



HPDE MNC WEB TOOL

Software to manage the non conformities and scrap



TARGETS

Create a web application for managing:

- Non conformities
- Scrap

With the following characteristics:

- Configurable across multiple locations
- Multilanguage [ITA-ENG-FRA-DEU-CEC-NOR-ESP. ExtraCee language excluded]
- Users and roles for each location

Structured:

- Database Ms SQL
- Page html, javascript e asp.net

Usable from PC desktop browser IE, Firefox, Chrome



ACCESSES

Subdivision users and roles for each location:

- Administrators of all, for statistics on every single location and all locations
- Supervisors, administers only the assigned location
- Users, only for data entry in the assigned location



PROCESS

The phases of work will be differentiated for each location.

They will be used in the detection of non-compliance and during the collection database on scrap/ natural scrap



NON CONFORMITY MANAGEMENT

DATABASE DEFECTS

Structured to:

- ✓ Location
- ✓ Line
- ✓ Phase
- ✓ Department
- ✓ Defect

Additional information with:

- defect description
- Decision
- Outcome or corrective actions
- Photo / image of the typical defect



GENERATION OF # NON CONFORMITY

The numbering will be unique for each location, with a year and a maximum of 5 digits for the progressive MNC. At change of the year the numbering starts over from one. Per year it means calendar year.

I.e.168.16.00023 is the Non Conformity No. 23 for the year 2016 in 168 locations (Veniano)



ANAGRAPHIC ITEMS

By JDE will extract the necessary data and saved directly in the SQL database, including any costs.

Translations of the items will be determined upstream of the process.

For each location will be present:

- Value stream
- Semi finished goods

ENTERING NON CONFORMITY

The MNC can be assigned to another location.

You must specify the location and the process step where is occurred.

You will be sent an email to the addressee [or recipients], with a link at the opening of the database and the respective MNC.

The encoding of the MNC will become, for example:

168.16.00023.442 where 168 is the sender and the recipient is 442.



NON CONFORMITY STATUS

Is managed with the following status: open, cancelled, suspended, work in progress, closed on.

And its outcomes: accepted, downgraded, rework, scrap, select, impute to the supplier.

RECEIVE A NON CONFORMITY

At the destination location will generate a new MNC with its own number and the original references of the sender, to have full traceability.

Example: nr. 168.16.00023 is sent to the location 442 which will see the to-do-list MNCs received from other locations and [manually or automatically] will generate a nr 442.16.00087 with 168.16.00023 origin.

In response to [manually or automatically] will be sent email to the location 168, indicating new MNC reference.

In the flow of the information can be inserted control step due to the handling phases of the MNC



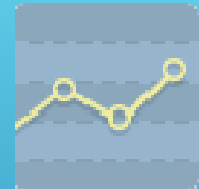
STATISTICS

Statistics will be extracted in two ways:

- absolute values [in quantity and in EUR]
- PPM [pieces per month] on the quantity produced

Need for each location you can get – from JDE – production report, with subdivisions for FY, VS and Semi-finished.

With total of quantities and values in order to draw up the percentages.



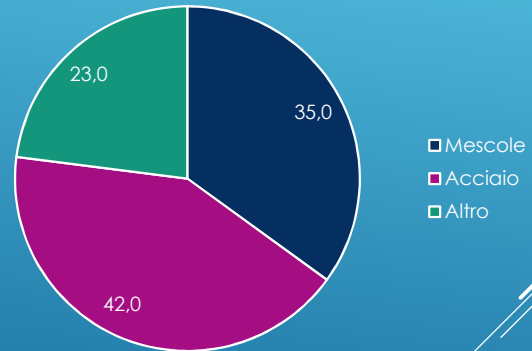
GRAPHS

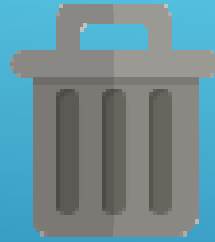
Graphs below are only indicative of the possible functions.

Quality scraps



% scrap





SCRAP MANAGEMENT

SCRAP BOXES

In each location, dedicated boxes are used throughout the production process, for the collection and measurement of the natural scrap / scrap. The Value Stream manager of each location , will have to identify and classify the scrap boxes, uniquely

IDENTIFICATION OF THE BOXES ACROSS THE PROCESS

And it's structured to:

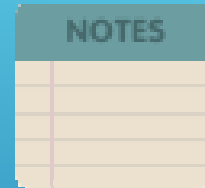
type of material [compound, steel, bars, fittings, more...]
type of scrap [scrap, natural scrap, short lengths, more ...]
box truck number
Tare



DATA RECORDING

Recording data in the system, by users, will be entering:

- ❖ Location and Fiscal Year [automatically]
- ❖ Value stream
- ❖ Process step
- ❖ waste type with type of material and scrap
- ❖ box number
- ❖ Date and time [automatically but can be changed]
- ❖ Weighted [gross weight, the tare is available with the box, the net is for difference]



With the same date there may be multiple recordings at different times

COST CALCULATION FOR COPQ

In order to calculate the scrap costs it is necessary to manage special tables.

The proposal is a structure with:

Fiscal Year

Location

Line

Type of material

Type of scrap

Cost in Euro for each Kg of scrap



SCRAP SUMMARY

Each location can generate a monthly summary, from the beginning to the end of the selected month, relative to the current fiscal year.

The search filters are for:

Value Stream,

Process step

waste type with type of material and scrap

Period



The display of the list will show the net weighed, the quantities and costs EUR. Even with a percentage on the amount produced.

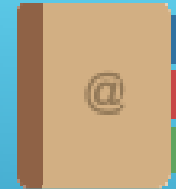
Need for each location you can get - from a management JDE - summaries on production, with subdivisions for FY, Value Stream and type of scrap.

With total of quantities and values in order to draw up the percentages

OPTIONS AND FUTURE INTEGRATIONS

Options to be requested at startup works:

- Import data from previous versions or from different databases; the feasibility is subject to a further in-depth analysis on the basis of the different formats used for each location.
- Charts, Pareto, histogram bar, pie chart, trend of defects per location, line processing stage, MNC open dates, scraps.



To assess how possible future additions:

- reporting generation in pdf
- Barcode nr MNC
- Data export in Excel format

THANK YOU FOR THE ATTENTION

QUESTION TIME

