

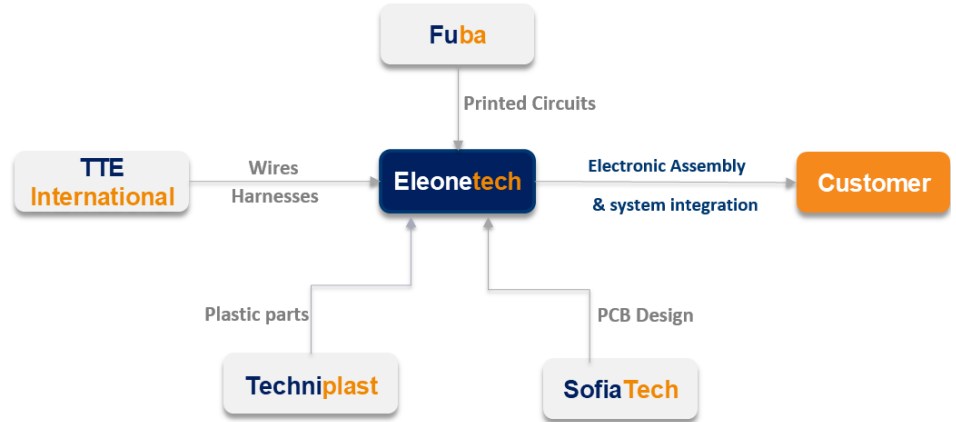


WELCOME

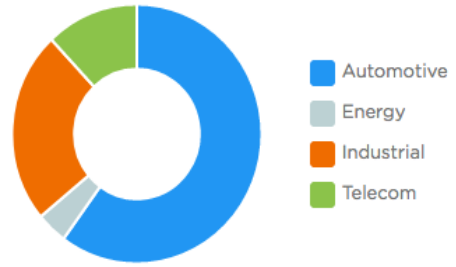
The background features a dark blue horizontal band across the middle. Within this band is a light blue, pixelated world map. A network diagram of white lines and dots is overlaid on the entire page, with a prominent dark blue dot at the center of the network.

**OneTech**  
INGENUITY FOR A BETTER INDUSTRY

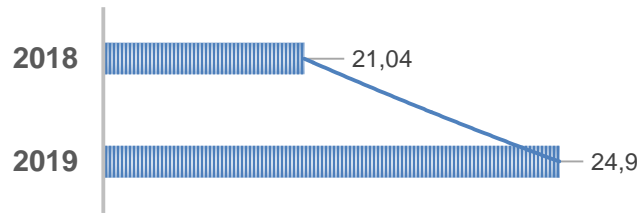
# AFRICA KAIZEN AWARD 2020 - Organization Presentation



TURNOVER BY SECTOR



ANNUAL TURNOVER (US M\$)



CERTIFICATIONS    ISO9001    ISO14001    ISO45001    IATF16949

# Mechatronics Subsidiaries

A regional Supplier to tier-one of the Automotive Industry, of better performing systems at cost Leadership.  
Supply of Electronic, Electrical and Electromechanical components and modules :

Automotive, Telecommunications ,Industry, Energy, Aerospace...



Components

## Plastic Modules



Technical Plastic Injection

**Techniplast** **OneTech**  
A Onetech company (Morocco) M&A



Modules & Assembly

## Electromechanical Modules



Modules and harnesses

**TTE International**  
A Onetech company



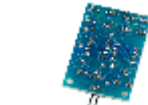
Modules & Assembly

## Electronic Manufacturing services



Electronic Cards

**Eleonotech**  
A Onetech company



Components

## Printed Circuit Boards

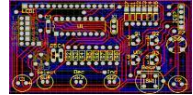


PCB double sided and multi-layer

**Fuba**  
A Onetech company



## Electronic Development Services



**Sofiatech**  
A Onetech company



Our technical partners

**Eleonotech**  
A Onetech company

**Techniplast**  
A Onetech company

**Fuba**  
A Onetech company

**Tunisie Cables**  
A Onetech company

**TTE International**  
A Onetech company

**Sofiatech**  
A Onetech company

**OneTech**  
B.S

**OneTech**  
Mobile

**OneTech**  
M&A

# Electronic Manufacturing Services

**Eleonotech** offers electronic manufacturing services including SMT, manual Insertion, leaded and lead free wave soldering as well as coating, potting, mechanical assembly and testing.

## Full service provider for our customers & partners

- ➔ CoDesign / routing with our partners
- ➔ New Product Introduction (NPI)
- ➔ Development of ICT and FCT tools

## Products

- ➔ Interior Switches & Controls:  
Control Panel, Door Control & Interior lighting, Car electronics
- ➔ Industrial control boards:  
access control, power meters boards, HVAC control boards.

**Valeo**

Mirrors switch Windows switch levers switch Steering wheel switch Start Stop switch

Power meters **BOSCH**

**INTEGRA** METERING

Access control

Industrial control **ANTOLIN**

**APTIV**

Remote Key

**Valeo**

Cruise control Switch

SOS Module

Toggle switch

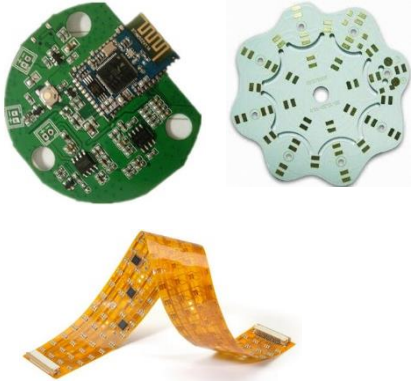
Control Panel

**Eleonotech**  
A Onetech company

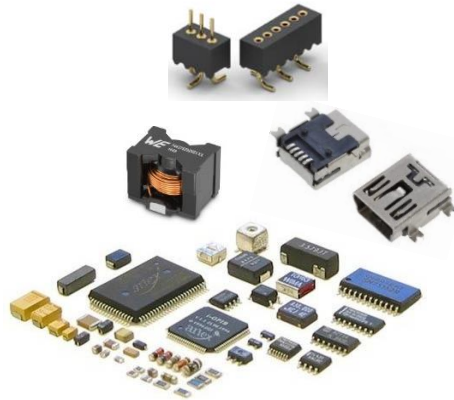
# SMT Process description



# Component Placement Capability



FR4, IMS and  
Flex PCB



Standard SMT packages

Chip shooter accuracy: 50um  
Multifunctional head: 30um



Exotic SMT packages

Connectors, Pin in paste, SIM  
holder, headers, battery holder...

## Traceability

### Full traceability deployment on SMT process

- Specifications definition with our partners
- Multi level tracking solutions
- Products in process unique identification
- Automatic process parameters records



Material reception with  
unique ID



SMT Process



Scan and trace solutions  
on Final Test

# References



# Awards



**Best Quality  
Supplier award  
2016**



**VALEO logistics  
Award Best  
supplier 2017**



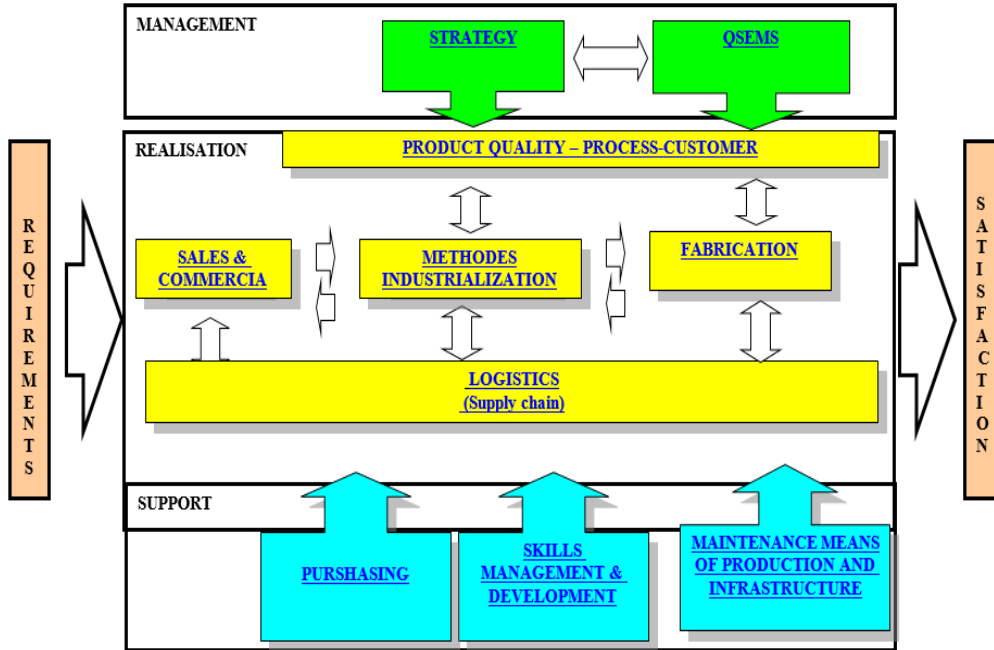
**Italian  
Business Oscars**



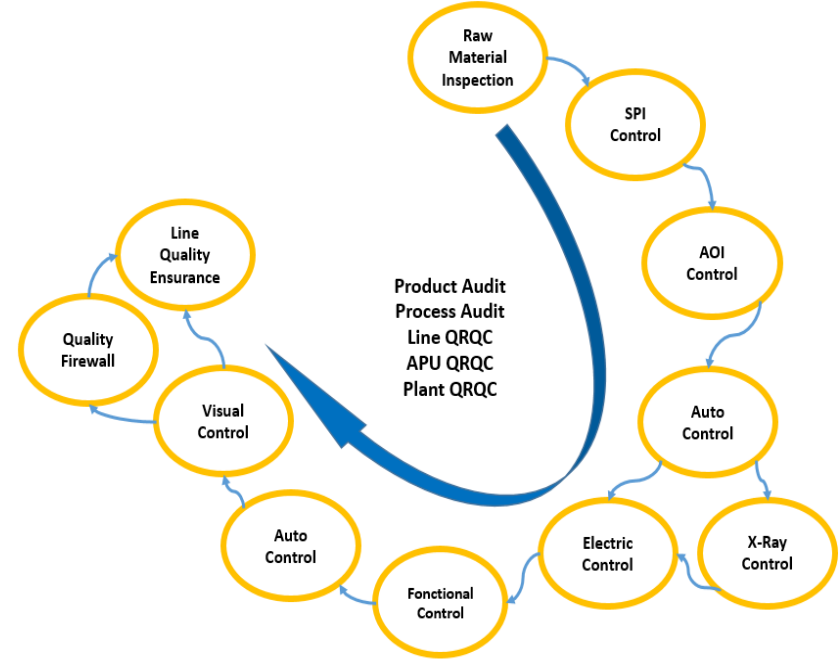
**KAIZEN  
Tunisia Prize**

# AFRICA KAIZEN AWARD 2020 – Work Structure & Quality Control

## Work Breakdown Structure



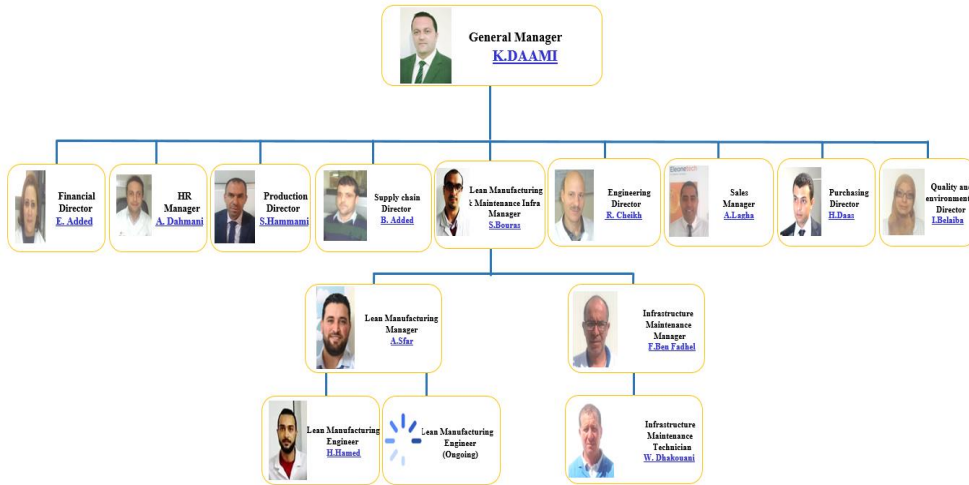
## Quality Control System





# AFRICA KAIZEN AWARD 2020 - Management commitment & staff Involvement

## Kaizen Activities Level



## Staff Involvement

- 1- Performance Report
- 2- Kaizen Training Plan
- 3- Kaizen improvement projects
- 4- Ideas Management System



## Management commitment

- Set aside an adequate budget for the realization of Kaizen activities;
- Kaizen training and awareness-raising for all staff;
- Participation in the Training of KAIZEN trainers organized by the UGPQ in partnership with JICA;
- Motivating staff by encouraging ideas for improvement and innovation ;
- Benchmark missions in several local companies to share know-how and possible collaborations ;

# AFRICA KAIZEN AWARD 2020 - Objectives of the *Kaizen* activities

## Vision and strategies

- 1- Customer satisfaction by achieving Quality / Cost / Delivery objectives
- 2- Mudas elimination and cost reduction
- 3- Changing the workers mindset and improving their working conditions
- 4- The evolution of the market position in new sectors (medical, home automation, communication, railways)

## Roadmap for Kaizen Implementation

2016	2017	2018	2019	2020	2021	2022	2023
<b>New Tools</b>	<b>New Tools</b>	<b>New Tools</b>	<b>New Tools</b>	<b>New Tools</b>	<b>New Tools</b>	<b>New Tools</b>	<b>New Tools</b>
- 5S - Hoshin - Poka-Yoke - SMED - Visual Mngmt - 8D	+	+	+	+	+	+	+
	- Layout - Product Storage	- QRQC Ligne - KOSU Ligne	- KARAKURI - Makigami - One Piece flow - QRQC UAP - VSM - TPM - Maintenance Mngmt	- KATA improvement - KANBAN - Energy management - Ergonomy - QRQC Env-Sécurité - Material Consumption - Traceability	- 6S-Lean-Safety - Lean 4.0 - ANDON - Lean invest - Six Sigma	- JIDOKA - HEIJUNKA - E-ANDON - JIT	- Machine to machine - E-KANBAN
<b>New Axis</b>	<b>New Axis</b>	<b>New Axis</b>	<b>New Axis</b>	<b>New Axis</b>	<b>New Axis</b>	<b>New Axis</b>	<b>New Axis</b>
- Production - Quality	+	+	+	+	+	+	+
	- Flow	- MES - Warehouse	- Finance - Supply Chain - Training - RH - Stock WIP CMS	- Méthodes - Infrastructure	- R & D - IT	- Purshasing - Ordonnancement	- Maintenance

# AFRICA KAIZEN AWARD 2020 - Continuity of the Kaizen process

## KAIZEN projects in collaboration with CETIME & JICA 2018-2019



Japanese  
Expert

- Mr Katsutoshi IKEDA

Interpreter

- Mrs Sophia BEN ROMDHANE

CETIME  
Consultants  
Team

- Mr Hatem AMOR – CETIME (Team Leader)
- Mr Akram TOUITI – CETIME
- Mr Nadhem HANNACHI – MIPME
- Mrs Nouha KHALED - PACKTEC

**KAIZEN Project:**  
**Hoshin for automotive product**

**Productivity:** Total Improvement rate  
**543,3%**

**KAIZEN Project:**  
**Dandori Time Reduction**

Total Improvement rate  
**81,4%**

**KAIZEN Project:**  
**Hoshin for industrial product**

**Productivity:** Total Improvement rate  
**442,6%**

**KAIZEN Project:**  
**Warehouse Flow Optimization**

**Productivity:** Total Improvement rate  
**158,2%**

**KAIZEN Project:**  
**5S in  
the Shop-Floor and the Office**

Total Improvement rate **21%**

# AFRICA KAIZEN AWARD 2020 - Continuity of the Kaizen process

## KAIZEN weekly committee



## 5S weekly Audit



## KAIZEN Workshops Follow-up

Eleonetch  
A Onetech company

Continuous improvement workshops follow-up-2018

Zone	N°	Titre de workshop/projet	Responsable	Date de Planification	Équipement closing date	Phase	Estimé Gain	Realisé Gain	Notes	Adressé(e)
INDUSTRIEL	2	Optimisation Process	Yassir	08/02/2018	15/02/2018	Salon Roubaie	100	100		22,400
	3	Optimisation Process	Yassir	10/02/2018	16/02/2018	Welding Lab	300	300		22,400
	4	Optimisation Process	Yassir	08/02/2018	15/02/2018	Moulin de St	400	400		22,200
	5	Optimisation Process	Yassir	08/02/2018	15/02/2018	CBWork	200	400		100,000
R&D	7	Optimisation Process	Yassir	22/04/2018	02/05/2018	Moulin de St	150	150		100,000
	8	Optimisation Process	Yassir	20/04/2018	19/04/2018	Ferret Ben Fallah	200	200		100,000
	6	Optimisation Process	Yassir	20/04/2018	19/04/2018	Ferret Ben Fallah	200	200		100,000
	9	Optimisation Process	Yassir	20/04/2018	19/04/2018	Ferret Ben Fallah	200	200		100,000
	10	Optimisation Process	Yassir	20/04/2018	19/04/2018	Ferret Ben Fallah	200	200		100,000
	11	Optimisation Process	Yassir	20/04/2018	19/04/2018	Ferret Ben Fallah	200	200		100,000
	12	Optimisation Process	Yassir	20/04/2018	19/04/2018	Ferret Ben Fallah	200	200		100,000
	13	Optimisation Process	Yassir	20/04/2018	19/04/2018	Ferret Ben Fallah	200	200		100,000
	14	Optimisation Process	Yassir	20/04/2018	19/04/2018	Ferret Ben Fallah	200	200		100,000
	15	Optimisation Process	Yassir	20/04/2018	19/04/2018	Ferret Ben Fallah	200	200		100,000
	16	Optimisation Process	Yassir	20/04/2018	19/04/2018	Ferret Ben Fallah	200	200		100,000
ASSEMBLAGE	17	Optimisation Process	Yassir	20/04/2018	19/04/2018	Ferret Ben Fallah	200	200		100,000
	18	Optimisation Process	Yassir	20/04/2018	19/04/2018	Ferret Ben Fallah	200	200		100,000
	19	Optimisation Process	Yassir	20/04/2018	19/04/2018	Ferret Ben Fallah	200	200		100,000
	20	Optimisation Process	Yassir	20/04/2018	19/04/2018	Ferret Ben Fallah	200	200		100,000
	21	Optimisation Process	Yassir	20/04/2018	19/04/2018	Ferret Ben Fallah	200	200		100,000
ASSEMBLAGE	22	Optimisation Process	Yassir	20/04/2018	19/04/2018	Ferret Ben Fallah	200	200		100,000
	23	Optimisation Process	Yassir	20/04/2018	19/04/2018	Ferret Ben Fallah	200	200		100,000
	24	Optimisation Process	Yassir	20/04/2018	19/04/2018	Ferret Ben Fallah	200	200		100,000
	25	Optimisation Process	Yassir	20/04/2018	19/04/2018	Ferret Ben Fallah	200	200		100,000
R&D	26	Optimisation Process	Yassir	20/04/2018	19/04/2018	Ferret Ben Fallah	200	200		100,000
	27	Optimisation Process	Yassir	20/04/2018	19/04/2018	Ferret Ben Fallah	200	200		100,000

## MAKIGAMI KAIZEN Workshop



## KAIZEN Team Genba



Eleonetch  
A Onetech company

Continuous improvement & Kaizen workshops follow-up-2019

N°	Workshop Title	Phase	Priority	Launch date	Need closing		Closed	Ongoing	Notes	Estimated Gain	Real gain
					initial closing	final closing					
1	Optimisation Process	Phase 1	Haute	25/02/2019	30/03/2019	25/07/2019	100%		Phase 1: Optimisation des paramètres de la machine	20%	20%
2	Optimisation Process	Phase 1	Haute	11/03/2019	30/03/2019	25/07/2019	100%		Phase 1: Optimisation des paramètres de la machine	40%	40%
3	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%		Phase 1: Optimisation des paramètres de la machine	40%	40%
4	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%
5	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%
6	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%
7	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%
8	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%
9	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%
10	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%
11	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%
12	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%
13	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%
14	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%
15	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%
16	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%
17	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%
18	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%
19	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%
20	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%
21	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%
22	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%
23	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%
24	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%
25	Optimisation Process	Phase 1	Haute	02/03/2019	30/03/2019	25/07/2019	100%	10%	Phase 1: Optimisation des paramètres de la machine	20%	20%

# AFRICA KAIZEN AWARD 2020 - Continuity of the Kaizen process

## SAN GEN SHUGI Attitude & QRQC Daily Management

### LINE QRQC

1



2



3



4



5



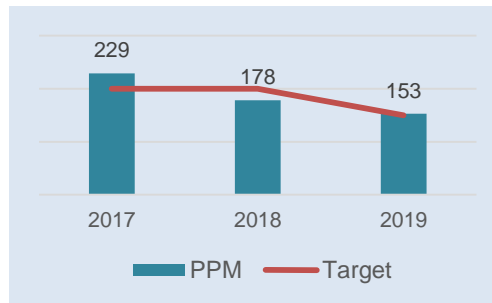
### Daily APU QRQC



### Daily PLANT QRQC



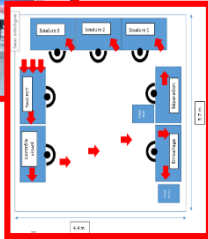
### Global PPM Evolution



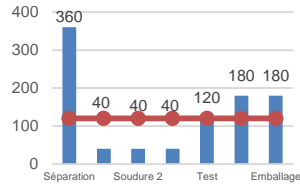
# AFRICA KAIZEN AWARD 2020 - Continuity of the Kaizen process

## KAIZEN Project: Hoshin for automotive product

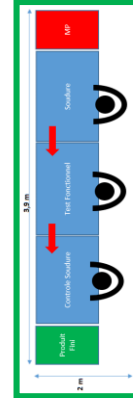
BEFORE



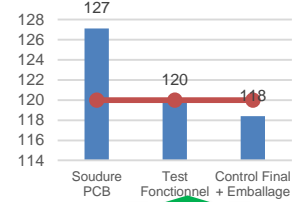
**Total Productivity (pc/p/h/m<sup>2</sup>) : 1,1**



AFTER



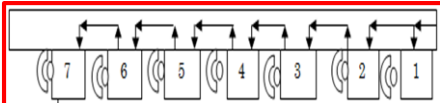
**Total Productivity (pc/p/h/m<sup>2</sup>) : 10,65**



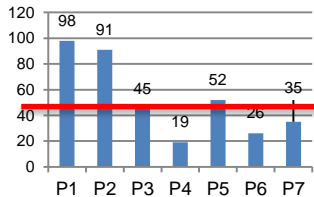
**543.3 %**

## KAIZEN Project: Hoshin for industrial product

BEFORE



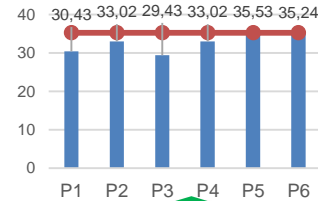
**Total Productivity (pc/p/h/m<sup>2</sup>) : 0,67**



AFTER



**Total Productivity (pc/p/h/m<sup>2</sup>) : 1,78**

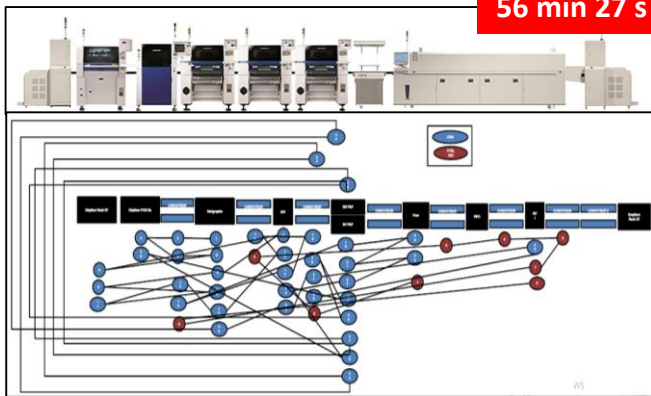


**442.6 %**

# AFRICA KAIZEN AWARD 2020 - Continuity of the Kaizen process

## DANDORI Time Reduction

BEFORE



56 min 27 s

AFTER

Liste des tâches à faire par le chargé machine lors de chargement de série	
Les tâches à faire avant de commencer le changement de série	
Action	Machine
Prendre un lot de réglage	Employé à Rack
Reglage logiciel rack KT	Employé à Rack
Les tâches à faire en cours de chargement série	
Action	Machine
prendre manivelle et faire réglage manuelle	Convoqueuse Entrée P&P
tenir le réglage en trait sur tellin	Convoqueuse Entrée P&P
Passer en mode automatique	Convoqueuse Entrée P&P
passer le convoqueur en mode manuel	Convoqueuse Entrée Four
prendre manivelle et faire réglage manuelle	Convoqueuse Entrée Four
tenir le réglage en trait sur tellin	Convoqueuse Entrée Four
Passer en mode automatique	Convoqueuse Entrée Four
selection programme de four stabilisation	Four
validation profil sélagrids interne/cane	Four
passer le convoqueur en mode manuel	Convoqueuse sortie Four
prendre manivelle et faire réglage manuelle	Convoqueuse sortie Four
tenir le réglage en trait sur tellin	Convoqueuse sortie Four
Passer en mode automatique	Convoqueuse sortie Four
passer le convoqueur en mode manuel	Convoqueuse sortie Four
appuyer sur bouton et faire réglage manuelle	FFO
tenir le réglage en trait sur tellin	FFO
Passer en mode automatique	FFO
passer le convoqueur en mode manuel	Convoqueuse Entrée ACl
prendre manivelle et faire réglage manuelle	Convoqueuse Entrée ACl
tenir le réglage en trait sur tellin	Convoqueuse Entrée ACl
reglage position lecture DMS (carte module ACl)	Convoqueuse Entrée ACl
Passer en mode automatique	Convoqueuse Entrée ACl
selection du programme ACl	ACI
passer carte module	ACI
passer le convoqueur en mode manuel	Convoqueuse Sortie ACl
prendre manivelle et faire réglage manuelle	Convoqueuse Sortie ACl
tenir le réglage en trait sur tellin	Convoqueuse Sortie ACl
Passer en mode automatique	Convoqueuse Sortie ACl
passer le convoqueur en mode manuel	Convoqueuse Entrée Employeur
prendre manivelle et faire réglage manuelle	Convoqueuse Entrée Employeur
tenir le réglage en trait sur tellin	Convoqueuse Entrée Employeur
Passer en mode automatique	Convoqueuse Entrée Employeur
troussation rack KT dans employeur	Employeur à Rack
pression mode automatique	Employeur à Rack

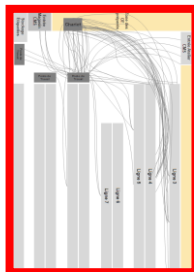


10 min 30 s



81,4%

## KAIZEN Project: Warehouse Flow optimization



### WO Preparation Time

160 min ↓ 88% 20 min

### WO Preparation traveled Distance

1000 m ↓ 85% 150 m

### Space occupation palets/ m<sup>2</sup>

0,53 palets/m<sup>2</sup> ↑ 68% 0,89 palets/m<sup>2</sup>

# AFRICA KAIZEN AWARD 2020 - Continuity of the Kaizen process

## KAIZEN Project: 5S Activity Management in the shop-floor & Office

### Shopfloor 5S Team



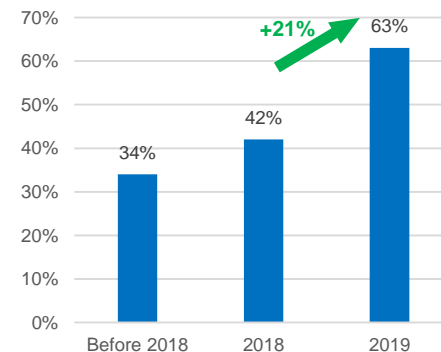
### 5S Visual Management



### Office 5S Team



### 5S Visual Management





# AFRICA KAIZEN AWARD 2020 - Continuity of the Kaizen process

## Workshops Output

**KAIZEN Card**  
Theme: Projet Kaizen Optimization of the Touch up section

BEFORE	AFTER

**Estimated Gains:**  
 Productivity : **150%**  
 Quality : **200%**  
 Space : **15%**

**KAIZEN Card**  
Theme: Kaizen of Productivity Improvement for ABB line

BEFORE	AFTER

**Earning Gains**  
 Productivity : **45%**  
 Quality : **30%**  
 Space : **20%**

**KAIZEN Card**  
Theme: Storage of returnable containers Improvement

BEFORE	AFTER

**Earnings:**  
 Productivity : **120%**  
 Quality : **80%**  
 Space : **40%**

**KAIZEN Card**  
Theme: Kaizen of RM storage in Warehouse

BEFORE	AFTER

**Earning Gains**  
 Optimization of space occupation From 0.52 pallet / m<sup>2</sup> to 0.89 pallet / m<sup>2</sup>  
 Gain **68%**  
 Improved handling time of components per item From 13.23 min to 8.56 min  
 Gain **36%**

## Workshops PDCA Management

**Tableau Chantier Hoshin BVM PA9**

Departement / Section : Production  
 Pilote : M. Mezaoui / M. Khatir  
 Date Lancement : 19/02/2018  
 Date Clôture : 29/05/2018

Produits : Mezanine PRF00001562

Taux d'avancement: **100,00%** Clôture

Objectifs :

- Equilibrage entre les postes de travail
- Minimiser l'espace du projet de 56m<sup>2</sup> à 11,28m<sup>2</sup>
- Diminuer le nombre d'opérateurs de 6,5 opérateurs à 4,5 opérateurs
- Realiser la quantité NCR de 18 à 0

Methode : **Hoshin**

Groupes :  
 Mahdi Mezaoui  
 Alassidine Star  
 Saber Kouras  
 Abdelmajid Krivatu  
 Hadji Ben Othman  
 Mourir Toumi

**Avant:**

**Après:**

	Avant	Après	Gain
Espace occupé	16,28 m <sup>2</sup>	11,28 m <sup>2</sup>	5 m <sup>2</sup>
Nbr d'opérateur	6,5	4,5	2
PPM client	18	7	11
Cadence / h	120 pc / h	120 pc / h	0

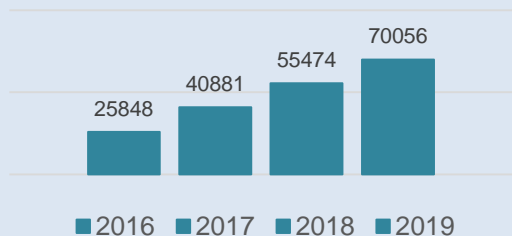
**Plan d'actions :**

N°	Actions	Chef de projet	Délai	Avancement
1	Faire un chronométrage des postes de travail		19-janv	100%
2	Confirmation du chronométrage par l'équipe méthodes		19-janv	100%

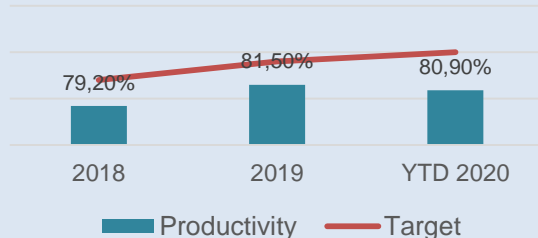
Equilibrage des tâches  
 --> Le TC soudure est de 60 s / pc 2 postes soudure seront

# AFRICA KAIZEN AWARD 2020 - Overall result of all Kaizen activities

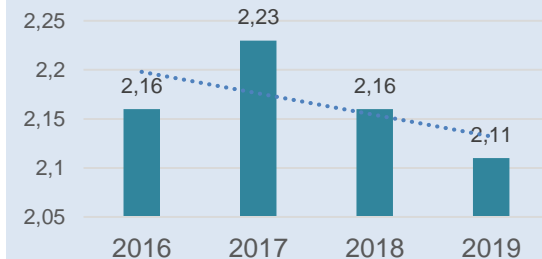
## TurnOver Evolution in KDT



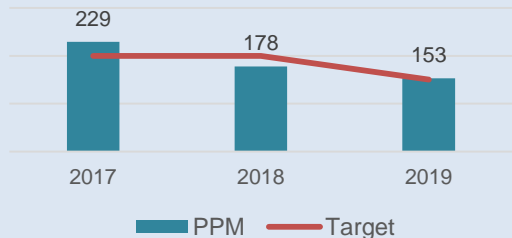
## Productivity Evolution



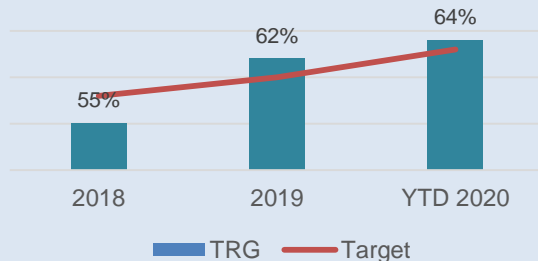
## Absenteeism



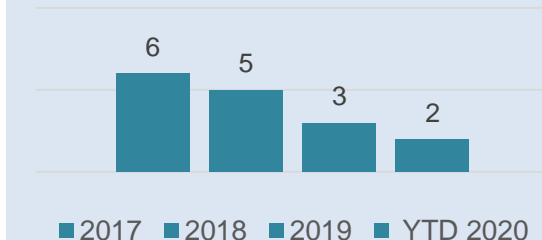
## Global PPM Evolution



## OEE Evolution



## Number of Accidents



# AFRICA KAIZEN AWARD 2020 - Changing the motivation of workers

## Change in the work environment



## Promotion of Kaizen Culture



## Spillover effects of Kaizen activities

- 1- Kaizen-Man in each APU to reinforce the Kaizen concept throughout the organization
- 2- Found a Kaizen school to strengthen Kaizen knowledge sharing towards a change of culture
- 3- Partnership with CETIME and JICA



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ATTENTION!**

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