Product Change Notification
Current Date: 06-Sep-2019

TE Connectivity

Product Change Notification: P-19-017866 **PCN Date:** 04-SEP-19

Customer: Future Electronics(0000080100) **Location:** WORLDWIDE **Agreement:** Agreement Unknown

TE would like to inform you of the following change(s) to the listed TE Connectivity Product. In case of any further questions about this change(s), please contact your TE Connectivity Sales Engineer. Affected part, drawing and/or specification numbers are listed on the attached sheet(s).

General Product Description:
Cable assemblies

Description of Changes
Manufacturing location change. Following Part Numbers will be transferred from BYDGOSZCZ (POLAND) to Morocco. **Other attachments:** Detailed transfer plan TINGIS transfer customer presentation

Reason for Changes:	
Detailed information can be found in the attached PDF, in case of questions please reach out to your responsible TE sales contact person.	
Estimated Dates:	
Last Order Date (Obsolete Parts Only):	**First Date To Ship** (Changed Parts Only):
	01-NOV-2019
Last Ship Date (Obsolete Parts Only):	**Last Date for Mixed Shipments:** (Changed Parts Only):
	31-DEC-2019

Part Number(s) being Modified:

Part Number	Part Discontinued per PCN	Customer Drawing	Customer Part Number	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
1-2083072-1	NO						
1-2083073-1	NO						
1-2083074-1	NO						
1-2083076-1	NO						
1-2083083-1	NO						
1-2083084-1	NO						
2-2083074-1	NO						
2-2083075-1	NO						
2-2083077-1	NO						

Customer: Future Electronics Inc (1290208) **Location:** Southaven **Agreement Number:** FUTAGR001

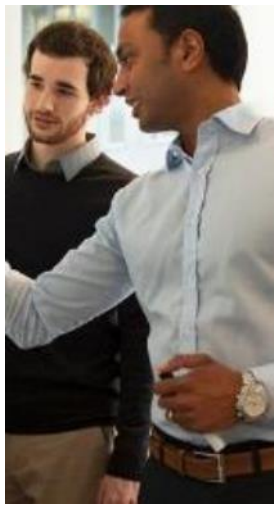
Part Number(s) being Modified:

Part Number	Part Discontinued per PCN	Customer Drawing	Customer Part Number	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
1-2083072-1	NO						
1-2083073-1	NO						
1-2083074-1	NO						
1-2083076-1	NO						
1-2083083-1	NO						
1-2083084-1	NO						
2-2083074-1	NO						
2-2083075-1	NO						
2-2083077-1	NO						

TE is actually facing **a significant lack of** additional **available workforce** in our manufacturing site in **BYDGOSZCZ (POLAND)**, continuous **labor cost increases** mandated by the Polish government are negatively impacting the manufacturing cost of labor intense cable assembly business.
This leads to **difficulties to expand our production resources** within the expected **competitive costs.**
TE Connectivity has been absorbing these negative impacts for more than two years and is now forced to take decisions on the manufacturing footprint that allow to sustain this business in customer friendly way.
Therefore, **TE Connectivity Industrial decided to transfer** the mentioned part numbers into a **TE owned facility in Morocco** where the **INDUSTRIAL BUSINESS UNIT** is creating a **plant-in-plant solution with full ownership**. This plant will offer **state-of-the-art manufacturing**, a **good cost structure** on a mid-to-long term perspective, and **access to skilled operators.**
In this way TE Connectivity Industrial cable assemblies can **ensure to support your cable assembly business also in the future**.

The transfer will be managed in 3 Phases:

- **Phase 1: Starting May** with **non-complex assemblies** (PN list below), **production lines will be duplicated and run simultaneously so no risk for your supply of goods**
- **Phase 2:** Will start in **July** focusing on **harnesses**
- **Phase 3:** Will start in **September** and include **overmolded assemblies and others**



TINGIS transfer information

Kurt Robert Hippler - 05.03.2019

EVERY CONNECTION COUNTS

AGENDA

Transfer BYD to MOR

1. **Strategic rational**
   - Why do we need to move out of BYD?
   - Plant information
2. **Transfer scenario / time plan**
   - Phase 1
   - Phase 2
   - Phase 3

Transfer BYD to MOR – Strategic rational

ISSUES:

- **lack of** additional **workforce** in BYDGOSZCZ
- continuous **labor cost increases** mandated by the Polish Government

RESULT:

- **Difficulties to expand our production resources** within the expected **competitive costs.**

SOLUTION:

- Transfer into ICT plant in Morocco where **IND** is creating a **plant-in-plant solution with full ownership**.
- Plant will offer **state-of-the-art manufacturing**, a **good cost structure** on a mid-to-long term perspective, and **access to skilled operators**

TE Connectivity: Morocco Operations

Tangier Med Free Zones

TE Morocco Auto Manuf Plant: Cable Assy, Assy & Molding
SOP 2015
10000m²
Fct 2017 : 700 employees
Fcs 2020: >1000 employees

TE Business Support Office (GM):
CSR, Sales, Finance, Cust Quality & Engineering support
700m²
100 employees

TANGER AUTOMOTIVE CITY

TE Morocco ICT Manuf Plant: Cable Assy, Assy & Molding
10500m²
Fct FY19 : 280 employees
Fcs FY23: 800 employees

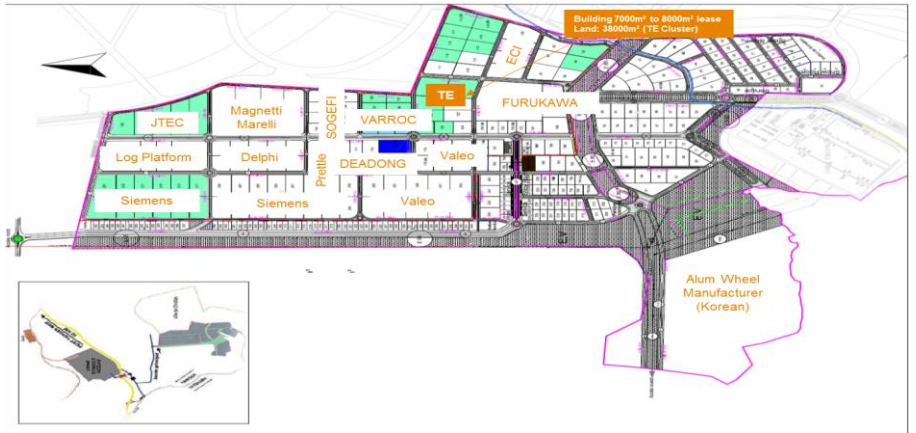
3PL Warehouse : Advanced DC
Start Up 2011
4000m²
98% Auto/2% Appliance
11000 cartons/Day
20-30 Tracks / Day
50 employees (3PL)

ICT Manufacturing Operations *(TAC Plant)*

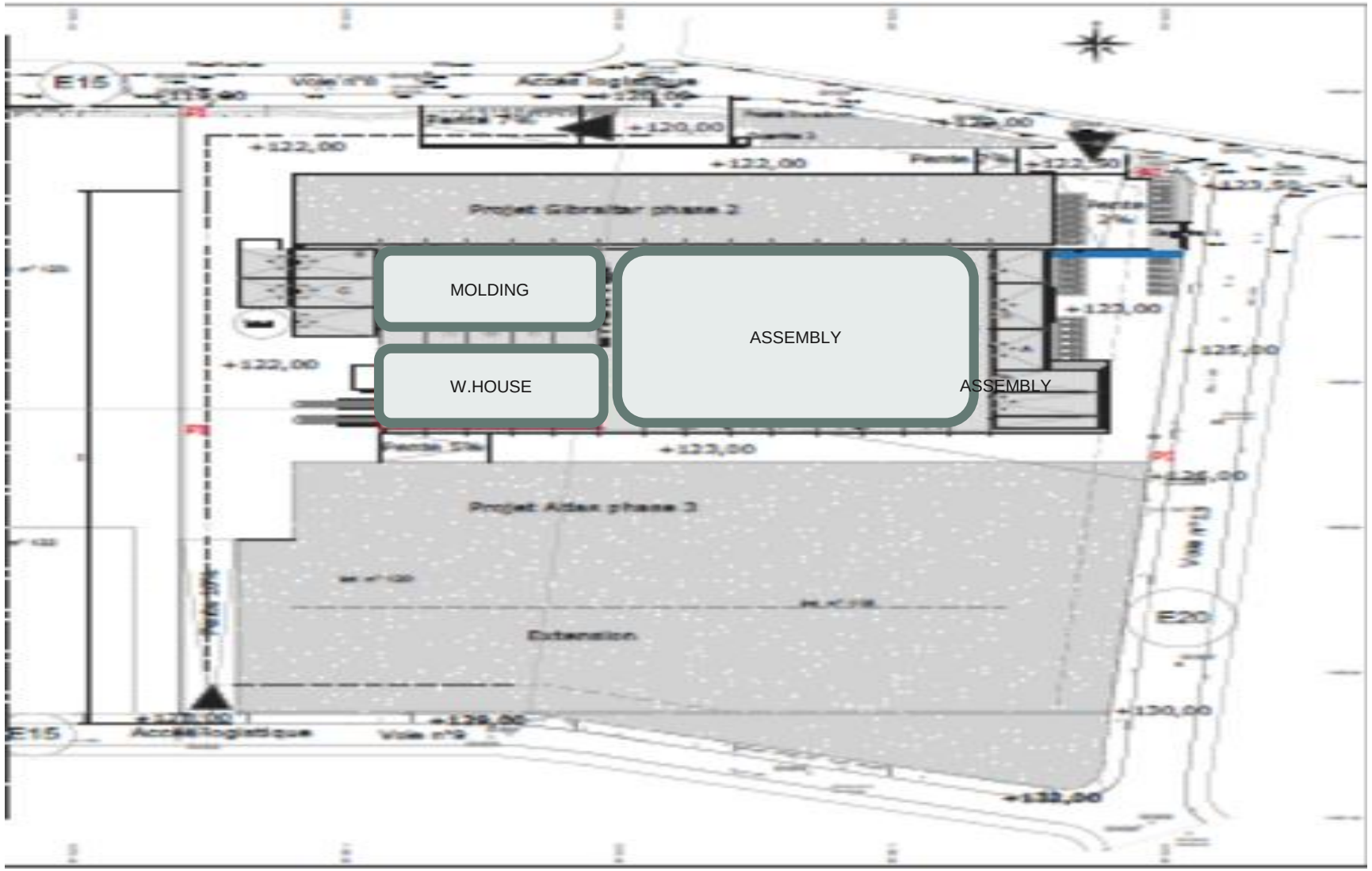
Tangier Cluster site Located in TAC to Support:

Phase I : Connectors manufacturing to support EMEA Market (10500m²)
Phase II (*Planned 2020*): extension (3000m²)

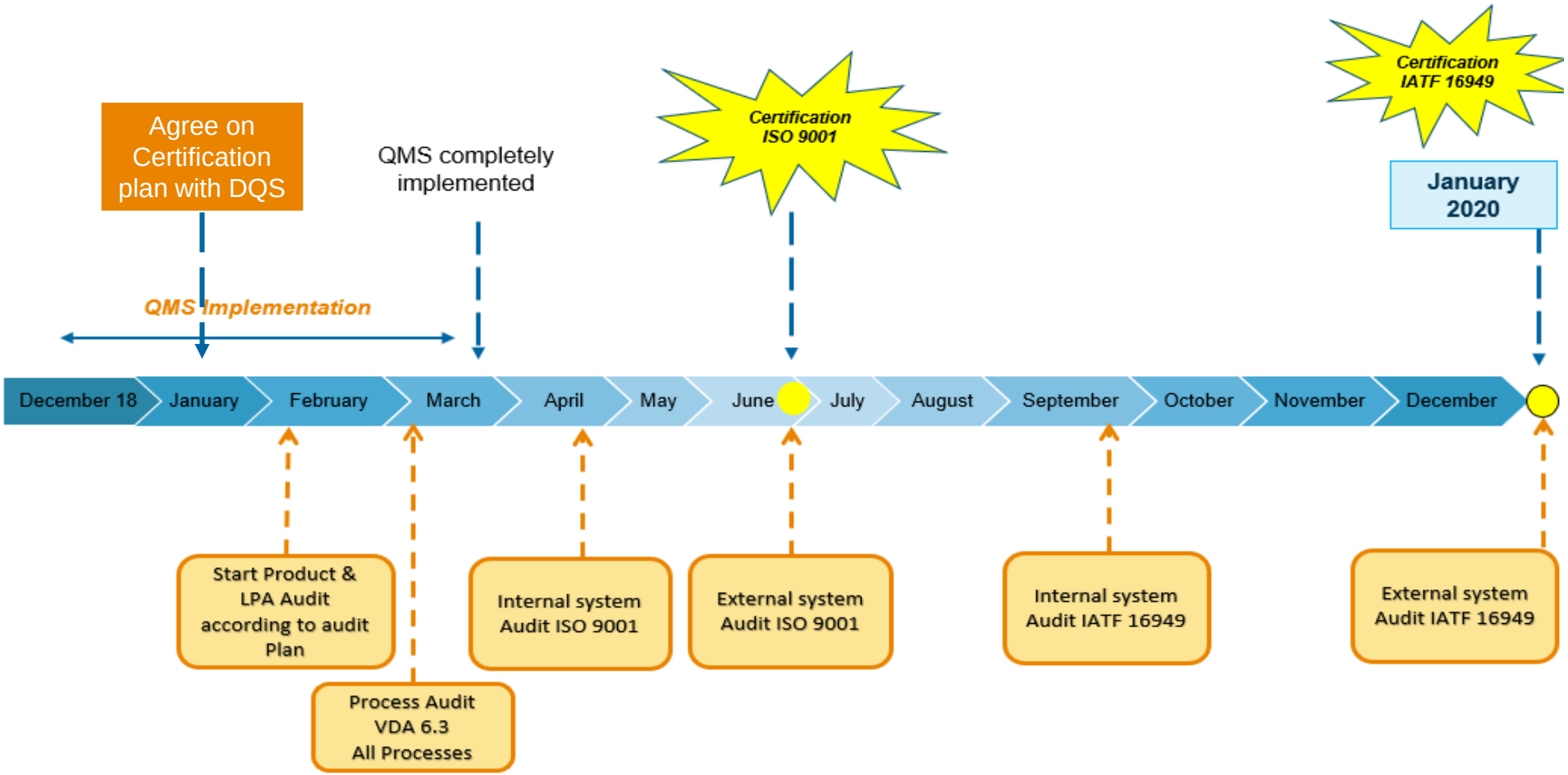
Head Count : 280 to 800 Employees (*Fcst*)
Shift Model: 3 shifts, 6 days/week *(Possibility to set 4shifts, 7days/week)*
Molding : universal molding machines *(FY19: 10-20 machines / 2020: 30 to 40 machines),*
Plastic Parts Assembly : Manual & semi-Auto
ToolShop : Tools maintenance capabilities & Tool repair
Certifications: ISO IATF, ISO 14001 (to be *Planned*)



TAC, ICT Plant Layout



TAC, ICT plant – Certification release plan



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Plant information - New ICT plant home of IND PiP

The new ICT plant in MOROCCO will be hosting IND with a plant-in-plant solution (PiP)

1. Completely built new in TAC (Tangier Automotive City)
2. New plant layout well organized for cable assembly business
3. Benefitting from training center in TFZ (Tangier Free Zone)

Plant information - Training center

- **Founded in 2017** for the automotive industry
- **2 years education** in Cable assembly engineer and Maintenance engineer
- Education is split in **theory and training on the job**
- Customized **training for operators** (harnessing ect.)
- **2000 students** per year.
- **State of the art equipment**

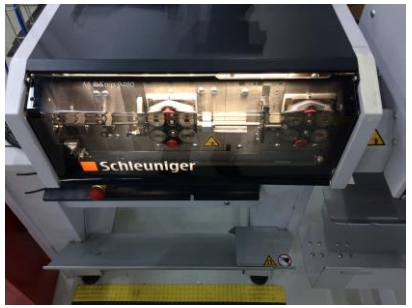


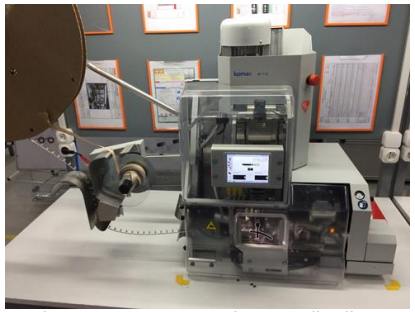
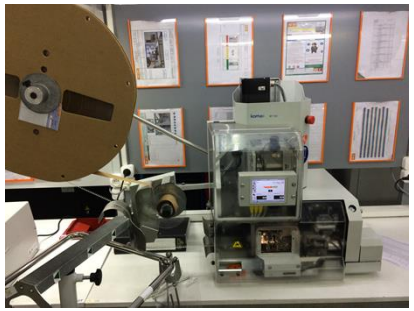
ICT Plant information – Equipment

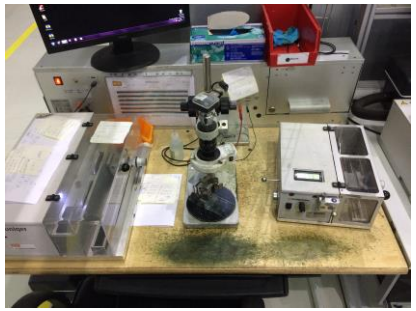
Core processes

1. Cable cutting/crimping
2. Cable preparation
3. Crimping / Presses / Accessories





Transfer BYD to MOR – Time plan

PROJECT info:

- Total project is **3-phase project**
- **Phase 1: Starting April** with **non-complex assemblies**
- **Phase 2:** Will start in **July** focusing on **harnesses**
- **Phase 3:** Will start in **September** and include **overmolded assemblies and others**

Transfer BYD to MOR – Time plan – Phase 1

PROJECT info:

- **Phase 1: Starting** with **non-complex assemblies,** used to startup production
- Hot phase will start in **April**
- **ECD** planned in **wk 22 2019**

	see comments in yellow cels >>>	December				January					February				March				April				May					June			
	Task	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Phase 1	CER Preparation (CER approved)																														
	Confirm the final list of PNs to transfer and send PCN																														
	Morocco Core Team creation: 1x Supervisor, 2xME, 1xQE, 5xOpertors (Future Leaders/Trainers), 2xTechnicans - All should speak English																														
	Visa application																														
	Traing in Bydgoszcz																														
	Tanning in Morocco under BYD supervision																														
	Release procedure (FSR1/FSR2)																														
	Ramp up -> regular production but with lower OEE																														
	New equipment purchase - offers collection																														
	New equipment purchase - LT for the equipment																														
	New equipment installation																														
	Infrastructure Preparation – energy supplies, building, etc																														
	SAP settings																														
	Safety stock preparation (time to prepare, target will be defined)																														
	Quality system transfer?? Benchmark?																														
	ISO? UL? Cerification timeplan?																														

Transfer BYD to MOR – Time plan – Phase 2

PROJECT info:

- **Phase 2:** Will start in **July focusing on harnesses**
- Hot phase will start in **July**
- **ECD** planned in **wk 41 2019**

	see comments in yellow cels >>>	December				January					Febuary				March				April				May					June				July				August					September					Octobe	
	Task	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
Phase 2	Recruit (book) 140 opertors																																														
	Morocco Core Team creation: Backbone: same people as in phase 1																																														
	Trainig in Bydgoszcz (inc Komax)																																														
	Safety stock preparation (time to prepare, target will be defined)																																														
	Equipment transfer (Komax)																																														
	Tanning in Morocco under BYD supervision																																														
	Release procedure (FSR1/FSR2)																																														
	Ramp up -> regular production but with lower OEE																																														

Transfer BYD to MOR – Time plan – Phase 3

PROJECT info:

- **Phase 3: include overmolded assemblies and others**
- Hot phase will start end of **October**
- **ECD** planned in **wk 52 2019**

	see comments in yellow cels >>>	December				January					Febuary				March				April				May					June				July				August					September				October					November				Decemeber			
	Task	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Phase 3	Morocco Core Team creation: Backbone: same people as in phase 1																																																								
	Trainig in Bydgoszcz																																																							
	Overmolding machine transfer (number TBC)																																																						
	Tanning in Morocco under BYD supervision																																																						
	Release procedure (FSR1/FSR2)																																																						
	Ramp up -> regular production but with lower OEE																																																					

THANK YOU!