


# Matheus Norberto Hagemann



 Brazilian, 10/21/1987  
 +55 47 99219 2160  
 eng.matheus.hagemann@gmail.com  
 <https://engmatheushagemann.wixsite.com/website>  
 <https://www.linkedin.com/in/matheus-hagemann-4b07a838/>  
 St Papanduvinha de Cima, S/N - Campo Alegre - SC - 89294-000 (Brazil)

## JOB APPLIED FOR

---

Senior Electrical Engineering

## WORK EXPERIENCE

---

**12/2021–Present Senior Electrical Engineer**  
Self Employed

- *Worked 2 years as a contractor for the company Lilium eAircraft GmbH.*
- *Assisting engineers on the electrical H&S topics, and Electrical Automation.*
- *Development of electrical projects (Eplan).*
- *Development of Risk Assessments.*
- *Development of Technical Manuals.*
- *Development of Harness Drawings.*
- *Development of documentation and calculations: Technical Files for CE marking, SOP's and RA's, PL calculation (SISTEMA), Heating Calculation, Processes and Directives necessary for the H&S and Electrical organization (e.g. Electrical Requirements, Acceptance Forms, etc.).*
- *Safety Reports: According to ISO12100, ISO 13849-1, ISO60204-1, (and others)*

**09/2020–11/2021 Senior Electrical Machinery Safety Expert**  
Lilium eAircraft GmbH (Germany)

- *Reporting to the Managing Director being part of the H&S team as the Responsible Electrician for the machinery and production equipment (vEFK).*
- *Accountable for verifying the purchased machinery (FAT, SAT, review of electrical design, specifications, installation, operation, etc..).*
- *Elaboration of electrical diagrams for electrical cabinets for special rigs/tests at the Production Organization and System Testing.*
- *Elaboration of reports and final safety commissioning on machinery according to Machinery Directive 2006/42/EC, VDE's and Standards for machinery (ISO12100, ISO 13849-1/2, VDE113-1 / ISO 60204-1, and others..).*
- *Accountable for the LOTO process: training, elaboration of the documentation (directives), installation of the LOTO equipment, etc..*
- *Developing equipment process, validations and documentation.*
- *E-checks: Periodical tests of the electrotechnical equipment and machines according to machinery directive 2006/42/EC and VDE 0113-1 at the facilities of Lilium eAircraft.*

**10/2017–09/2020 Independent Professional (Engineer)**

Matheus Norberto Hagemann (Brazil, New Zealand)

- *(Lilium) Work instructions verification to Lilium assembly processes.*
- *(Lilium) Assisting engineers on the electrical H&S topics and Electrical Automation.*
- *(Lilium) Researching and specifying electrical, safety and controls components for equipment. (for Lilium standard requirements).*
- *Safety Reports: According to ISO12100 and the Safety Brazilian Norm NR12.*
- *Translation of customer's technical equipment specifications for quotation.*
- *Technical consultancy.*
- *32 weeks being an English Student at Seafield English School (New Zealand).*

**06/2012–09/2017 Automation Engineer**

Itra Automação EIRELI, Joinville (Brazil)

- *Electrical Engineering Management, verification and approval of electrical projects, bill of materials & costs management. Verification of electrical installations and assemblies. Technical support for electricians.*
- *Safety Reports: According to ISO12100 and the Safety Brazilian Norm NR12.*
- *Creation of quotes according to customers' technical equipment specifications.*
- *Project Management; Cost, Schedule, Customer relations, Try-out and Start-up, Troubleshooting.*

**08/2009–06/2012 Electrical Designer and PLC Programmer**

Itra Automação EIRELI, Joinville (Brazil)

- *Electrical design of machines and elaboration of the bill of materials. Programming of machines (PLC, IHM, Servomotor Drive, VFD, Industrial Communication Network, etc.). Final installation on the client and start-up. Troubleshooting on machinery and Technical assistance.*

**05/2006–04/2009 Mentor Automação**

**May / 2008- April / 2009**

Position: Electrician 1

- *Activities: Assembly of electrical panels, electrical installation on machinery (sensors, valves, general I/Os, drives, etc..). Final installation on the customer.*

**July / 2007- May / 2008**

Position: Electrician Assistant

- *Activities: Assembly of electrical panels, electrical installation on machinery (sensors, valves, general I/Os, drives, etc..).*

**May / 2006 - July / 2007**

Position: Mechanical Assembler Assistant

- *Activities: Mechanical assembly of machinery and equipment.*

## EDUCATION

---

- 2006–2012**     **Bachelor’s Degree in Control and Automation Engineering**  
*Instituto Superior Tupy, Joinville (Brazil)*
- 2012–2014**     **Specialisation in Workplace Safety Engineering**  
*Centro Universitário Tupy, Joinville (Brazil)*
- 2015–2017**     **MBA in Financial Management: Cost and Result Management**  
*Fundação Getulio Vargas, Joinville (Brazil)*

## PERSONAL SKILLS

---

**Mother tongue:**     Portuguese

**Foreign language:**     English



**IELTS™**  
**Test Report Form**     GENERAL TRAINING

NOTE Admission to undergraduate and post graduate courses should be based on the ACADEMIC Reading and Writing Modules.  
GENERAL TRAINING Reading and Writing Modules are not designed to test the full range of language skills required for academic purposes.  
It is recommended that the candidate's language ability as indicated in this Test Report Form be re-assessed after two years from the date of the test.

Centre Number: NZ018     Date: 14/JUN/2019     Candidate Number: 000933

**Candidate Details**

Family Name: HAGEMANN  
First Name: MATHEUS NORBERTO  
Candidate ID: FR731512

Date of Birth: 21/10/1987     Sex (M/F): M     Scheme Code: Private Candidate

Country or Region of Origin: [Blank]  
Country of Nationality: BRAZIL  
First Language: PORTUGUESE

**Test Results**

Listening	6.0	Reading	6.0	Writing	5.0	Speaking	6.5	Overall Band Score	6.0	CEFR Level	B2
-----------	-----	---------	-----	---------	-----	----------	-----	--------------------	-----	------------	----

### Communication skills

- Excellent networker; in the course of my career, I have been able to build up a good network with colleagues, suppliers and customers.
- Able to lead and support small teams.
- Able to follow up on external/supplier services.
- Able to express thoughtful and complex ideas, using drafts and presentations when necessary.
- Good listener.

## Organisational / managerial skills

- Good self-management of time and goals.
- Self-learning ability.
- Extremely focused and tenacious.
- Excellent team worker.

## Job-related skills

- Experience in automation engineering (electrical), safety reports, machinery safety standards, try-out and start-up, machine costs, technical specifications, budgets, ladder logic (PLC), electrical design (automation), and pneumatic schematics knowledge.
- Good documentation skills (Throughout my career I developed many documentations like; CE marking, manuals, safety reports, quotations, etc.. And I read and interpreted biddings, technical specifications of customers, and technical datas).
- Try-out (I have been at more than 150 tryouts during my career).
- Technical skills (I had the privilege of working on numerous electrical designs, as well as verifying a significant number of them. Additionally, I developed a variety of PLC and HMI programs.).

## Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem-solving
Proficient user	Proficient user	Independent user	Proficient user	Proficient user

- Softwares; Electrical design: EPLAN Pro Panel 2.7 (independent user) | Harness Drawings: Drawio (independent user) | PLC program: TPW-PCLINK (independent user) | HMI program: ADP 6 (independent user) | PLC program: SIEMENS TIA Portal V14 (basic user) | Mecanical project: SOLIDWORKS - 2016 (basic user) | Design and drafting: AutoCAD2007 (basic user) | Stepper motor program: SiProg2.7.6 (independent user) | Project management: MS project (basic user) | PC-Oscilloscope: DSO-2029 USB (independent user) | Financial Calulator: HP 12C (independent user). Others: WinRAR, Spreadsheet, Site assemble, Shared electronic calendar, Computer formatting, Software installation, Antivirus, Browsers configuration, Shortcut configuration, Editing videos and photos, LinkedIn, E-mail, Google Driver, Instant messaging.

## SUCCESSFUL CASES

---

- 1) In 2011, at the age of 23, I embarked on my first international installation project, in Monterrey (Mexico). Accompanied by a mechanical assembler, we successfully installed a 12-meter production line that was divided into three distinct parts. I took charge of the entire electrical installation and startup of the program using the SIEMENS S7-1200 system. Additionally, we provided comprehensive operational and maintenance training to ensure smooth functionality.
- 2) I was actively involved in the development of 15 state-of-the-art laboratory quality test machines. These machines conduct a variety of essential tests on furniture, including Static, Stability, Fatigue, Durability, Force Resistance, and Impact tests. To ensure that our machines

met the highest standards, we meticulously read and interpreted the relevant regulations and norms:

- *NBR15860-2 based on the standard EN716-2:2008 | NBR14006:2008 based on the standards; EN 1729-1:2006, EN 1729-2:2006 | NBR13961:2010 based on the standards; ISO 554:1976, ISO 4628:1982 | NBR 13966:2006 based on the standard: EN 527-1:1993 | NBR 15878:2011 based on the standard: EN 12727:2002*

3) Throughout my career as a Safety Engineer, I have successfully developed over 50 safety reports for which I hold both technical and legal responsibility. These reports adhere to international standards such as ISO, as well as Brazilian norms (NBRs) that align closely with European standards. Below are several examples of the key standards that guided the creation of these safety reports, the assessment of hazard categories, and the implementation of the HRN method for risk analysis:

- *DIRECTIVE 2006/42/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL;*
- *Regulatory Standard No. 10 - Safety in Electrical Installations and Services;*
- *Regulatory Standard No. 12 - Occupational Safety with Machinery and Equipment;*
- *ABNT NBR ISO 12100:2013 – Safety of machinery – General design principles – Risk assessment and reduction;*
- *ISO 13849-1 Safety of machinery – Safety-related parts of control systems – Part 1: General design principles;*
- *ABNT NBR IEC 60204-1 Safety of machinery — Electrical equipment of machines – Part 1: General requirements;*
- *ABNT NBR 13759 – Machine safety – Emergency stop equipment, functional aspects – Design principles;*
- *ABNT NBR ISO 13857 Machine safety – Safety distances to prevent access to danger zones by upper and lower limbs*
- *ABNT NBR 14152 - Machine safety – Two-hand control devices – Functional aspects and design principles;*

**For further information, please visit the site:**

*<https://engmatheushagemann.wixsite.com/website>*

