

LOGICAL OPERATION CHART AND TIMETABLE FOR NON-COMPLYING PRODUCT RETURN INTO PROCESSING IN AUTOMOTIVE INDUSTRIES

ЛОГИЧЕСКИ МРЕЖОВ ГРАФИК НА ДЕЙНОСТИТЕ ПРИ ВРЪЩАНЕ В ПРОИЗВОДСТВОТО НА НЕСЪОТВЕТСТВАЩИ ПРОДУКТИ ПРИ АВТОМОБИЛНАТА ИНДУСТРИЯ

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Abstract: *This paper describes the activities necessary to treat non-compliant products found in the reception and production flow and return them to the supplier.*

It presents how to realize:

- *collection of non-compliant products;*
- *send non-compliant products from suppliers;*
- *disposal of non complying;*
- *easing requirements to suppliers;*
- *drafting note reject.*

The paper aims to define the necessary activities (what? who? how? when?) in order to recover costs related to suppliers of products not, considering the contracts, orders, and the structural units involved in this process. Operators of manufacturing department shall be responsible for finding products compliant to isolate them in containers located on the production line in special places, marked with red markings, called "zone unavailable", complete and attach a red label identification products inconsistent. The latter applies to non-compliant products found in the reception and production departments.

KEYWORDS: *NOTE THE SCRAP, NON-CONFORMING PRODUCTS, DISCARDING NON-CONFORMING PRODUCTS, OPINION DEBIT, SUPPLIERS.*

1. Introduction

This work goes from idea to make a new circuit of non compliant products in the automotive industry [1] and detailed description of activities [3].

To carry out this work we follow the flow of technology and products compliant circuit, hence the idea of starting and implementing this work [2].

2. Experimental researchs

2.1. Object of research

Objective of this scientific work is the implementation of new procedures (synopsis) of the circuit in a non-compliant products for automotive factories.

2.2. Detailed description of activities

Step 1 Identify and isolate non-compliant products

1. Reception- Logistic Department representative isolate compliant parts and put them in unavailable.

2. Flow manufacturing

- Operators in the manufacturing department and found non-compliant parts in space isolate furnished with red markings, complete and attach a red label identifying the product conformity.

- Non-compliant products are collected and transported daily by the logistics department in parts compliant repository, based on identification labels and note reject.

Step 2 Implementation in parts compliant unavailable

- Storage officer in charge of non-compliant parts in the computer system operates in parts compliant with the status unavailable pending decision.

Step 3 Service producer to the department as quality

- Quality Department made in 24 hours of arrival in warehouse, a preliminary analysis of product conformity and states:

- Non-compliant products that are the responsibility of suppliers

- Non-compliant products that are the responsibility of plant

- Depending on this analysis, the quality department draws first notice to the supplier, no estimate attached to inform the non-conformities found (parts, quantity).

Step 4 Analysis department quality suppliers

- Department organizes quality supplier to within 15 days of arrival in Storage compliant products, an analysis of quality in the factory to establish responsibilities: manufacturer and factory. Analysis results shall be entered in form, a document that you place the order and return / cassation / transport non-conforming products.

Demand billing is issued in two copies, signed by both parties.

The first original copy remains in the factory, and the second original will be sent by fax or email provider.

A copy goes and logistics department, Logistics department in turn forward the copies as follows: Export Customs Service to issue pro forma invoice to the Notes application submitted by the Logistics Department under the procedure;

- Client Accounting Services;

- Management control;

- General accounting service for tracking stocks decline.

Step 5 Send irregular products accompanying the invalid cargo

If the supplier can choose to recognize its responsibility:

A. Recovery of non-compliant product:

1. National providers, logistics department will issue a document accompanying the goods without billing non dispatch of goods valued;

2. International providers, logistics department will issue an opinion accompanying the goods, export and customs services will prepare the proforma invoice.

B. Return products not complying with the transport of the plant.

After checking the documents of the department of quality control transmission is transmitted customs export.

C. Disposal of products not conforming to the factory (or if the supplier does not indicate the products not in the prescribed period). Non-compliant products

will be scrapped in an opinion submitted by the provider and the logistics department will register in the system disposal parts. Is not permitted disposal plant in parts compliant to incur extra costs related to environmental protection.

Logistics department operates out of stock on systemic information not available to non-compliant parts in the committee analysis of non-conforming parts and change the status of pending decision pending return to the supplier. To send parts, logistics department draws accompanying the goods without billing, compliant product labels will be removed from unavailable. The disposal of products not conforming to vendor account is recorded by discarding parts of cassation declared by mutilation.

Step 6 Exit from stock unavailable compliant parts

Logistics department operates out of stock on systemic information not available to non-compliant parts in the committee analysis of non-conforming parts and change the status of pending decision pending return to the supplier. To send parts, logistics department draws accompanying the goods without billing, compliant product labels will be removed from unavailable. The disposal of products not conforming to vendor account is recorded by discarding parts of cassation declared by mutilation.

Step 7 Valuing non-compliant products

Accounting service providers every day return lists of non compliant products effectuate the previous day. Accounting service providers will produce not the last price valuing existing informatics system gives its opinion on the flow.

Step 8 Reference flow opinion supplier

Accounting service providers shall first notify the estimate attached

Stage	Activities	Responsible	Documents related
S 1	<div style="border: 1px solid black; padding: 5px; text-align: center;">Non compliant products in manufacturing, identification, isolation</div>	Logistics Dep.	Identification label Notice of dispute Note the scrap
S 2	<div style="border: 1px solid black; padding: 5px; text-align: center;">Commissioning of unavailable non compliant products</div>	Logistics Dep.	Steering and tracking components flow
S 3	<div style="border: 1px solid black; padding: 5px; text-align: center;">Notification by Supplier Quality Dep.</div>	Quality Dep.	Notification email, fax
S 4	<div style="border: 1px solid black; padding: 5px; text-align: center;">Analysis Quality Dep. Suppliers</div>	Quality Dep.	Committee compliant components analysis
	<div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px; width: 100px; margin: 0 auto;">Responsibility</div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px 5px;">YES</div> <div style="border: 1px solid black; padding: 2px 5px;">NO</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px; text-align: center; width: 40%;">Return to manufacturer</div> <div style="border: 1px dashed black; padding: 5px; text-align: center; width: 30%; opacity: 0.5;">Analysis non conform products</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px 5px;">YES</div> <div style="border: 1px solid black; padding: 2px 5px;">NO</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px; text-align: center; width: 40%;">Send non compliant products with accompanying the goods</div> <div style="border: 1px dashed black; padding: 5px; text-align: center; width: 30%; opacity: 0.5;">Cassation</div> </div> </div>	Quality Dep.	Note the scrap
		Direction maintenance	Note weight Minutes of cassation
S 5	<div style="border: 1px solid black; padding: 5px; text-align: center;">Send non compliant products with accompanying the goods</div>	Logistics Dep.	Proforma invoice Order export Order transport
S 6	<div style="border: 1px solid black; padding: 5px; text-align: center;">Out of stock not available</div>	Logistics Dep.	Accompanying the goods

Fig.1. Summary of non compliant products – part 1

Stage	Activities	Responsible	Documents related
S 7	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Valorisation non-compliant products</div>	Accounting service providers	Note the scrap Debit advice
S 8	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Notification by the service provider Accounting Supplier / reference flow opinion</div>	Accounting service providers	Notice to the supplier Debit advice
	<div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">YES</div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">NO</div> </div> <div style="text-align: center; margin: 10px 0;"> <div style="border: 1px solid black; padding: 5px; width: fit-content;">Accord supplier</div> </div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">YES</div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">NO</div> </div> <div style="text-align: center; margin: 10px 0;"> <div style="border: 1px dashed black; padding: 5px; width: fit-content; border-style: dashed;">Resume conciliation</div> </div>	Direction purchases	
S 9	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Issue cancellation</div>	Supplier	Cancellation Debit advice
S 10	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Home / Validation cancellation</div>	Accounting service providers	Cancellation

Fig.1. Summary of non compliant products – part 2

to the vendor, through which to communicate:

- Number accompanying the goods non-values;
- Notice of flow (references, quantity, price);
- Value that will be corrected last invoice with the supplier has delivered the goods, to reduce debts to the factory. If the supplier does not submit the agreement/cancellation.

Accounting service providers send three notices:

- First notification within 3 days of the opinion flow, the supplier must transmit the agreement or within 10 days of first notification.
- If the supplier does not submit the agreement or, following the second and third notification every 7 days. National providers is the procedure for compensation. Within 15 days from the date of this notification, the accounting department shall refer the issue back to the supplier for handling non-compliant components and injury recovery amicably.

- Direction purchase, send an invitation to reconciliation provider directly.

At the same time is informed and judicial Directorate (Legal Notice).

If an agreement is reached between the parties, one within another 15 days from the date of reconciliation Director, juridical decided to initiate legal proceedings.

The legal department to check framing limitation periods, so as to avoid forfeiture of rights to recover debts by juridical, and proceed to start legal action in accordance with contract terms and legal provisions.

Step 9 Issue cancellation

On receiving the supplier will issue a cancellation corresponding to the value factory communicate with debit advice.

Step 10 receipt, validation, registration cancellation bill

If the provider and the agreement of cancellation- Accounting service providers will validate and register cancellation under the notifications issued by the supplier, number of opinion accompanying the goods, reference, price, value, quantity.

3. Conclusions

The main conclusion of this paper is that summary of this new non-compliant products is designed to improve the quality of the technological flow, the evidence to non compliant products and for improve the relations between the factory and suppliers.

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