个人简历 | Personal resume

基本信息

姓　名：张文毅　　出生年月：1999.09

籍　贯：江西 上饶　　毕业院校：南昌航空大学科技学院

电　话：19942126314　　专　　业：自动化

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工作经历

2022.9-2024.4 富士康集团 B 事业群 AME

1. 针对新产品导入阶段制定自动化设备的技改方案制定和跟踪，并设计实验进行验证技改方案的可行性分析和成本评估;

2. 提升生产线自动化程度，减少人力提高生产质量与良率，在生产过程中根据设备运行问题提出改善方案，以推动设备制程能力指数提高;

3. 运用统计手法分析设备生产数据，并提供技术报告给各部门，及早反应生产议题，缩短新产品量产时程。配合量测需求，规画并发展设备的量测方法，确保检测流程质量;

4. 根据客户的要求，确保人机法料达到验证要求，进行验证测试，对验证的结果进行归纳整理，并做出报告。

5.对已经导入的自动化设备段进行日常维护点检，每个阶段结束进行性能运行状态分析，制作报告。

2024.6-2025-5 伊戈尔电气 能源配电事业部 海外基地管培生

1. 负责优化现有产品工艺和设备，开发新工艺，引进新设备，制定标准工时推配合精益生产推动降本增效。

2. 使用 Creo&CAD 为产品设计运输所需特种包装和特殊工装，审核供应商提供设备模型的可行性。

3. 负责编制、修订和完善体系文件，如工艺守则、操作作业指导书、作业流程卡等，确保体系文件的准确性和时效性；管理体系文件，确保文件的安全、完整和可追溯性。

4. 对生产人员进行培训，提升他们的操作水平；解答生产过程中的技术问题，提供技术支持和指导，现场解决生产遇到的问题和检验不良。

5. 跟进国内外新工厂的建设进度，翻译技术文件，提供技术支持，根据当地法律规定和产品标准提出新产线的改善方案和开发新工艺流程，并配合多部门进行试产。

项目经历

iPad Pro 2024 NPI:

主导 iPad pro NPI 的最终组装测试阶段的自动化组装/检测设备导入、确保自动化设备重复性、相关性、制程能力指数、压合力测试、胶路验证等测试数据的准确，进行 DOE 验证优化产品制程设计和提高设备制程能力。

1.负责组装与点胶**设备的导入、验证、不良分析**，通过相关 **DOE 验证找到最优调机参数，提高制程良率。**例如前摄模组的组装工艺优化，胶路以及胶量优化，缩短保压固化时长，**提高 UPH。**主板散热膏胶量优化 DOE，降低点胶成本和断胶频率，提高散热良率。散热垫片贴装 DOE，验证出最优光源与定位方式，**优化了视觉模块，节约成本并**且避免后续主板保护盖组装因垫片遮盖主板定位孔导致的不良。

2.负责**测试设备的导入，验证分析**如 ALT、AOI、Golden Eye、AXI 和 MUM 等设备。协助客户通过**数据分析、良率剖析、CPK 制程能力分析**等一些手法优化新产品/制程的设计。例如 MUM ，在机台合盖前进行镭射检测的点位挑选，挑选出最重要以及经常**不良的点位进行管控**，避免不良机台合盖出货。

3. 负责 **NPI(研发与试产)至 MP(量产)的衔接**，制作生产中**设备的改善报告和不良分析报告、各阶段结束后的总结报告，编写设备制程数据验证报告和设备 SOP。**

美国配电变压器新工厂建设与生产体系搭建：

因中美贸易**关税政策**变化，事业部计划**在美国**德州达拉斯市**新建**配电变压器制造**工厂。**作为**工艺技术负责人**，需提供技术支持,解决新工厂在"**人机料法环**"方面的核心问题，如美国本土相关行业的**技术工人稀缺**、**用工成本高昂**、**自动化**和数字化**覆盖率低**、**UL/IEEE 认证壁垒**、**供应链断裂风险**（大部分物料需从中国海运）、以及**严格**的 EPA/OSHA **监管要求。**为满足技术落地与生产需求,突破上述技术瓶颈，我为该过程贡献了以下项目成果。

1.本土化人才培养体系搭建:

项目背景：由于美国变压器制造行业技术人才短缺，工厂产线员工多为墨西哥籍工人，语言沟通（英语/西班牙语）及技能水平存在较大差异。为确保生产质量符合 IEEE 标准并提升效率，需建立标准化培训体系，优化作业指导（SOP），降低人为操作误差。

职责与成果：负责**编制了** 109 页全彩**《变压器制造工序卡》**，涵盖绕线、插片、总装等 11 个关键工位,明确关键工艺（如断线焊接工艺，线张力大小设定），每个工位**录制** 15 到 40 分钟**标准化作业视频**（涵盖质量关键控制点）并配置中英字幕，开发**上岗资质评定表**（含理论考试+实操考核），设定 80 分合格线,邀请质量,生产和工艺工程师定期对操作工进行测评。使每个工位的新员工**培训周期从 4 周缩短至 2 周，上岗合格率提升 53%。**

2.半自动引线脱漆设备的导入与优化:

项目背景：由于美国环保法规和劳工保护法更为严格，国内原有工艺流程中涉及职业危害和环保不合格的工序需重新规划。其中，引出线脱漆工艺采用化学药水浸泡脱漆，原先工人作业无特殊保护进行，现需要导入一台符合环保要求、职业危害小的半自动脱漆设备。

职责与成果：负责与设备厂商的**技术协议谈判**，优化了脱漆废液处理系统，设计废液循环与回收装置，使废水回收率达到 85%，减少废液排放量 30%，符合排放标准，设计药水槽误触防呆，防止工人受到化学灼伤，**保障职业安全**，通过优化设备布局和工艺流程，将单次脱漆作业时间从 3 分钟缩短至 1 分钟，**生产效率提升 75%。编制新版《脱漆作业指导书》**，明确操作流程、安全规范和环保要求，并**通过 SOP 培训生产员工**，确保操作规范性和一致性。

用于大重量产品(1t)进行长途海运的包装与防护设计以及装柜作业指导：

项目背景：因为事业部海外业务扩展，部分大重量型号的变压器需要发送至西亚、北美和南美等远洋地区，运输方式一般采用海运，而海运期间要经历一到两个月的长途远洋运输。在海运期间途中有风浪晃动和长期颠簸的危险因素，现有的货柜内的运输箱可能会因为承重不均匀出现变形甚至倒塌，而内部产品也会出现移位碰撞，并且现有的运输箱对货柜内空间的利用率不足，而远洋货柜的租金高昂，如果不能充分利用货柜的空间，将会是一笔不小的浪费。基于此，设计一种用于大重量变压器放置的木箱和包装，稳固地固定变压器、充分地利用货柜内的空间，成为亟待解决的重要技术问题。

职责与成果：用 **Creo&CAD 设计**了一款可承重 2 吨的**高强度结构木箱**，设计 8 根实木撑条为 1 对 1 搭建的承重结构，使其承重能均匀导力，确保抗压强度达到 1000kg/m²，该包装箱可在 40HQ 集装**箱内分两层堆放**，一层可摆放两排，集装箱**空间利用率提高了 40%**，**节省**单个集装箱租赁费用约 **4.5 万元。**经过**设计**震动**试验**，模拟长途海上运输，优化箱内产品的定位和防腐蚀保护，确保了箱体的强度和内部产品质量。美国收到货后 130 多个**木箱均无损坏,内部产品均无质量损失,获得同事一致好评。**后续编制《大重量包装设计作业指导书》和

《装柜作业指导书》，**明确设计规范**、装柜流程和质量控制要求，为后续类似产品**提供标准化指导**，并且所在部门后续为该种木箱**提报了专利**。

环保型工业水性漆涂装的新工艺开发：

项目背景：因公司业务扩展，新建美国工厂和吉州工厂，生产过程需要符合当地环保和劳工保护规定，但以往为油箱上漆需要先用角磨机打磨然后用抛光机打磨，然后使用喷漆枪将油漆喷涂在油箱表面，其中打磨和抛光部分会产生大量烟雾和粉尘，如没有专门隔离间对全车间影响巨大，而喷漆更是污染周围环境，喷漆时油漆大量雾化在空气中，长期这样对操作员和周围环境都会有巨大危害，因此为了符合当地环保政策规定，减小职业危害，节约工时，降本增效，需要寻找新的工艺以取代旧的。

职责与成果：我**全程负责开发**用水性漆代替油性漆的**新工艺**。从选漆开始，我参考了相关行业的经验，水性漆是取代油漆的良好选择，水性漆符合国际环保标准（如美国的 Green Seal）和国内标准。缺点是水性漆比较贵，可选择供应商少，在与采购合作**开发**到杜邦作为**供应商**，**提供**我们需要的环氧底漆和耐候面漆**样品**，并由供应商出具性能合格报告和 SGS **第三方环保检测报告**，在供应商寄来样品后，我设计了 **DOE** 来**验证**油漆的性能是否满足我们的质量要求，包括盐雾试验、老化试验和百格试验。性能验证后，我**参考 DeepSeek** 对涂装工具选择和涂装操作的建议，经过**两次验证**和**内部评审**，最终**确定工具**为海绵滚筒为主细节刷为辅，**刷漆手法**垂直交叉法，底漆使用滚筒薄涂 2 次，沿长边方向均匀施工，第二道交叉进行，每道间隔 4 小时，面漆待底漆 8 小时实干后涂刷一道。最终**组织各部门领导**如质量、制造、销售、研发和工艺进行**现场评审**，形成**总结报告**，**跟踪小批量试产**情况，**输出 SOP**。该成果省去了打磨抛光的过程,单台节省工时约 1.23 工时，**效率提升 40%**，每台节省 18.45 元，**年收益约 16605 元**，场地上减少了一个喷漆房的场地规划，最重要是**符合**了当地的**安全和环保生产规定**，**减小了职业危害**。

个人技能

语言能力：熟练使用英语听说读写，英语等级 CET 6。

办公能力：熟练使用 Office&WPS 等办公软件进行工作总结和数据分析。

技术能力：熟练使用 Creo 和 CAD 进行模型绘制，熟练进行基于 stm32 系列单片机的开发和 C 语言编程，熟练使用实验室 OMM 影像测量仪，JMP 数据分析软件、VHX-6000 超景深三维显微镜等；熟悉 visual C++6.0、MATLAB、Proteus、keil。

自我评价

本人具有良好的心理素质和抗压能力，较强的逻辑思维方式，对事情认真负责，能吃苦受累，有很强的责任心和团队意识；

对待同事朋友开朗、积极，好沟通，在项目合作中具有一定的创新意识。

热爱自动化行业，多次完成过设计项目，有嵌入式开发 144 小时的培训经验，熟悉电子测试工具使用，热爱编程，了解多种专业软件。

Personal resume

Personal Information

Name : Zephyr

Gender : Male

Mobile : 19942126314

E-mail :wenyizhang99@qq.com

Date of Birth: September 9,1999

Residency : Shangrao, Jiangxi, China

Education : Science&Technology College of Nanchang Hangkong University,2018-2022

Major : Automation（Bachelor）

Work Experience

AME(Advanced Manufacturing Engineer), Foxconn,2022.9-2024.4

1.Developed and tracked technical improvement plans for automation equipment during new product introduction (NPI) phase, designed experiments to verify feasibility and conducted cost-benefit analysis.

2.Increase the automation cover-rate of workshop to reduce labor costs while improving quality and yield. Proposed optimization solutions based on equipment operation issues to improve process capability index (CPK).

3.Applied statistical methods to analyze equipment production data and provided technical reports to work teams, enabling early issue detection and reducing new product time-to-market. Developed measurement methodologies to ensure inspection quality.

4.Conducted verification testing per customer requirements to ensure compliance of manpower, machines, methods and materials (4M), compiled test results into comprehensive reports.

5.Performed routine maintenance checks on automated equipment, conducted periodic performance analysis and generated operational status reports.

Manager Trainee for abroad base, Eaglerise Electric & Electronic,2024.6-2025-5

1.Optimized existing product processes and equipment, developed new manufacturing techniques, introduced new equipment, and established standard time measurements to drive lean production and cost efficiency.

2.Designed specialized transport packaging and fixtures using Creo & CAD, evaluated feasibility of supplier-provided equipment models.

3.Developed, revised and maintained quality system documentation including process specifications, work instructions and operation flow charts to ensure accuracy and timeliness. Managed document control system for security, completeness and traceability.

4.Conducted operator training programs to improve production skills, provided on-site technical support to troubleshoot process issues and quality defects.

5.Monitored progress of domestic and overseas new factory construction, translated technical documents, provided technical consultation, proposed production line improvements and new process flows compliant with local regulations and product standards, coordinated trial production with cross-functional teams.

Achievement

iPad Pro 2024 NPI:

In this NPI process, I introduced 8 new automation equipment (4 dispensing machines, 2 assembly machines and 2 testing equipment) into the production, tracked the production data, completed the DOE required by the customer, and maintained the normal operation of the daily maintenance.

1. Responsible for the **introduction, validation and failure analysis** of assembly and dispensing equipment. Through relevant **DOE** verification, the optimal machine adjustment parameters were found to improve the process yield. For instance, For instance, by adjusting the machine vision light source to capture clearer pictures to improve localization and re-inspection accuracy.
2. Responsible for the introduction and validation of testing equipment such as ALT, AOI, Golden Eye, AXI and MUM, etc. Assist customers in optimizing the design of new product/machine through data analysis, yield analysis, CPK process capability analysis and other methods.
3. Responsible for the connection from NPI to MP (Mass Production), create improvement reports and failure analysis reports for production equipment, create summary reports at the end of each phase, and write equipment process data verification reports and equipment SOPs.

New factory construction in the US:

Due to the uncertainty of tariff policy, the division plans to build a new manufacturing plant in Dallas, Texas, USA. However we had met some critical problems in terms of 4M1E(Man,Machine, Material,Method,Environment).As the technical supporter I contributed the following key achievements to address these issues:

1.Local labors are lack of relevant experience: For training the local employees, I compiled a 109-page Transformer Manufacturing Process Card, produced a 15 to 40-minute standardized work video (covering quality key control spots) with Chinese and English subtitles for each station, developed a qualification assessment form (including theoretical exams + practical tests), and conducted regular assessments of operators. The training cycle for new employees at each station was shortened from 4 weeks to 2 weeks, and the onboarding qualification rate was increased by 53%.

2.Shopfloor with low automation level: I responsible for technical consultation with equipment manufacturers, introduced a semi-automatic paint stripping equipment, optimized the paint stripping waste liquid treatment system, so that the wastewater recycling rate of 85%, reduce the waste liquid emissions by 30%, so that it complies with the emission standards, add fool-proofing to prevent the workers from being chemically burned, to make sure the occupational safety. Shorten the single paint stripping cycle time from 3 minutes to 1 minute, the production efficiency increased by 75%. Written a "Paint Stripping SOP" and train the operator to ensure the operation standardization.

3. Material transportation challenges: I designed a wooden package box that can carry 2 tons of weight on Creo, the crate can be stacked in 2 layers in a 40HQ container and one layer can be placed in two rows, increasing the utilization rate of container space by 40% and saving the cost of renting a single container by about 45,000 RMB. After simulating the shipping test and optimizing the positioning and protection of the products inside the crate, the strength of the crate and the quality of the product are ensured. And I written the "Large Weight Packaging Design instruction" and "Loading instruction" to clarify the design specification, loading process and quality control requirements, which provide standardized operating for similar products in the future, and I submitted a patent application for the wooden package.

4.Stricter environmental regulations: In order to comply with local environmental regulations and reduce occupational hazards, I was responsible for the development of a new process of painting with water-based paints to replace oil-based paints. At the beginning of the project, I selected DuPont as the supplier with reference to the relevant industry experience. After the supplier sent us the samples and SGS environmental test reports, I designed the DOE to verify the paints` performance to check whether it can satisfy our quality requirements, which included salt spray test, aging test, and Hundred Grid Test. After the performance verification, I refer to the DeepSeek's advices on the selection of painting tools and the operation of painting , after two practice and internal reviews, and finally organize the quality, manufacture, sales, R & D and process`s leaders to have a on-site review, then output report, proceeding a mini trial production. Through 4 months, the verification completed. After the new process utilized, the efficiency of a single unit was increased by 60%, saving 18.45 RMB per unit, and most important is complying with the local environmental protection production regulations and reducing occupational hazards.

SKILLS

Language Skills: Proficient in using **English** for oral, reading and writing **(CET 6)**,

OFFICE Skills: Proficient in using **office** software such as Excel, PPT&Word, etc.

Technical Skills: Proficient in model drawing using Creo and CAD.

Proficient in using techniques such as **GRR, CORR, and CPK** to verify automation equipment.

Self Assessment

Cheerful and **positive** when getting along with colleagues and friends, and I am **good at communication**.

I have **nice psychological quality**, **meticulous logical thinking**, **strong sense of responsibility** and **teamwork**.