyday life with positivity and enthusiasm

Team working, collaboration and group protection

Support and guidance towards other group members

Improvement and effectiveness on people on the organisation

Dialogue, negotiation and consensus

Relationship orientation

Oriented towards achieving individual and group goals

Attention to others and high expectations

Propensity for multitasking and proactive approach

Continuous study and continuous search for enrichment

Understanding of customer needs