DRÄXLMAIER

End of year projects

2024-2025

Curious?

Contents

WHO WE ARE?

Public

DRÄXLMAIER at a glance

DRÄXLMAIER

- Sustainable system supplier in the premium segment
- Innovative partner from concept, series development to industrialization

since **1958**

Market and Customers

References: Audi, BMW, Jaguar, Land Rover, Maserati, Mercedes-Benz, MINI, Porsche, VW and Californian car manufacturers

Main business segments:
Interior | Electrics | Components | Battery Systems

Represented in the most important premium automobile markets: **Europe, USA and Asia/China**

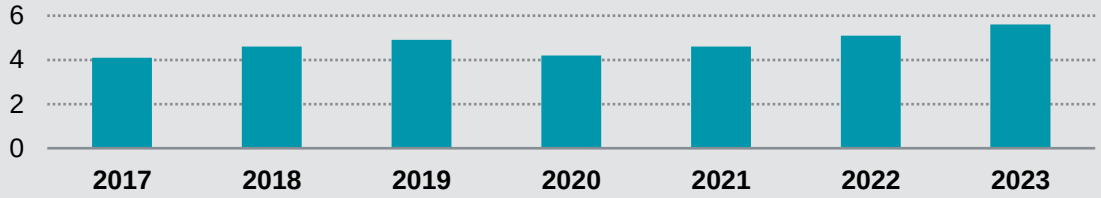
Global Footprint

> **60 locations worldwide in**
> **20 countries**

Employees

more than 70.000 worldwide

Sales in billion €



DRÄXLMAIER

Global Presence

74k
Employees

65+
Sites

20+
Countries

Europe

Germany, Italy, Austria, Romania, Slovakia, Serbia, Poland, Hungary, North Macedonia, Moldova, Spain, Great Britain

Americas

USA, Mexico, Nicaragua

Asia

China, India, Malaysia, Thailand, Vietnam

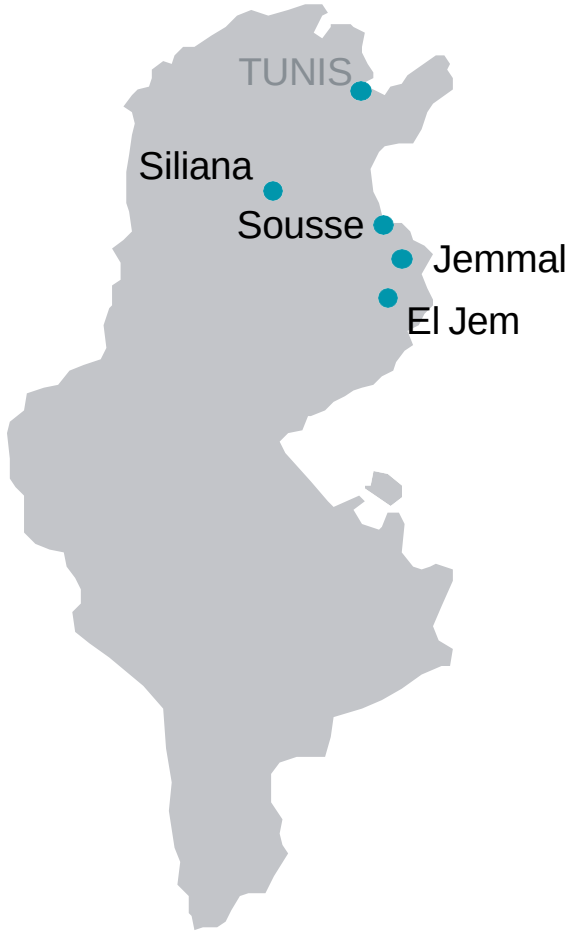
Africa

Tunisia, South Africa, Egypt

DRÄXLMAIER in Tunisia

Since

1974



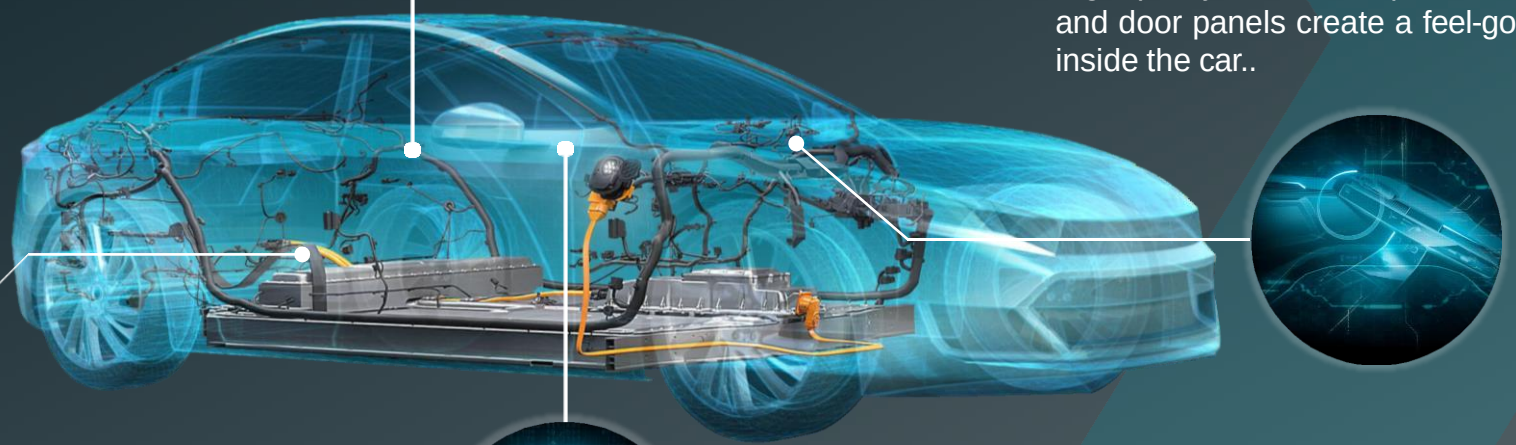
~10.000
Employees

5
Locations

4
Excellence Centers

What we do?

Outstanding Solutions for **Premium Vehicles**

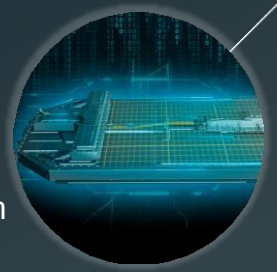


Electrical Systems

From many individual cables to zonal architecture: the best possible wiring system for every vehicle.

Interior Systems

High-quality instrument panels, center consoles and door panels create a feel-good atmosphere inside the car..



Battery Systems

Our battery modules with high power and energy density: standardized and individually scalable.

Component Systems

Scalable electrical and electronic components - for battery electronics, contact and connector systems or high-voltage charging systems.

How we act?

Strategy

Shaping Progress together

L	E	A	D	E	R

Leadership

We strengthen our position as a preferred system partner in the premium segment.

Market and customer orientation

Excellence

We strengthen the effectiveness and efficiency of our processes.

Process Excellence

Attitude

We secure our financial independence and realize our growth target.

Independance

Drive

We are paving the way for forward-looking technologies: with top performance today and the technical mobility of tomorrow.

Innovation

Empathy

We are an employer of choice - from the shop-floor to top management.

Employee orientation

Respect

We take responsibility and operate sustainably: economically, ecologically and socially.

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Sustainability

Our Internship Opportunities

Public

Sousse Hub - Test Engineering Department

Neopark Sahline – Monastir

Project 1

Implementation of Quality Management System (QMS)

DRÄXLMAIER

Description:

Evaluate the current state of the plant’s processes and systems to identify gaps between existing practices and ISO 9001 requirements.

Tasks

- Review existing documentation
- Conduct audits to verify that processes are in accordance with documented procedures and ISO 9001 requirements.
- Perform a gap analysis to determine areas that do not meet ISO 9001 requirements
- Finalize documentation and ensure all processes are functioning as per the QMS

Department: Test Engineering Tunisia

Profile

Industrial Engineering

Required Skills

English Language, MS office, Basic understanding of the ISO 9001 standard, data Collection and Analysis

Number of Interns: 1 Intern

Duration: 4 - 6 Months

Project 2

Hardware in The Loop System : Wiring Harness Emulator

DRÄXLMAIER

Description:

This project aims to design and develop a robust and flexible Hardware-in-the-Loop (HIL) system for a testing station, emulating a harness while offering key features such as real-time operation, multi-protocol interfacing, on-device user interface development, and diagnostic capabilities. It will enhance the station's overall functionality and user experience.

Tasks

- **Requirements Gathering:** Understand HIL system and the current testing system
- **System Architecture Design:** Design the overall architecture of the system
- **Firmware/Software Development:**
- Real-Time Operations: Develop firmware for real-time data processing and communication.
  Harness emulator: Add functionalities like signal continuity and Connector presence.
- Multi-Protocol Support: TCP/IP, RS232 and proprietary communication protocol of DRÄXLMAIER.
- Diagnostic Capabilities: Add features like protocol analyzer and system health monitoring.
- User Interface: Design a user interface within the embedded system for easy control and configuration.
- **Testing and Validation:** Test the system integrity and functionality to validate your work

Department: Test Engineering Tunisia

Profile

Embedded System Engineering

Required Skills

English Language, STM32, Real-Time Operating System (RTOS), Network: RS232 and TCP/IP, Basic Programming in C/C++, TouchGFX is a plus

Number of Interns: 1 Intern

Duration: 6 Months

Project 3

Fixture for Hole Axis Alignment

DRÄXLMAIER

Description:

The aim of the project is to build a fixture that can ensure precise coaxiality between the drilling tool and the existing hole, improving the accuracy and consistency of the machining process.

Tasks

- Analysis of the current status and requirement definition
- Suggest possible solutions to help align the axis of the drilling tool with the axis of the hole already drilled.
- Once the solution has been decided upon, the design created, the parts ordered and the fixture built
- Test and validation of the results

Department: Test Engineering Tunisia

Profile

Mechanical Engineering

Required Skills

English Language, Mechanical Design, solution finding methods, problem solving methods

Number of Interns: 1 Intern

Duration: 5 Months

♦ Project 4

Workflow redirection for test equipment production

DRÄXLMAIER

Description:

Re-engineering of the test equipment manufacturing and assembly workflow to improve plant efficiency and eliminate as many interfaces as possible.

Tasks

- Understand the current workflow and identify opportunities for improvement
- Work out and present to the team proposals for reengineering the production workflow.
- Set up a project team to work on all the necessary aspects to make the agreed proposal a reality.
- Simulate and evaluate

Department: Test Engineering Tunisia

Profile

Industrial Engineering

Required Skills

English Language, MS office, project management, teamwork, coordination

Number of Interns: 1 Intern

Duration: 4 - 6 Months

Project 5

Enhancing Quality Control of Machined Parts

DRÄXLMAIER

Description:

Dimensional inspection of mechanical parts is complicated and requires a lot of concentration on the drawing details and knowledge of how to measure them. The aim of this project is to guide the quality technician through HoloLens while looking at the part to take all the necessary measurements and document the results online.

Tasks

- Identify important details from the drawings that must be checked.
- HoloLens should show the 3D model and what needs to be measured while looking at the part
- Readings should be taken directly from the caliper and recorded directly in a log.
- Deviations should be identified and alerted

Department: Test Engineering Tunisia

Profile

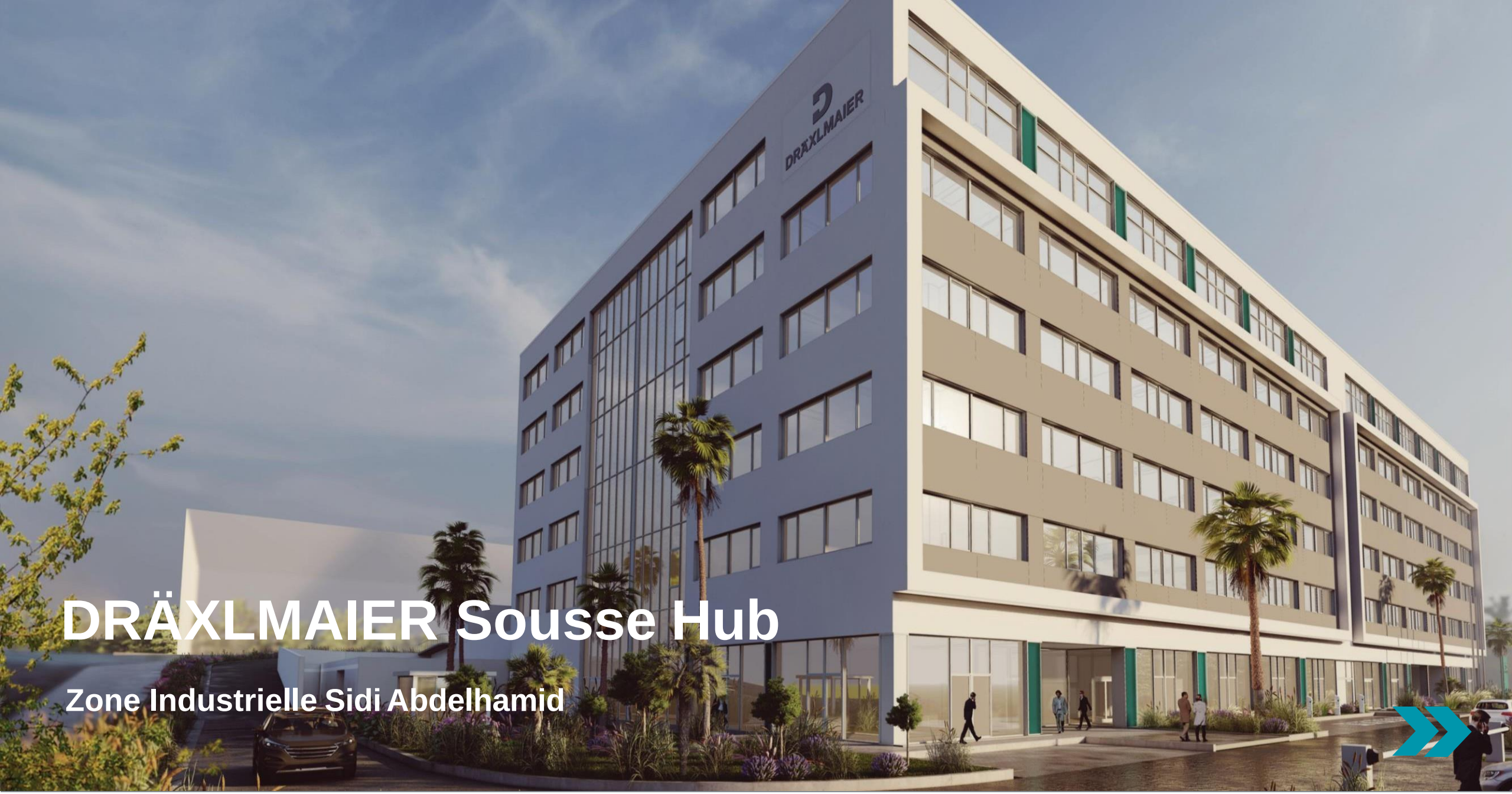
Software engineering, mechatronics

Required Skills

English Language, Knowledge in mixed reality application, good understanding of technical drawings, MS-Office

Number of Interns: 1 Intern

Duration: 6 Months



DRÄXLMAIER Sousse Hub

Zone Industrielle Sidi Abdelhamid

Project 6

Salesman Algorithm for Buses/Cars

DRÄXLMAIER

Description:

The main project is to create the ideal combination for bus/cars scheduling (fewer buses/cars and less time) from a list of stations, number of passengers, and distances, using Machine Learning models such as the Traveling Salesman Algorithm, Dijkstra's algorithm, and others.

Tasks

- Understand the specifications and third-party requirements in the current situation
- Develop a model that provides the ideal bus/car scheduling plan (respecting all conditions)
- Upgrade the model after each simulation

Department: Mobility

Profile

Computer Science Engineer

Required Skills

English Language, Python, Web Scraping ,ML, Problem Solving

Number of Interns: 2 Interns

Duration: 6 Months

Project 7

Facility Management Digitalization

DRÄXLMAIER

Description:

The project focuses on integrating digital technologies to improve facility management operations. This internship aims to analyze current manual processes, identify areas for improvement through digital solutions (power apps application and Power Bi Dashboard) and implement new systems to streamline facility operations.

Tasks

- **Assessment of Facility Management:** Analyze current processes, focusing on inefficiencies.
- **Research Digital Solutions:** Identify suitable tools like CMMS, BIM, IoT, and mobile apps.
- **Pilot Implementation:** Assist in launching digital tools, ensuring system compatibility.
- **Staff Training:** Support training staff to use new solutions, including creating materials.
- **Monitor and Report:** Track tool performance and compare with previous methods.
- **Final Report:** Summarize findings, challenges, and suggest future digital rollouts.

Department: Site Infrastructure

Profile

Computer Science Engineering Degree or related field

Required Skills

English Language, Project management in a digital transformation environment, Facility Management digital tools, Data Analysis, Performance Monitoring, Training and change management

Number of Interns: 2 Interns

Duration: 4 Months

Project 8

Prediction and Prevention of Safety Risks through Artificial Intelligence

DRÄXLMAIER

Description:

This project aims to develop an AI-based system to predict and prevent safety incidents at industrial sites. It includes the collection and analysis of historical incident data, the development of machine learning algorithms to identify risk situations, and the integration of these models into existing safety management processes.

Tasks

- Data Collection and Analysis:
  - Gather historical data on incidents and workplace accidents from different sites.
  - Include data on working conditions, equipment used, schedules, etc.
  - Analyze the data to identify trends and recurring risk factors.
- Development of Machine Learning Algorithms:
  - Use machine learning techniques to develop predictive models.
  - Train the models with the collected data to identify risk situations.
  - Test and validate the models to ensure their accuracy and reliability.
- Integration of the AI System:
  - Integrate the predictive models into the existing safety management system.
  - Develop a user interface to allow HSE managers to view predictions and alerts.
  - Establish protocols to respond quickly to alerts generated by the system.

Department: Site Infrastructure

Profile

Master, Engineering in Computer Science, data science, safety engineering, or a related field

Required Skills

English Language, Machine learning, Data Analysis, Python, R, or MATLAB. Database management, Knowledge of workplace safety principles.

Number of Interns: 2 Interns

Duration: 6 Months

Project 9

Development of a Mobile Application

DRÄXLMAIER

Description:

This project aims to create a mobile application to improve the management and communication of safety and environmental incidents and risks at industrial sites. The application will allow employees to quickly report risks and incidents. The project includes the design, development, and deployment of the application, as well as training employees on its use.

Tasks

- Define the key features of the application (incident reporting, risk management, training, etc.).
- Create mockups and prototypes of the application using Power Apps.
- Define the application's architecture and workflows.
- Develop the various features of the application with Power Apps.
- Integrate forms for incident reporting and risk management.
- Integrate the application with existing HSE management systems.
- Conduct tests to ensure the application's functionality and reliability.
- Gather user feedback and make necessary adjustments.
- Deploy the application.
- Organize training sessions for employees on how to use the application.

Department: Site Infrastructure

Profile

Master/Engineering degree in computer science, IT, information systems or a related field

Required Skills

English Language, Power Apps and other mobile application development tool; JavaScript, Python, or C#; System Integration and Database management

Number of Interns: 1 Intern

Duration: 6 Months

♦ Project 10

Prevention of Ergonomic Risks in an Office Environment

DRÄXLMAIER

Description:

This project aims to identify and reduce ergonomic risks in an office environment to improve working conditions and decrease the incidence of musculoskeletal disorders (MSDs). The work includes an ergonomic assessment of workstations, the proposal of suitable solutions, and the implementation of training and awareness programs for employees.

Tasks

- Ergonomic Assessment:
  - Conduct observations and evaluations of workstations.
  - Use ergonomic analysis tools (such as RULA, REBA, etc.) to assess risks.
- Improvement Proposals:
  - Design suitable ergonomic solutions (adjustment of workstations, ergonomic equipment, etc.).
  - Collaborate with the different teams to implement the improvements.
- Training and Awareness:
  - Develop training modules on ergonomic best practices.
  - Organize awareness sessions for employees and managers.
- Monitoring and Evaluation:
  - Establish performance indicators to monitor the impact of ergonomic measures.

Department: Site Infrastructure

Profile

Master degree in ergonomics, occupational health and safety, industrial engineering, or a related field.

Required Skills

English Language, MS Office, Knowledge of ergonomic principles and analysis tools. Skills in workstation design and process improvement.

Number of Interns: 1 Intern

Duration: 6 Months

♦ **Project 11**

Implementation of an HSE Management System for an Office Building

DRÄXLMAIER

Description:

This project aims to establish an HSE management system in compliance with ISO 14001 and ISO 45001 standards for an office building. The work includes conducting an initial audit, developing HSE policies and procedures, implementing safety and environmental measures, and training and raising awareness among employees

Tasks

- Initial Assessment:

-Conduct an HSE audit to evaluate current practices and identify areas for improvement.
-Analyze risks related to office activities (ergonomics, fire, air quality, etc.).

- Development and Implementation of the HSE Management System:

-Develop HSE processes and procedures in compliance with ISO 14001 and ISO 45001 standards.
-Define HSE objectives and performance indicators.
-Develop action plans.
-Create communication materials (posters, guides, etc.) to raise employee awareness.

Department: Site Infrastructure

Profile

Master degree in environmental management, occupational health and safety, or a related field

Required Skills

English Language, ISO 14001 and ISO 45001 standards, Project Management, Risk Analysis

Number of Interns: 2 Interns

Duration: 6 Months

Project 12

Creation of a smart Macro-planning & follow up in project management and product audits reporting

Description:

The project aims to improve the activities run-flow through the creation of a smart macro helps us to ensure an effective planning and permanent monitoring for our projects, as well as facilitates the international coordination of monthly product audit reports.

Tasks

- Analyze with statistics the current state.
- Evaluate the effectiveness of project management tools related to our activities
- Provide an innovative solutions
- Create an innovative Smart Macro

Department: Project Quality

Profile

Industrial Engineering / Master degree in IT

Required Skills

English Language, Macro, Excel VBA, SolidWorks, Good Communication, innovation

Number of Interns: 1 Intern

Duration: 4 Months

Project 13

Power on solution to calculate logistics costs of materials

Description:

we actually calculate the cost of raw material manually (purchasing cost + transport + warehouse +...) and we want to have a Power on solution which can handle till 250 line of data with mathematical formular and calculation.

Tasks

- Understand the whole supply chain
- Collect all needed data for calculation
- Prepare the ToR of the Power on solution
- Develop the solution

Department: Operations Engineering

Profile

Engineering Degree

Required Skills

English Language, Power on developer advanced knowledge

Number of Interns: 1

Duration: 4 Months

DRÄXLMAIER Sousse - METS

Zone industrielle Sidi Abdelhamid

♦ Project 14

Algorithm for Machines Data

DRÄXLMAIER

Description:

Create a Machine Learning model that extracts data from multiple sources (TXT and XLSX), processes and analyzes the data, provides comments and conclusions, and finally generates a standard presentation from the results.

Tasks

- Understand the data
- Prepare the necessary measures and analysis formulas
- Develop the ML model
- Test the model's feasibility

Department: Continuous Improvement

Profile

IT or Computer Science Engineer

Required Skills

English Language, Python, Machine Learning (Extract, Transform, Load) processes and automation, SQL for database queries and data manipulation

Number of Interns: 1

Duration: 4 Months

Project 15

Work in Process (WIP) Dashboard Development

DRÄXLMAIER

Description:

Create an ML model that extracts data from multiple sources (TXT and XLSX), processes and analyzes the data, Understand the current state, then define the new reference for Work in Process (WIP). After that, create a dashboard to display quantity, price, and other KPIs.

Tasks

- Understand the current situation
- Understand the data and current process
- Define the method for creating the new reference by developing a process flow and work instruction
- Design and develop a Power BI Dashboard
- Validate the Dashboard with actual inventory data

Department: Continuous Improvement

Profile

Industrial Engineering, Computer Science, or a related field

Required Skills

English Language, Power BI (advanced), lean manufacturing, Problem Solving Tools

Number of Interns: 1

Duration: 4 Months

♦ Project 16

Change Management Dashboard

DRÄXLMAIER

Description:

Current change management faces inefficiencies due to manual tracking, limited visibility, and poor communication. A lack of centralized systems increases risks, delays decisions, and complicates prioritization. Limited reporting further hampers performance tracking. Without a dashboard, these issues lead to higher costs and operational disruptions.

Tasks

- Provide a unified view of all change management activities for better progress tracking and issue identification.
- Enhance team coordination and collaboration across the change process.
- Monitor change requests in real-time to enable timely interventions.
- Track progress and key performance indicators (KPIs) to ensure deadlines and milestones are met.
- Identify potential risks or bottlenecks early and implement proactive measures to mitigate them.
- Assess the impact of changes on systems or production processes.
- Use data-backed insights to support informed decision-making.
- Analyze trends and patterns in change requests to anticipate future needs and improve processes.

Department: Industrial Engineering

Profile

Master/Engineering Degree Computer Science

Required Skills

English Language, Power BI, SQL

Number of Interns: 1

Duration: 6 Months

Project 17

Reducing Material Over Consumption (MOC)

DRÄXLMAIER

Description:

Reduce Material Over Consumption (MOC) in cable production processes by applying the DMAIC methodology of Six Sigma (Define, Measure, Analyze, Improve, Control). The project will focus on identifying the causes of overconsumption, improving production processes, and optimizing material usage throughout the value chain.

Tasks

- Define: Identify areas of material overconsumption in cable production and set specific reduction goals.
- Measure: Collect relevant data on material consumption at different stages of the value chain.
- Analyze: Analyze the data to determine the root causes of overconsumption using Six Sigma tools (e.g., cause-and-effect diagrams, Pareto charts).
- Improve: Propose solutions to reduce MOC by optimizing processes, cutting methods, and material stock management.
- Control: Implement monitoring systems to ensure the sustainability of improvements, with performance indicators (KPIs).

Department: Continuous Improvement

Profile

Mechatronics /Mechanical /Industrial Engineering Degree

Required Skills

English Language, Six Sigma, Project Management, Lean tools

Number of Interns: 1

Duration: 4 Months

Project 18

Development of a Production Scheduling Tool

DRÄXLMAIER

Description:

This project aims to design and develop a production scheduling tool. The tool should optimize task scheduling, resource management (operators, production lines, and raw materials), and enable real-time monitoring. The ultimate goal is to improve overall production efficiency, reduce downtime, and better anticipate resource needs.

Tasks

- Preparation and Data Collection Phase
- Tool Design
- User interface design
- Testing and Validation
- Monitoring and Continuous Improvement

Department: Continuous Improvement

Profile

Industrial/ Mechatronics Engineering Degree

Required Skills

English Language, Production Planning, Programming (Python, C#, or Java), ERP Tools, Data Visualization (Power BI)

Number of Interns: 2

Duration: 4 Months

DRÄXLMAIER Zaouiet Sousse - UATS

Avenue 14 Janvier 2011

Project 19

Improvement of the supply system between MP store and production

Description:

Feasibility study for the implementation of a more advanced system that complies with industry 4.0 between the raw material store and production with minimal human intervention.

Tasks

- Current case study in our store
- Identify areas for improvement
- Proposal of technical solutions with the possibility of implementation to improve the complete supply system

Department: Continuous Improvement

Profile

Engineering

Required Skills

English Language, MS Office tools,

Number of Interns: 2

Duration: 4 Months

Project 20

Auto control Concept

DRÄXLMAIER

Description:

Creation of a self-control concept in all projects with a robust systematic follow-up

Tasks

- Make a concept of self-control
- Implementation of the concept in a production line as a pilot project.
- Design of a progress monitoring tool

Department: Continuous Improvement

Profile

Engineering

Required Skills

English Language , IT Skills , Quality knowledge

Number of Interns: 2

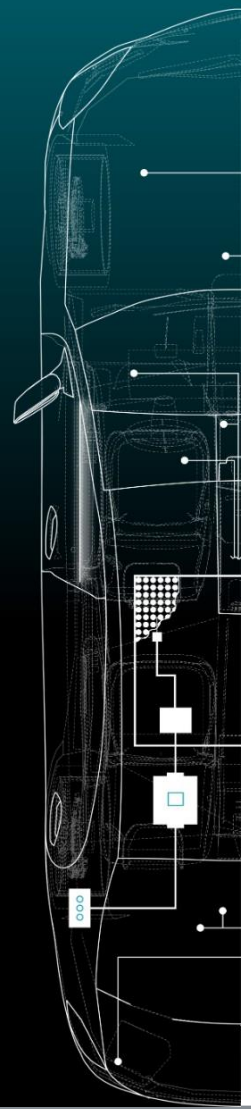
Duration: 6 Months

Tips and Advantages

Public

Seize the opportunity!

Join a Top100 Automotive Supplier!



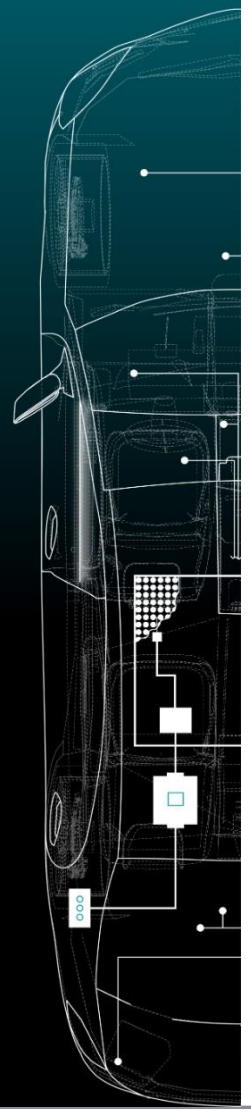
DRÄXLMAIER

TIPS

- **Apply via the QR-Code**
- **Send your Resume in English**
- **Select one project**
- **Mention the Number of the project**

Seize the opportunity!

Join a Top100 Automotive Supplier!



DRÄXLMAIER

Advantages

- **Real-World Experience**
- **Industry Insight**
- **Soft Skills Development**
- **Networking Opportunities**
- **Mentorship**

Application link

Public

Scan the QR code to apply!

Follow the tips above to ensure that your application is considered.

DRÄXLMAIER

WE **CREATE** CHARACTER