

# CONTROL PLAN

2-DEL/103/E  
procedure

N°	Description	Machine, Device , Jig ,Tools for Mfg	Characteristics		Special Char. Class.	Specification / Tolerance	Evaluation / Measurement Technique	Sample Size	Sample Freq.	Methods			Control Method	Maintenance	Poka Yoke	Reaction plan
			N°	Product	Process					Level 1	2	3				
10	Materials Receiving and Incoming Inspection	Forklift	1		Import Documents		Correct information from PO and CMR	Visual	100%	Each delivery	●		AQ/PO-DEL/204-33			Notify logistic manager, Communicate to supplier
			2		Packing Condition		Box without deformation or hole	Visual	100%	Each delivery	●		AQ/PO-DEL/204-33			Notify logistic manager, Communicate to supplier, Announce quality if nonconform is found
			3		Quantity Check		Correct Quantity Specified in the PO	Visual	100%	Each delivery	●		AQ/PO-DEL/204-33			Notify logistic manager, Communicate to supplier NC treatment procedure
			4		Label placement		Correct DPN with Batch Number	Visual	100%	Each packing unit	●		AQ/PO-DEL/204-33			Notify logistic manager, Communicate to supplier NC treatment procedure AQ18/PO-SQ18/004
			5		Supplier Conformance Report		Analysis of the batch according to the specifications	Visual	Once	Each delivery		●	AQ/PO-DEL/204-33			Notify Site OM and report to Supplier any discrepancy found NC treatment procedure AQ18/PO-SQ18/004
			6		Insert values in consolidated file		According to specification	Visual	Once	Each delivery		●	AQ/PO-DEL/204-33			Notify site OM and announce Material Manager NC treatment procedure
30	RAW MATERIAL STOCKING				Correct Location and proper packaging		Marking on shelves	Visual	100%	Each delivery	●		AQ/PO-DEL/204-33			Notify WH Supervisor NC treatment procedure AQ18/PO-SQ18/004
40	PREPARATION OF TOOLING	Moulds, Inner pin, Nozzle, Air rod, Thrust, Slitting guide, Ø Valve	1		Tooling preparation		To be checked: - reference of the tool - dimensions of: tool; rod; plug; cutting rod according process sheet	Visual	Each	Tool setup	●		Control card			Maintenance tooling area and fill intervention request SM/MO-SOF/ST4/A NC treatment procedure AQ18/PO-SQ18/004
50	MOUNTING THE TOOLS	Moulds, Inner pin, Nozzle, Air rod, Thrust, Slitting guide, Ø Valve	1		Mounting the tools		Correct mounting of tools; respect moulds order number	Visual	Each	Tool setup	●		Control card	According GMAO		Maintenance tooling area and fill intervention request SM/MO-SOF/ST4 NC treatment procedure AQ18/PO-SQ18/004
60	Material preparation		1		Preparing the necessary materials for MO		Preparing: based material; colorant; additive according process sheet	Visual	Each	Start of production	●		Control card Setters for extrusion process Process sheet			NC treatment procedure AQ18/PO-SQ18/004
61	Extruder machine feeding		1		Correct type of material used		According process sheet	Visual	Each	Start of production	●		Control card Dedicated barrel for each type of material Process sheet	Mnt level 1 for Maguire		NC treatment procedure AQ18/PO-SQ18/004
62	SETTING UP THE PROCESS		1		Setting up the production parameters	KCC KCC	In this following order: - material dry (PA, TPA and M0468) - temperatures KCC - air pressure KCC - puller system - slitting unit (if required)	Visual	Each	Production start	●		Control card			NC treatment procedure AQ18/PO-SQ18/004 MAN18_IT-MAN_041 AQ18 - LM 01
			2				- weight / meter	Scale	Each	Production start	●		Control card			NC treatment procedure AQ18/PO-SQ18/004
63	Extrusion process	FC 32 and FC 14	1	Over all aspect of tube			According process sheet - burrs; slit, strip; transversal breaking; profile shape; interior	Visual	Each	Packing unit	●		Control card Failure catalog AQ18/IT-SQ18/033			NC treatment procedure AQ18/PO-SQ18/004 SM/MO-SOF/588 AQ18 - LM 01
			2	Control on the product, material distribution/ thickness		ICSpC	Maximum difference should not be more than 0.1 according process sheet	Comparator	Each	Packing unit	●		Control card Failure catalog AQ18/IT-SQ18/033			NC treatment procedure AQ18/PO-SQ18/004
			3	Weight			According process sheet	Scale	Each	Packing unit	●		Control card Failure catalog AQ18/IT-SQ18/033			NC treatment procedure AQ18/PO-SQ18/004
81	Perform stripe		1	Color stripe, if required			According process sheet -presence of the stripe -shade of the stripe	Visual	Each	Packing unit	●		Control card System- execution time for changing stripe colour Failure catalog AQ18/IT-SQ18/033 General control sheet for convolut.			NC treatment procedure AQ18/PO-SQ18/004
82	Slitting operation	Slitter	1	Slitting aspect, if required			Burr; no opening of the slit; Presence of the slit; general aspect No overlapping of the slit	Visual	Each	Packing unit	●		Control card Maintenance level 1 Failure catalog AQ18/IT-SQ18/033 General control sheet for convolut.			NC treatment procedure AQ18/PO-SQ18/004 MAN18_IT-MAN_041 AQ18 - LM 01
83	Marking	Printer	1	Marking aspect, if required			Overall aspect and color	Visual	Each	Packing unit	●		Control card Failure catalog AQ18/IT-SQ18/033			NC treatment procedure AQ18/PO-SQ18/004
84	Packing and labeling		1		Process of the filling CTN		Preparing the correct packaging for the final product. Checking the process of filling CTN.	Visual	Each	Packing unit	●		Control card Failure catalog AQ18/IT-SQ18/033			NC treatment procedure AQ18/PO-SQ18/004
			2		Correct quantity per box		According to manufacturing range	Visual	100%	Each box	●		Counter on machine			NC treatment procedure AQ18/PO-SQ18/004
			3		Correct label, clean and readable		Must be clean and readable	Visual	100%	Each box	●		Internal instruction Failure catalog AQ18/IT-SQ18/033			NC treatment procedure AQ18/PO-SQ18/004
			4		Damages on packaging		Packaging without any damage	Visual	100%	Each box	●		Internal instruction Failure catalog AQ18/IT-SQ18/033			NC treatment procedure AQ18/PO-SQ18/004
			1	Control on the product, material distribution/ thickness		ICSpC	Maximum difference should not be more than 0.1 according process sheet	Comparator	1st meter sample	Production start Set-up or machine interruption	●	●	Control card Failure catalog AQ18/IT-SQ18/033			NC treatment procedure AQ18/PO-SQ18/004

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92	Final inspection		2	Weight			According process sheet	Scale	1st meter sample	Production start Set-up or machine interruption	●	●	Control card Failure catalog AQ18/IT-SQ18/033			NC treatment procedure AQ18/PO-SQ18/004
			3	Over all aspect of tube			According process sheet - burrs; slit; strip; transversal breaking; profile shape; interior aspect; no rubbing; colour; tube arranged in clin; no blowouts/holes; <small>(discontinued AlBla)</small>	Visual	1st meter sample	Production start Set-up or machine interruption	●	●	Control card Failure catalog AQ18/IT-SQ18/033			NC treatment procedure AQ18/PO-SQ18/004
95	Annual laboratory test		1	Material to be test			All test from list Products Annual Testing to be performed	According customer specification	According request	1/year		●	Callisto			If nok test raise Uranus claim
100	Capability study		1		- Thickness	IC <sub>Spc</sub>	Cpk > 1,67 Cp > 2	Comparator clock,	50 parts	Once per year		●	Minitab file			NC treatment procedure AQ18/PO-SQ18/004 In case Cpk values are nok 100% sorting until process is brought to limits
130	FIFO STOCKING		1		Finished products stocking in designated zone		Product stocking on marked area	Visual	100%	Each shipping.	●		Sign marking of warehouse area			Announce Logistic and Quality managers
140	SHIPPING PREPARATION	Forklift Scanner	1		Products taken out from main store and sent to expedition area.		Delivery note following-up sheet. No damaged packaging	Manual	100%	Each shipping.	●		Pick list			Reject – replace packaging and / or label of the goods
			2		Expedition label manual sticking		Same expedition label reference with the label reference present on the packaging of goods for delivery.	Manual	100%	Each shipping.	●		Label pairing			Reject – replace label of the goods
			3		Scanning for FIFO system check and pairing		SATURN check for correct stock take out	Visual	100%	Each shipping.	●		Scanner	Scanner		If error, put back the packaging in the stock and take the correct FIFO box

Revision	Revision Details	By	Revision Date
A	Creation of document	Jozsef Gyarmati-Fati	07/12/2005
B	Introducing the Shipping audit	Jozsef Gyarmati-Fati	31/01/2006
C	Concern from SEWS – Alba. Introducing Quarantine for Op. 12 and 14.	Jozsef Gyarmati-Fati	05/03/2006
D	Customer concern from Valeo.	Jozsef Gyarmati-Fati	23/06/2006
E	Customer concern from Delphi and Valeo.	Jozsef Gyarmati-Fati	08/09/2006
F	Customer concern from Lear	Jozsef Gyarmati-Fati	19/01/2007
G	Customer concern from SEWS-Alba Iulia	Jozsef Gyarmati-Fati	04/05/2007
H	Customer concern from Delphi Samara & logo change	Jozsef Gyarmati-Fati	11/09/2007
I	Customer concern from SEWS-Deva	Jozsef Gyarmati-Fati	12/10/2007
J	Updating of CP according group update: parameter adjustment introduced in the flow chart	Jozsef Gyarmati-Fati	29/01/2008
K	Customer concern from SEWS-Deva	Bria Calin	07/07/2008
L	Leoni Pitesti quality notification: Conditioning in smaller CTN's	Bria Calin	29/05/2009
M	Leoni Pitesti and SEBN quality claim: introduction of expedition label manual sticking	Jozsef Gyarmati-Fati	10/12/2009
N	2x Customer claims from SEWS-Alba: Op. 11 & 8	Dalina Suci	29/11/2010
O	Internal quality claim: add drying of the new additive for PA (M0468) at Op.6	Dalina Suci	02/03/2011
P	Customer claim from SEWS-Alba	Dalina Suci	14/07/2011
Q	Customer claim from SEWS-Alba	Dalina Suci	18/12/2011
R	Removing simbol „R”	Dalina Suci	09/03/2012

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			N°	Product	Process						Level 1 2 3	Control Method				
S			Customer concern from Delphi Samara							Dalina Suci			12/03/2012			
T			Customer concern from Delfingen Sk / Lear Hu							Dalina Suci			12/06/2012			
U			Customer concern from Delfingen Sk / Lear Hu							Toma Ovidiu			25/10/2012			
V			Introducing of scanning system for FIFO							Toma Ovidiu			12/02/2013			
W			Delete paragraph with Green Labels for acceptance							Toma Ovidiu			05/11/2013			
X			Implemented CP in new format							Toma Ovidiu			15/01/2014			
Y			Customer claim from Sk Nitra							Toma Ovidiu			25/03/2014			
Z			Customer claim from Fr-Anteuil/Amipi - Uranus18,000,145							Toma Ovidiu			22/09/2014			
AA			Remove flammability test in production by adding Annual Lab.Test							Toma Ovidiu			11/11/2014			
AB			Reinforce control after new operators arrived							Toma Ovidiu			15/12/2014			
AC			Customer claim Draxelmaier 18,000,156 and Delphi 18,000,157(cancelled)							Toma Ovidiu			21/01/2015			
AD			PPMV NAG VW project integration							Toma Ovidiu			01/06/2015			
AE			Update to matching FLOW-CP-FMEA after Internal Audit							Toma Ovidiu			21/07/2015			
AF			Annual review							Toma Ovidiu			21/07/2016			
AG			Review after SEWS Claim Uranus 18.000.216							Toma Ovidiu			31/01/2017			
AH			Remove IC from weight							Toma Ovidiu			12/10/2017			
AI			New extrusion machine recive TC8 and 18.000.242							Toma Ovidiu			09/03/2018			
AJ			Annual review							Brihan Remus			09/03/2019			
AK			Put in new CP format							Brihan Remus			23/08/2019			
AL			Update after external audit							Brihan Remus			04/02/2020			
AM			Update reaction plan							Brihan Remus			30/03/2020			
AN			New extrusion machine receive CA32 -122							Boszormenyi Francesca			29/10/2020			
AO			Update after claim #374							Boszormenyi Francesca			21/02/2021			
AP			Annual review - Adding SPC to IC							Petrescu Nicolae			15/12/2021			
AQ			Review- Adding control methods							Petrescu Nicolae			12/12/2022			
AR			Review - adding general informations and control methods according to 2023 claims							Petrescu Nicolae			04/12/2023			
AS			Review - perform stripe with control methods							Petrescu Nicolae			17/01/2024			
AT			Review - Slitting operation with control methods							Petrescu Nicolae			07/03/2024			
AU			Review - Overall aspect of the tube with burrs							Petrescu Nicolae			05/04/2024			
AV			Review after transfers and relocation of the plant							Petrescu Nicolae			12/08/2024			
AX			Update Material preparation , Machine feeding and Slitting operation.							Petrescu Nicolae			20/01/2025			
AY			Update Extrusion Process							Petrescu Nicolae			26/03/2025			