## Eolane China Co., Ltd. Company Profile

#### I. Company and plant overview

Eolane group, established in 1975, is a leading European provider of electronic manufacturing services (EMS). We have over 2,400 outstanding staff in the world, and revenues in 2022 is 314MEuro, the Eolane Group guarantees technological performance, proximity and customer intimacy with pragmatism and agility.

Concretely, we are an EMS designer, manufacturer, producer and maintainer of electronic assemblies and sub-assemblies, and we have also developed expertise in OMD (Original Design Manufacturer) and CDM (Contract Design Manufacturer). It is the second largest EMS company in France.

Our profession is the design of advanced electronic PCBA produced in small, medium and large series, and their integration into a final product. We produce on 3 continents---Europe, North Africa and Aisa, as close as possible to the needs and markets of our customers.

Our value proposition is based on an expertise that allows us to meet a wide range of needs of industrial players from eight main markets: Defense, Industry, Telecom, Railway, Automotive, Medical, Energy and Aeronautics.

Founded in 2005, Eolane China started in SIP, SUZHOU, JIANGSU province, China. which is the No.1 Industrial Park in China, 2 hours from Shanghai Pudong International Airport and 50 minutes from Hongqiao Airport. It is 100% owned by the Group.

The factory covers an area of 5300 square meters, with 500 outstanding staffs. The plant adopts the general manager responsible system and has PI (Production & Industrial), Business Development, Supply Chain Management, Quality, Finance, HR and Legal, total 7 primary department. We have been deeply involved in Greater China for 17 years, we are passionate about Kaizen, Amoeba and digital to improve and enhance our overall operation competence and our process capabilities cover SMT, traditional & selective wave soldering, automatic soldering, automatic pin insertion, washing, conformal coating, assembly, ICT, FT, etc. With ISO13485(medical), ISO22163(railway), IATF16949(automotive) and other quality system certification. We' re committed to serving the customers who has high requirements for product reliability and quality, with medium /low volume, Rail Transit, Clean Energy, etc.

Eolane China has maintained strong sales growth in the past four years: 55.4M->72.3M-> 88.6M->92M respectively (2020-2021-2022-2023).

#### II. Milestones in the process of conducting TPM activities

In 2021, Eolane China decided to implement TPM system to improve the QCDSM in response to the rapid changes in the market and in the industry. The TPM project was officially launched on August 11, 2021, followed by the TPM House of Eolane, which we established based on the TPM system. Starting from the standardization&5S&visual on-site management and performance control system as the base system, we encourage all employees to participate, establish a factory cost model and value stream, and continuously improve our operational system through eight pillars: progressive quality, environmental health and safety, focus improvement, independent management, planned maintenance, education and training, lean flow, and advanced equipment and product management(We just kicked off five pillars on 2021 firstly). To achieve safety first, quality first, and flexible delivery Moving forward with the factory strategy of cost reduction and talent cultivation, ultimately meeting our factory mission (lower manufacturing costs, more flexible product delivery, better quality control, safer production environment, digital empowerment) and factory vision (to become a world-class professional electronic manufacturing service provider).

The milestones events in the journey of TPM activities are divided into the following four phases

## 1) In the preparation stage:

TPM journey of Eolane China was officially launched in 2021.08.11, and TPM steering committee was established at that time, in the preparation stage, we start from base system and initiated 4 projects: 6s and visualization optimization to restore basic condition of shop floor; PCS (performance control system) to manage all levels of KPI of the plant; new product introduction process optimization and process conformance improvement. This stage created a solid foundation for further TPM activities.

#### 2) In the pilot phase:

We selected SMT as the pilot area. And many kaizen teams were formed to do optimization, e.g., change over reduction, breakdown reduction, CILT activities, competence improvement. The performance had a significant improvement and operators and manages were all involved. We further feel the importance of TPM.

# 3) In the expansion phase:

In 2022.07, we successfully held the TPM steering committee meeting. We look back to our gains, and plan for expansion. We introduced 5 pillars of FI, AM, PM, E&T and EHS. TPM manager was defined, and every pillar's team has been established. Meanwhile, we use digital system to support TPM activities to improve the efficiency and visualization. More and more colleagues started to participate in TPM activities and enjoy the benefit of TPM.

## 4) In the stabilization phase:

The activities of each pillar are carried out based on the defined pillar route, we always doing continuous improvement and pursuing excellence. We encourage full participation of all staff and make our plant develop together with employees' personal development. We continuously practicing digital development and enabling TPM activities to be faster, easier, and more stable through digital support.

#### III. Benefits gained from conducting TPM activities

The TPM system activities have brought significant improvements to the plant's performance and created a positive company continue improvement culture in the following two ways.

Tangible results: Since TPM was launched, the cumulative improvement savings reached 4 million RMB. The work-related accidents are zero. The OEE increased by 11% and OTD increased to 100%. The number of breakdowns decreased by 31%, customer complaint decreased by 35%, scrap rate decreased by 36% and 58 internal trainers were developed and active.

Intangible results: The plant has established an operation management system across pillars and functional departments, strengthened the loss data collection system and the operation review mechanism and performance control system at all levels and formed a good scientific PDCA methodology for problem solving. A good working method has been adopted by the employees at all levels of the plant and the employees are empowered. Digital system also increased standard procedure and established the fool-proof to improve work efficiency and quality.

The achievement of excellent results has greatly improved the overall morale of the team, and gradually formed the cooperation among pillars and functional departments, continuously promoted the enterprise culture of pursuing excellence, which has provided the momentum for the continuous development of the company.

# IV. The key to carry out TPM activities

TPM activities have been introduced in Eolane China Co., Ltd for more than 2 years and the key to carry out TPM activities are:

- Strong support from the company's senior management. The management commitment
  is the key to TPM success. The GM and senior managers were actively involved in
  TPM audits and clarify the direction of TPM to all staffs.
- 2) Total Participation. More and more Employees involved into TPM activity, not only the management staff, also the operator in production, they have more sense of ownership, manage their own machine, consistently promote loss reduction activities.
- 3) Tools and methodologies well applied in each area of activities. The in-depth use of tools and methodologies enhanced the employees to solve problem efficiently and changed their mindset of working.
- 4) Effective pillar activities: AM and PM Pillars made efforts to restore and improve the basic condition of the equipment and establish preventive system. FI focused on losses analysis and improved production efficiency and quality. E&T identified the needs of the development of the employees, supported the development of the capability of each pillar and improved the skill level of the operators. Through routine inspections, BBS and safety hazard investigations, EHS prevented accidents from recurring, aiming to create a comfortable working environment with zero accidents, zero injuries and zero pollution.