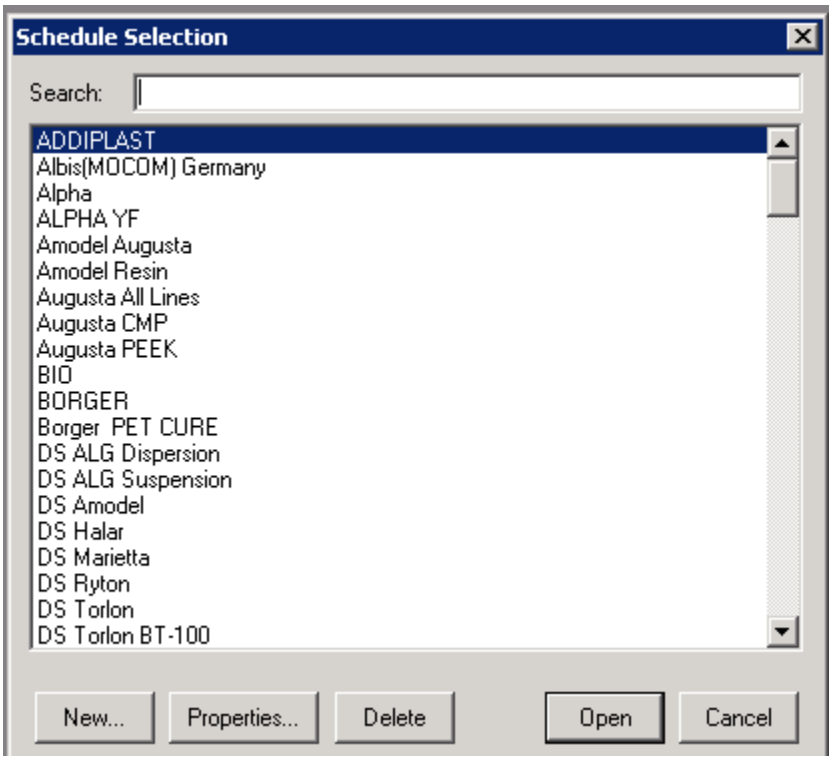
Picaso Production Schedule

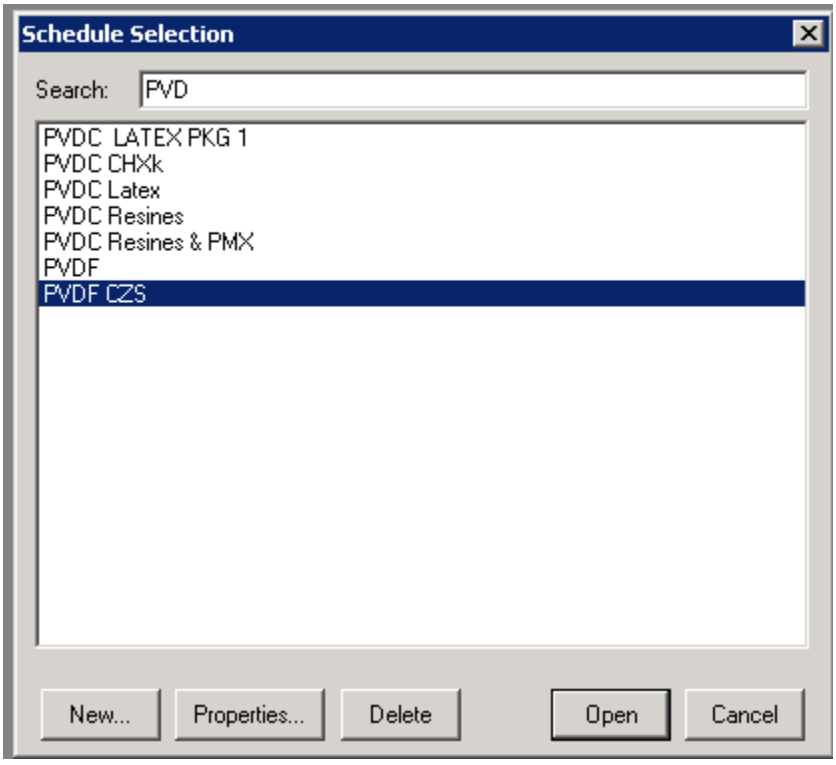
Picaso Production Schedule - Classic

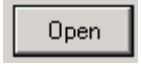
Open a schedule

In Picaso, hit this icon:  . It opens a list of Schedules:



Use the search to find the one you need.



Once you find the one you were looking for, hit: 

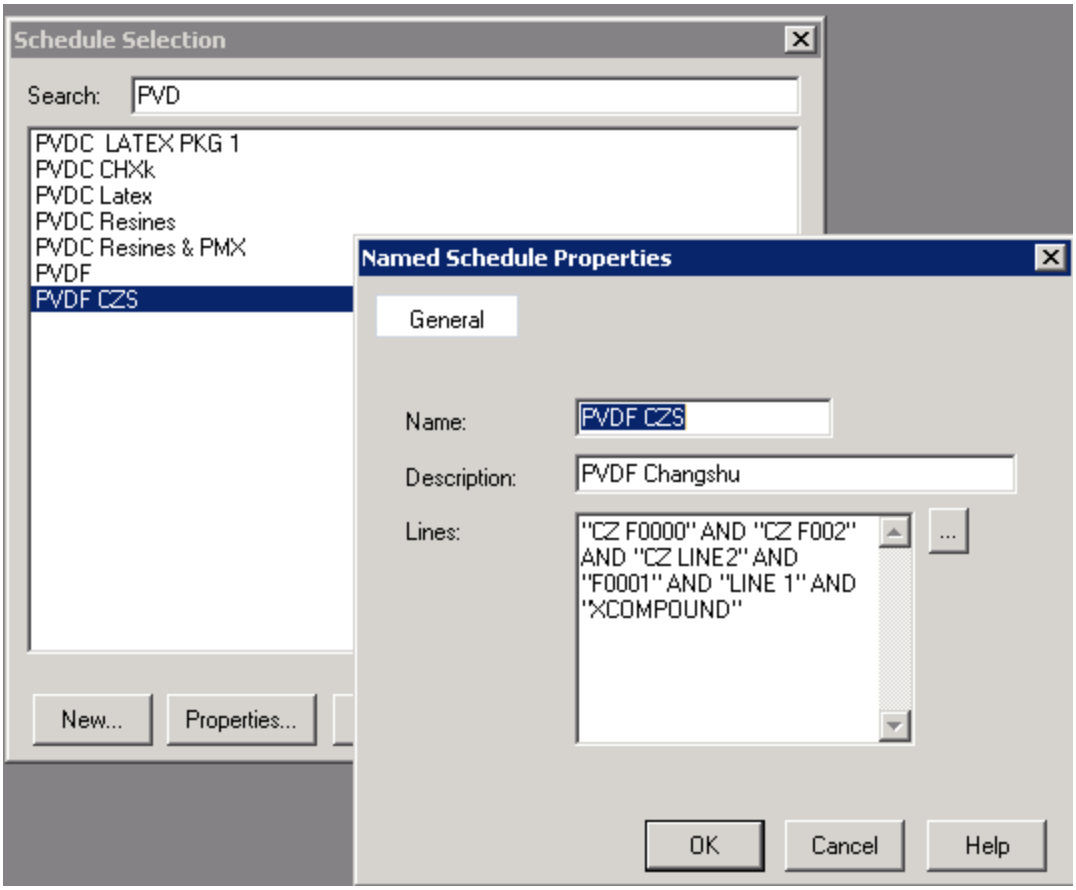
You may also create a schedule (hit: 

) and/or understand how a grid works by looking at its properties (

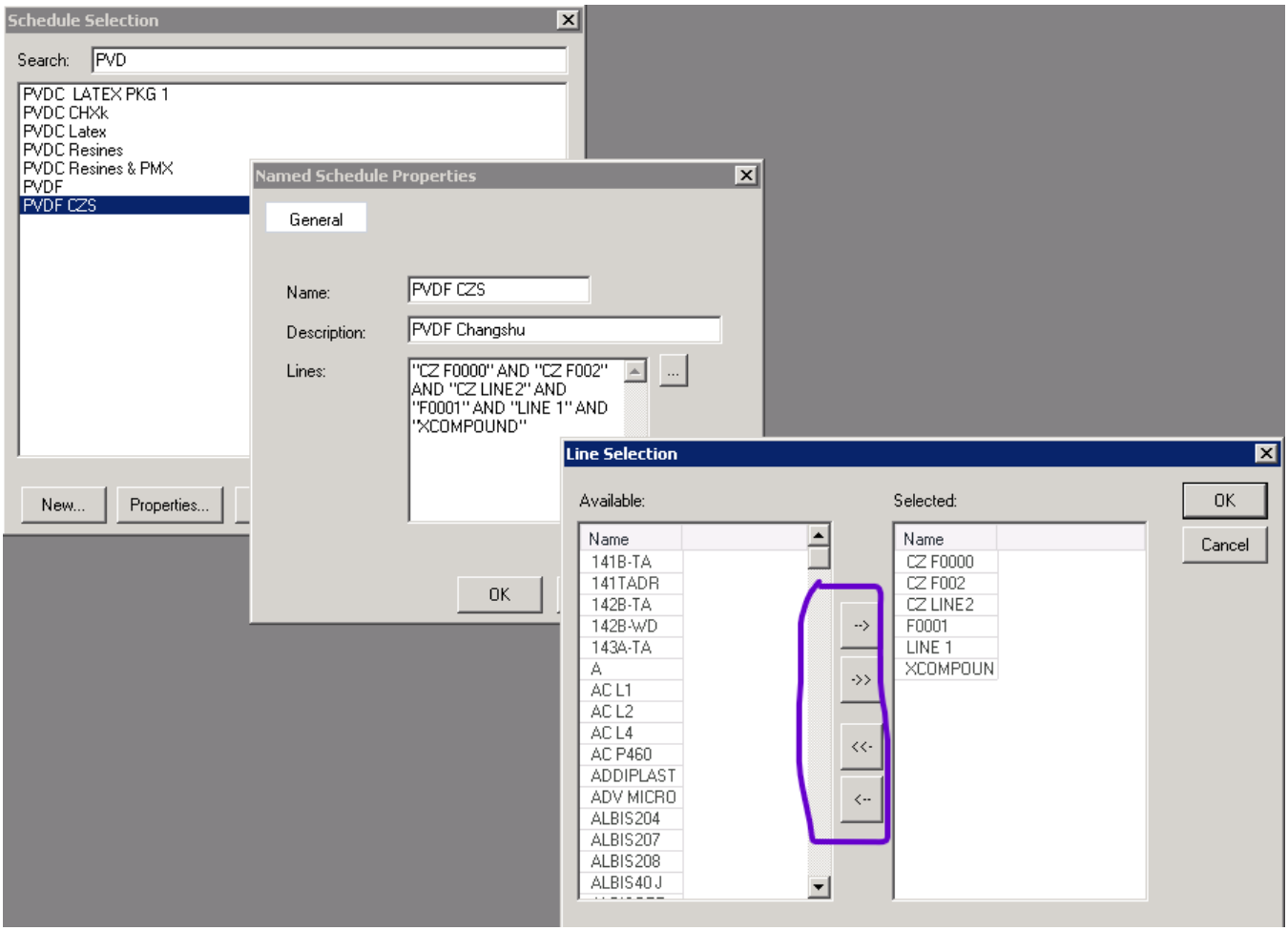
)

Schedule properties

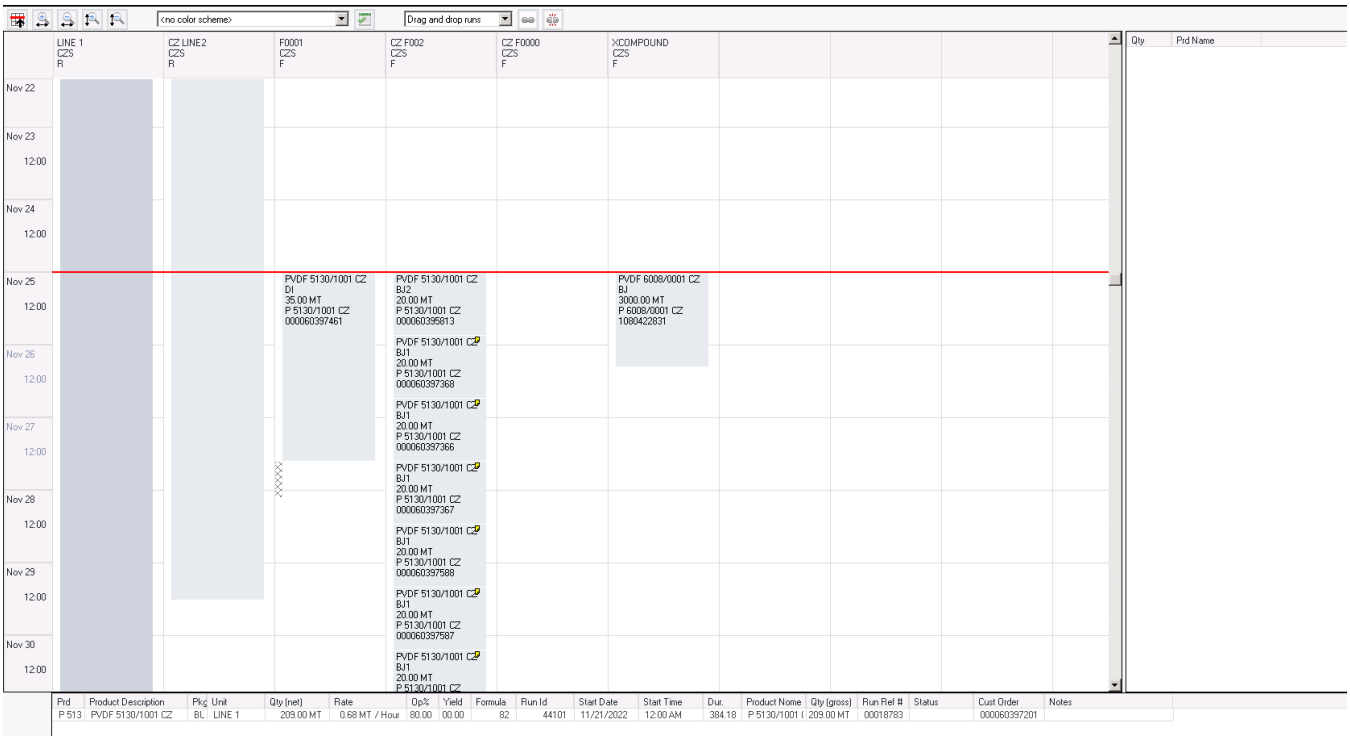
The schedule properties, beside its name and description, is mostly its a list of lines.



Use the  icon to open the inventory of lines; and use the arrow keys to update the list of lines.



All lines show next to each other, in a sequence that is determined by the equipment "Unit Position"



Schedule properties - Edit Display

EDIT SCHEDULE Properties

Each User can display fields in the sequence you want from top to bottom

For example display Product description on top line then Qty on next line , etc

System will save for each User

Navigation

Navigation buttons

	jumps to today
	zoom in - horizontal
	zoom out - horizontal
	zoom in - vertical
	zoom out - vertical

Color schemes

TBC

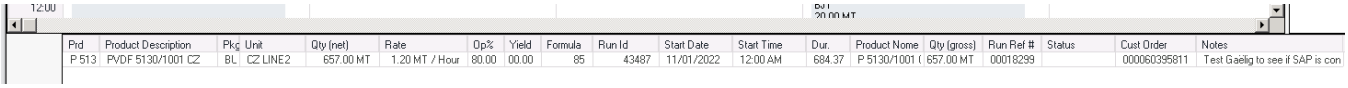
Linking runs together

Key	Function
	Select two runs, then hit this key. Runs are now linked in a predecessor / successor relationship. See Predecessor/Successor.
	To cancel the relationship.

Candidate runs

Picaso generated runs. Resulting from imbalance between demand and supply

Run details

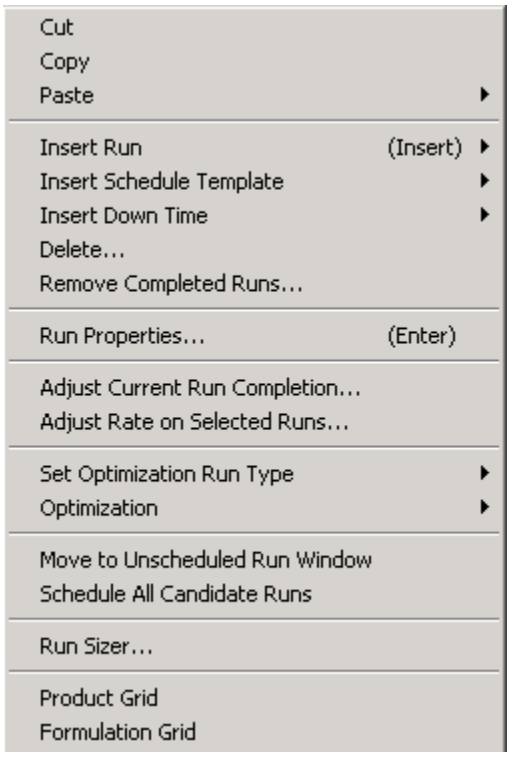


Prd	Product Description	Pkg Unit	Qty (net)	Rate	Op%	Yield	Formula	Run Id	Start Date	Start Time	Dur.	Product Nome	Qty (gross)	Run Ref #	Status	Cust Order	Notes
P 513	PVDF 5130/1001 CZ	BL CZ LINE2	657.00 MT	1.20 MT / Hour	80.00	00.00	85	43487	11/01/2022	12:00 AM	684.37	P 5130/1001 (	657.00 MT	00018299		000060395811	Test Gaelig to see if SAP is con

Inserting a run on the schedule

From scratch

Position your cursor on the production line / existing run on that line. Right click:

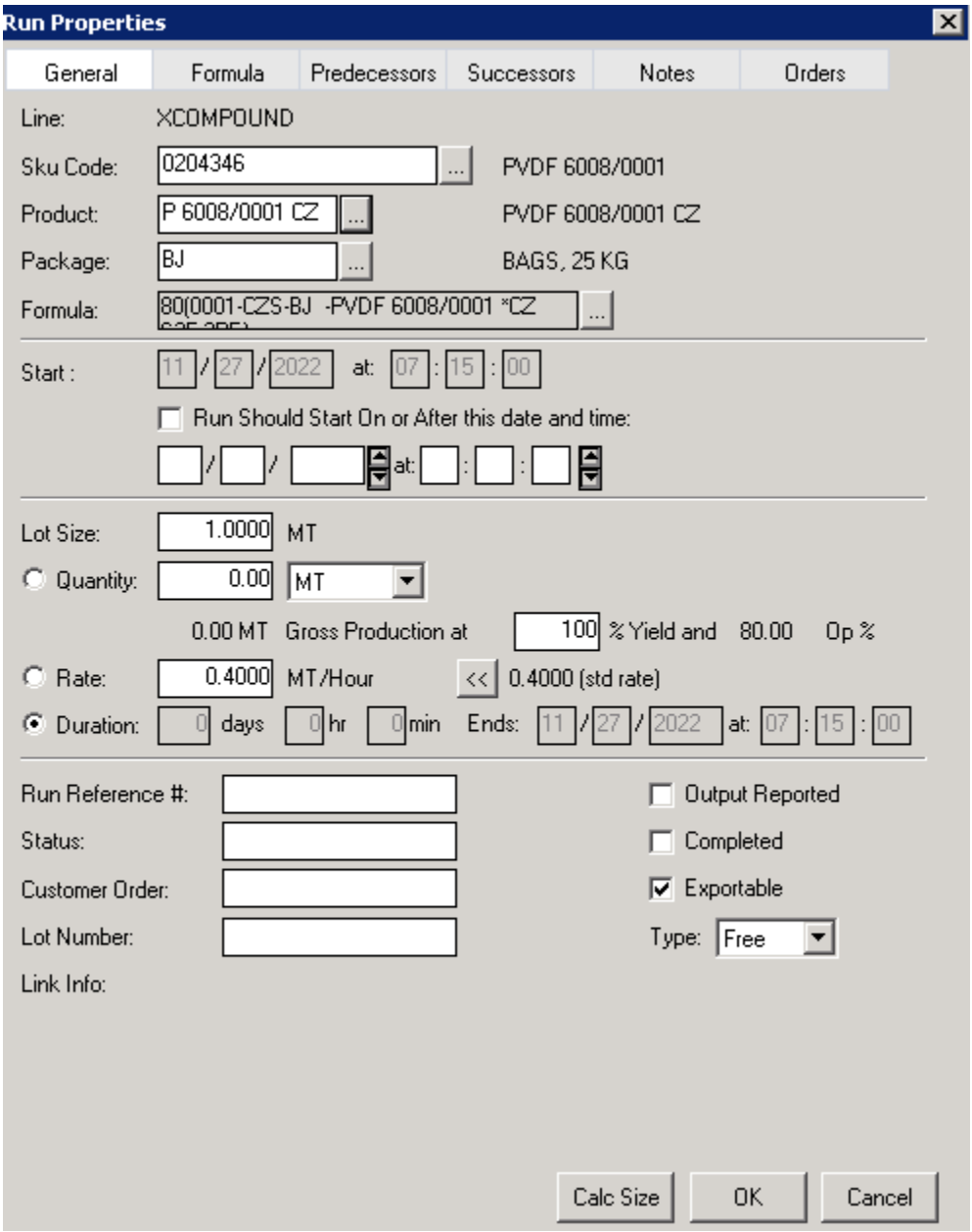


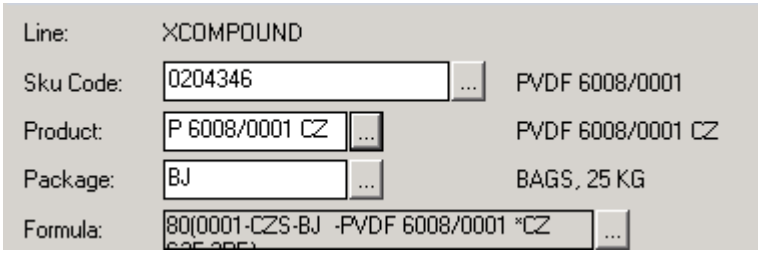
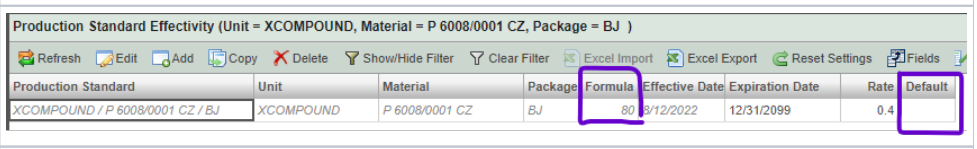
and select " 

".

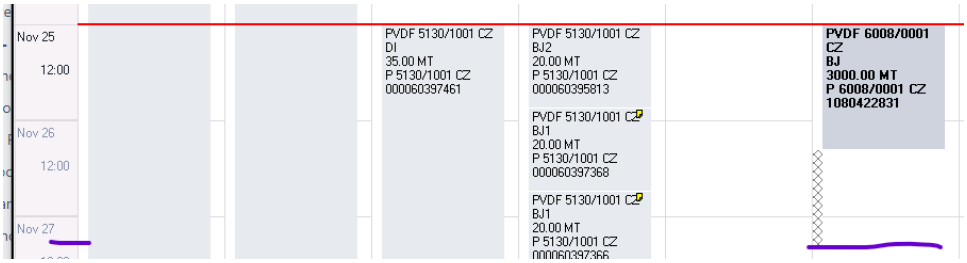
You may insert a run after or before an existing run: 

It opens a window as below:

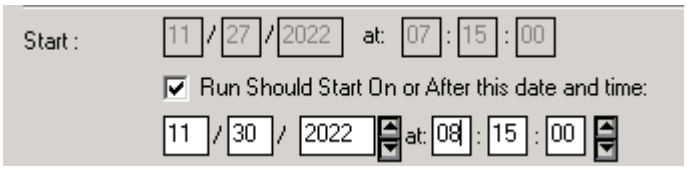


Header Tab	
In that window, populate either the SKU, or the Picaso material & package code. Picaso will pull in complementary data. The default formula auto-populates. You may pick another valid formula if necessary. Valid means: within validity date & formula assigned to the relevant production line via production standard effectivity.	
For this product/package/line, there is only one production standard effectivity: Would there be more than one, the one with the default check mark would be selected automatically by default (duh!).	
Start Date/Time	

As per previous run (+transition), the new run can start Nov 27 at 7:15 am the earliest.



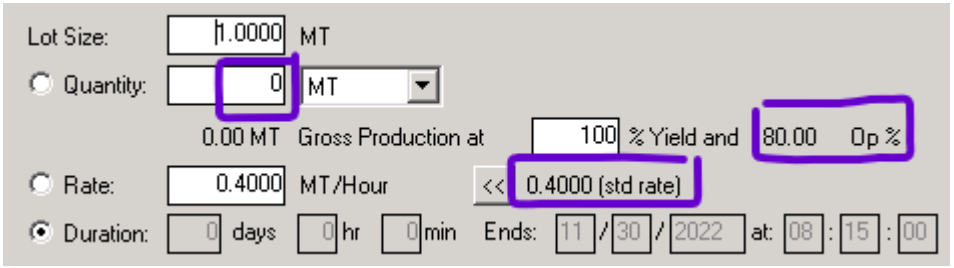
You may also anchor the new run to a given date /time (here, we indicate that we want the new run to start no earlier than Nov 30 at 8:15 am)



Quantity/Duration

Enter a quantity:

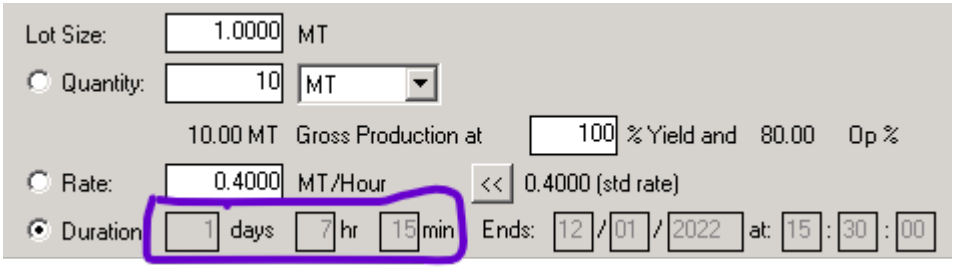
It results in the duration of the run being recalculated as per rate (here, 0.4 MT/h), Up Time from the line (or Op, here = 80%), and yield (here = 100 %)



Duration = 10 MT / (0.4 MT/h) = 25 h.

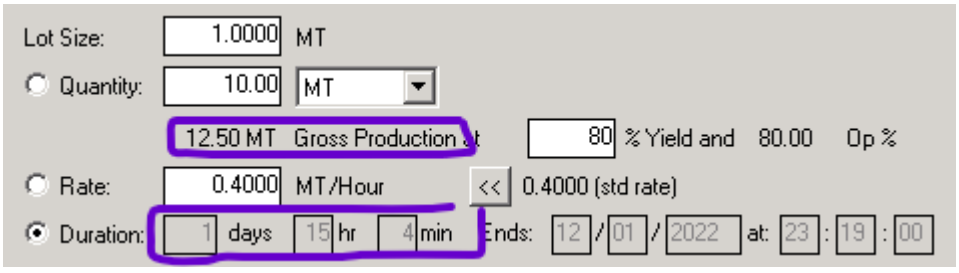
However, a 80 % **Up Time** affects negatively the **duration**: 25 h / 0.8 = 31.25 h. Or 1 day, 7h, and 15 min.

The yield is 100 %, therefore it does not affect the run duration.

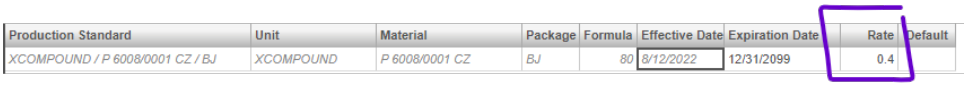


If the **yield** was set to 80% (you can modify it in the run, and it will only affect that run), it would result in both:

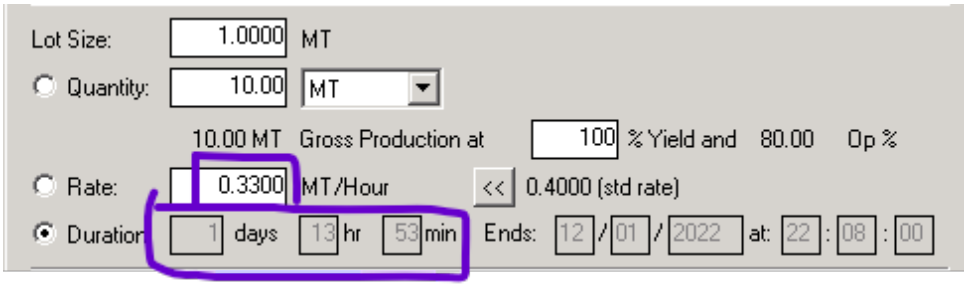
- **longer run duration**: 31.25 h / 0.8 = 39.06 h. Or 1day, 15h, and 4 min
- **increased Gross Production**: 10 MT / 0.8 = 12.5 MT
  - **net production unchanged** (i.e. what is seen on the grid and affects projected inventory) remains at 10 MT
- **increased component consumption** (see Effect of yield on components quantity).



The standard rate is pulled from the production standard efficiency (through the formula picked for that run).



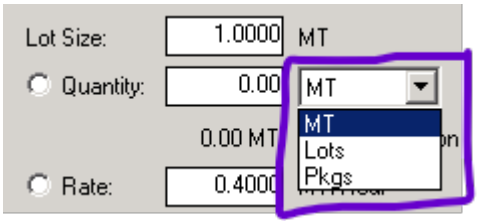
The rate can be modified in the run itself. It will only affect that run and its duration.



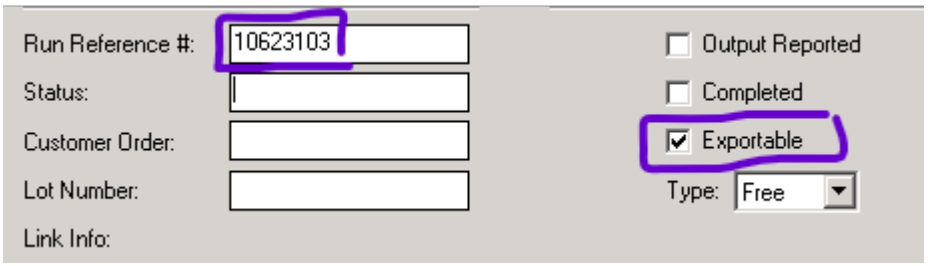
Hit  to revert to the standard rate.

blocked URL

Note that you may enter quantity with alternative units of measures or multiples of lot size:



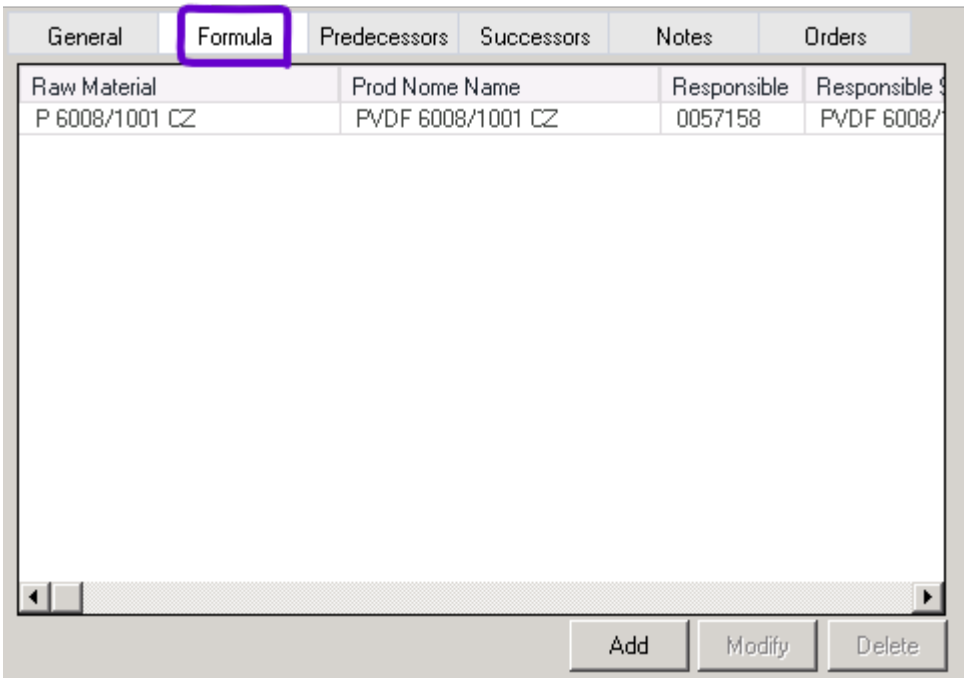
Run references



Field	Description
The Run Reference #	is a Picaso internal reference number that is automatically generated once the run is saved.
Customer Order	Once a run has been uploaded to SAP and a Planned order/Process order as been created in SAP, the SAP number populates the Customer Order field. Find more about the Picaso Schedule upload to SAP here.
Lot Number	If an output lot number is assigned to a Process order in SAP, it will also show here.
Exportable	The Exportable checkbox is inherited from the equipment. It can also be checked on or off by hand. If active, that run is selected for upload to SAP.
Output Reported	When activated, this flag indicates that production is complete, resulting in the run not affecting the plot nor the grid nor any query any longer.
Completed	will not interface with SAP. Even when activated, the run still shows on the grid, the plot and PicReports.
Type	Fixed: Dynamic Scheduling (DS) will not delete run when updating schedule; Free -DS will delete run when updating schedule

Formula

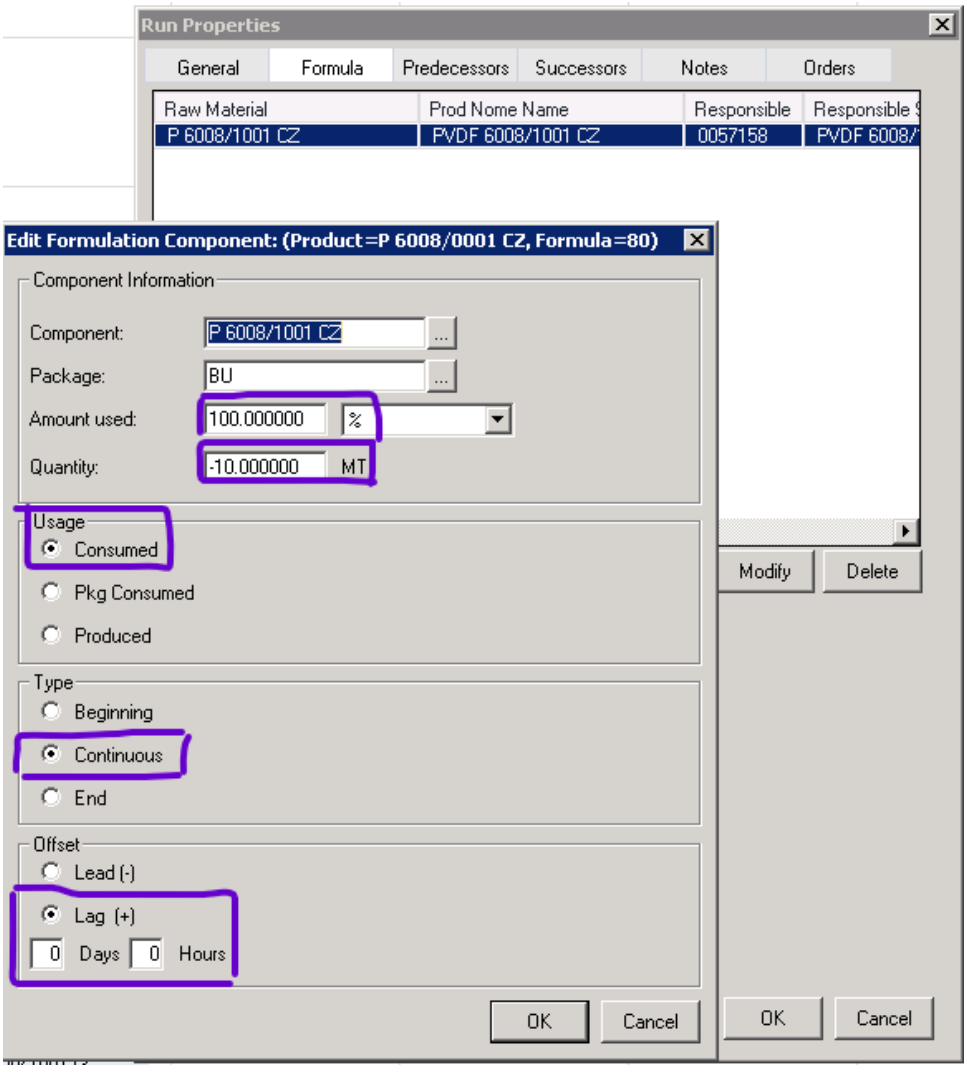
The formula tab of a run shows the components of said run. Here, only one component.



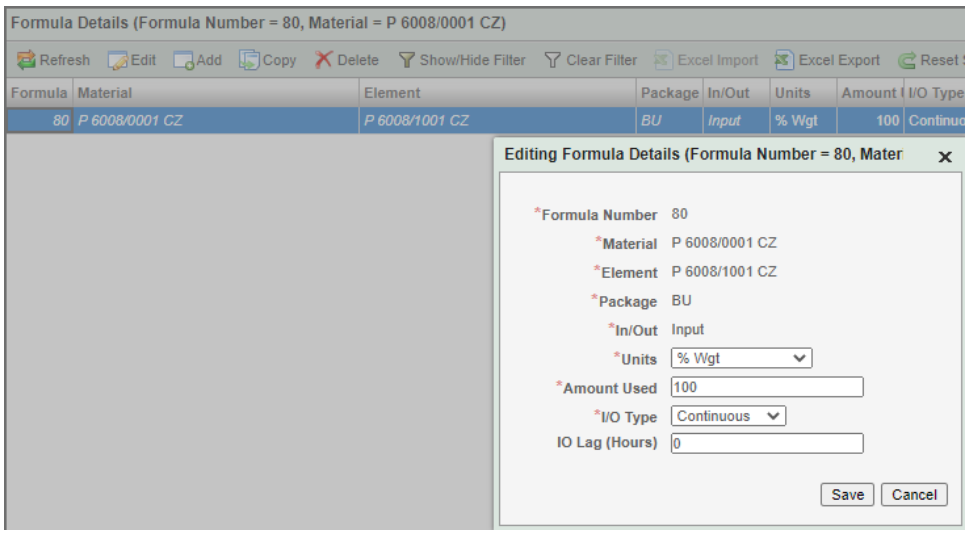
Hit the Add button to insert more components.

Highlight the component and hit the Modify button to display/modify the component's

- consumption rate (100%)
- resulting quantity (-10 MT)
- usage (consumption, since this is a component)
- type (continuous)
- lag (0 days, i.e. no lag)



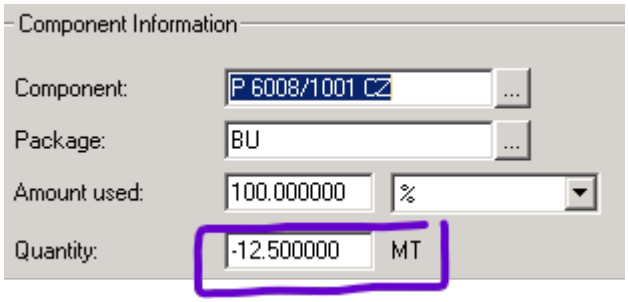
These values are auto-populated from the standard formula details:



Effect of yield on components quantity

Using the example above: 80% yield results in an increased component consumption:

- increased : -10 MT / 0.8 = -12.5 MT



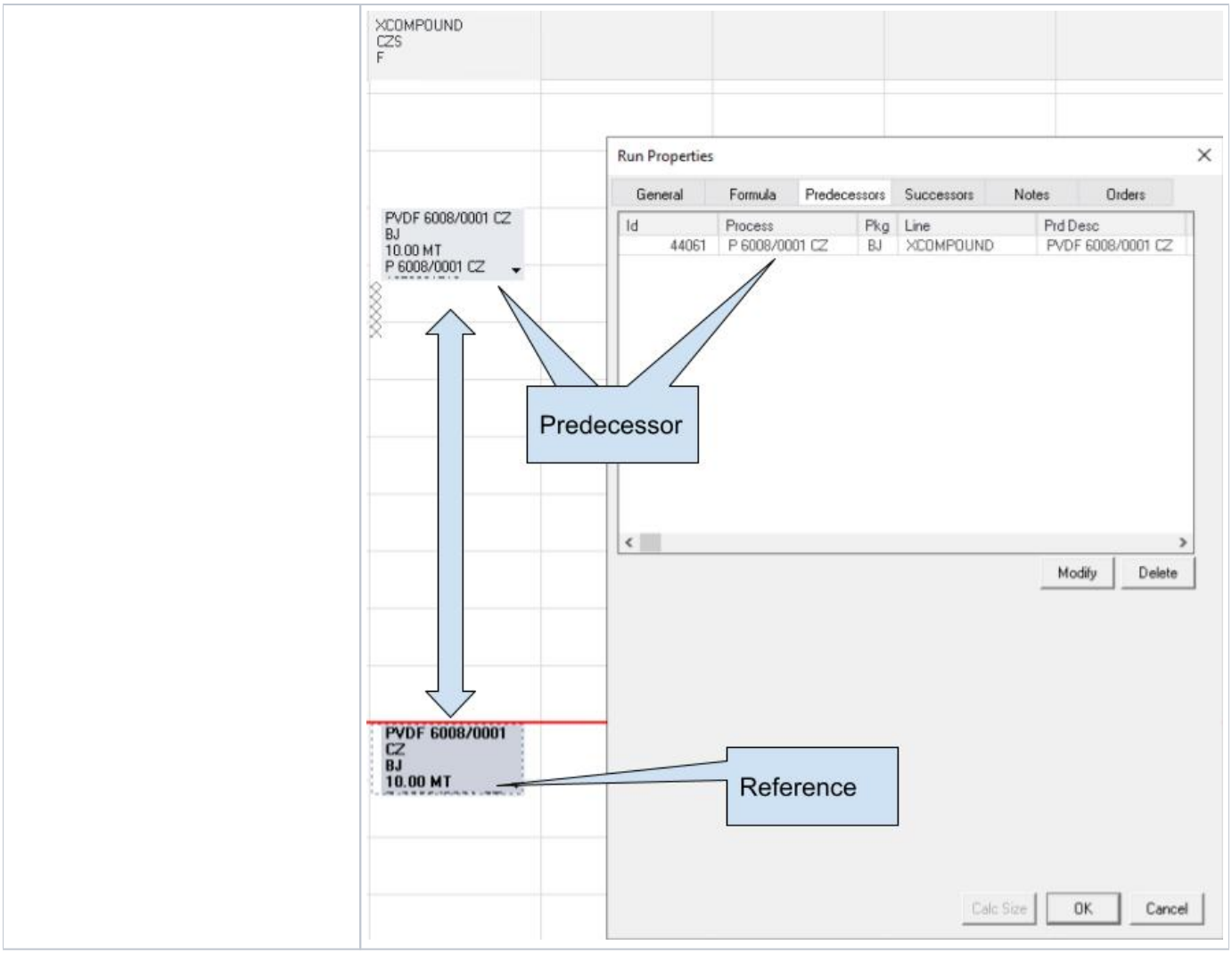
Contrary to output gross production, the effect of a yield *is* visible on the component's grid.

Predecessor / Successor

By default, a predecessor / successor relationship links together two consecutive runs on the same production line.

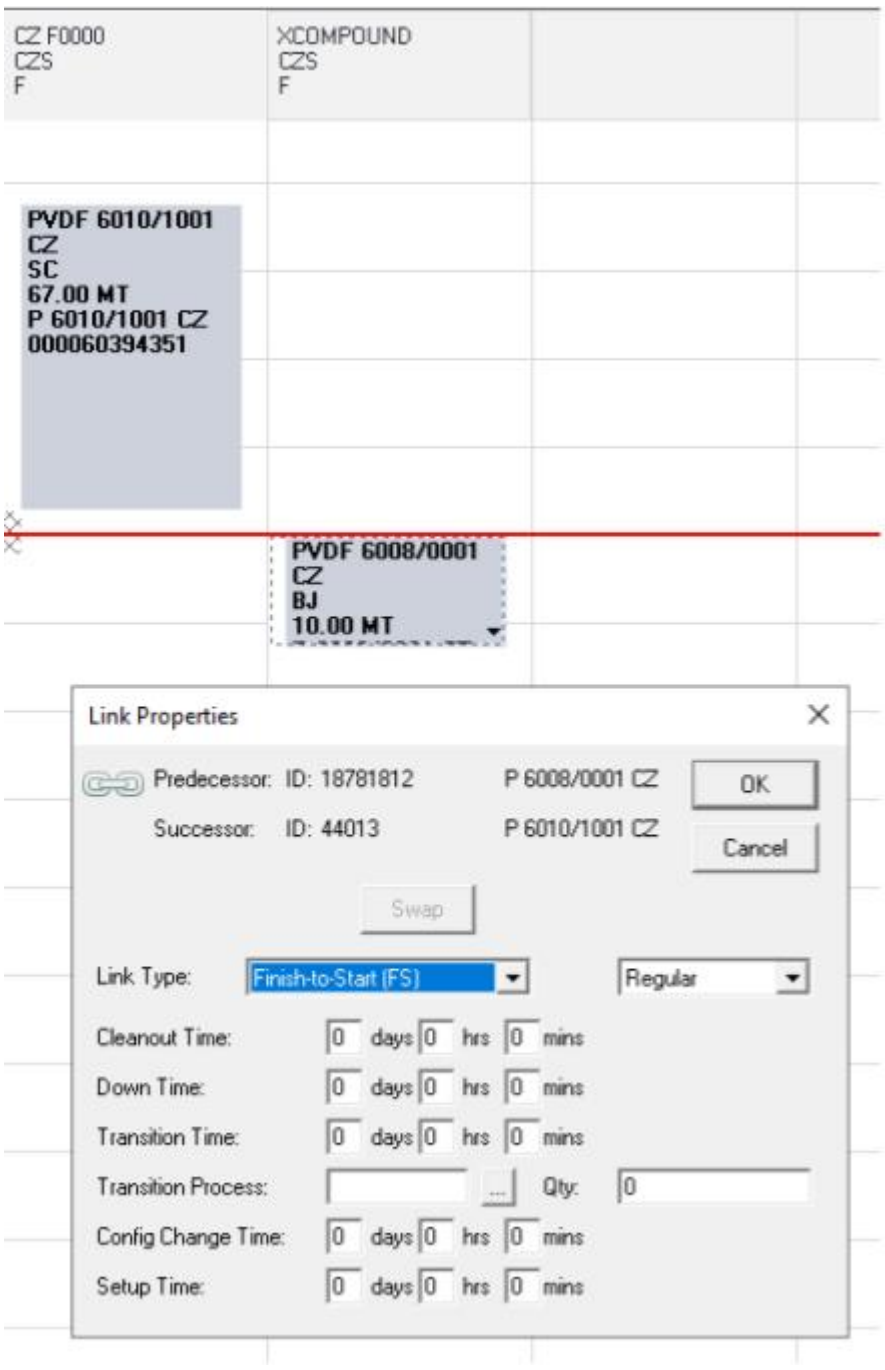
When inserting a run, the 

action decides what is going on with the relationship.

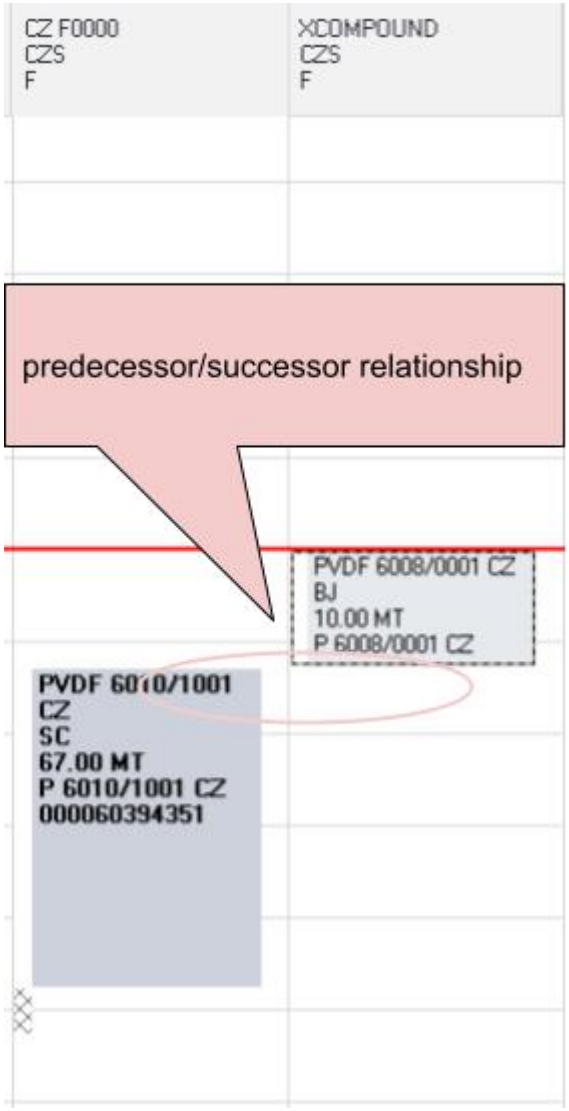

XCOMPOUND
CZS
F
PVDF 6008/0001 CZ
BJ
10.00 MT
P 6008/0001 CZ
Predecessor
PVDF 6008/0001
CZ
BJ
10.00 MT
Reference
Run Properties
General
Formula
Predecessors
Successors
Notes
Orders
Id
Process
Pkg
Line
Prd Desc
44061
P 6008/0001 CZ
BJ
XCOMPOUND
PVDF 6008/0001 CZ
Modify
Delete
Calc Size
OK
Cancel

However, a link can be setup between a run and *any other run of any other line*. Select two runs (keep the shift key down), then hit the  key.

The Link Properties dialog box lets you adjust the details.



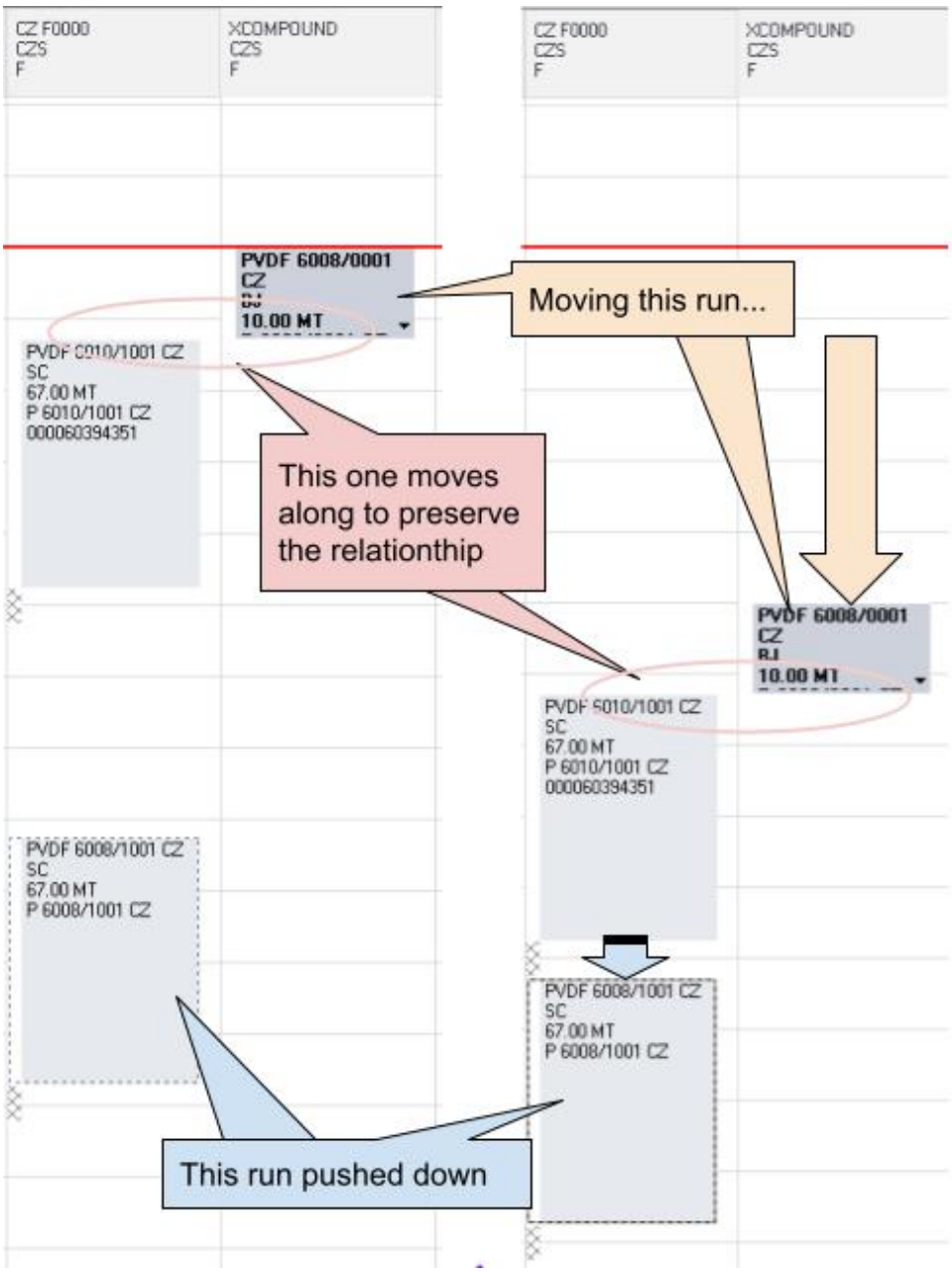
Once saved, the runs are linked. In this example, the PVDF 6006/0001 CZ run on XCOMPOUND is the predecessor and the PVDF 6010/1001 CZ is the successor.



Note that because of this relationship, the later run to the left (PVDF 6010/1001 CZ) was pushed down to meet the requirements of that relationship.

Now that these runs are linked together, moving one run results in the other run moving too to comply with the link properties.

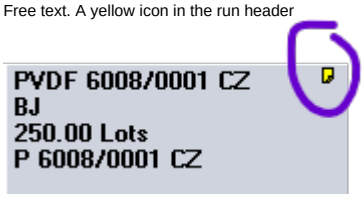
Any other run in the way will be pushed down.



Hit the  key to cancel the relationship.

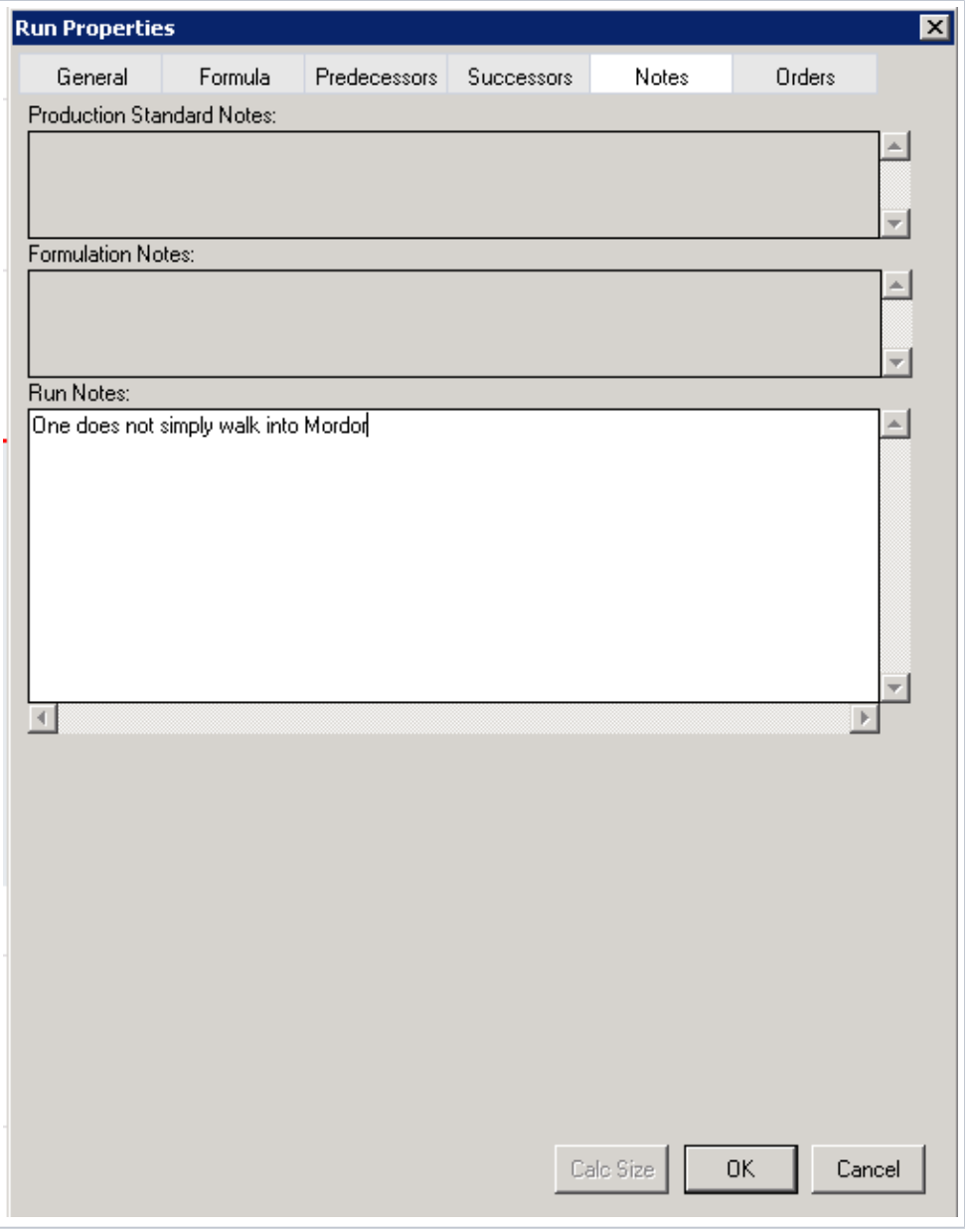
Notes

Free text. A yellow icon in the run header



signals that there is something there.

Notes can also be inherited from Production Standard Notes and Formulation Notes.



Copy from another run

Copying multiple runs

Modifying a run

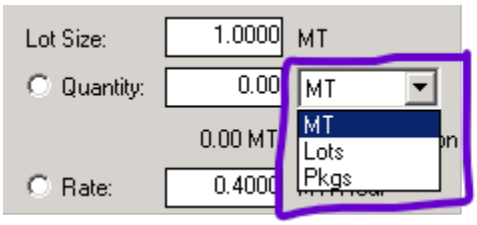
Moving a run

Deleting one/multiple runs

Inserting a floating downtime

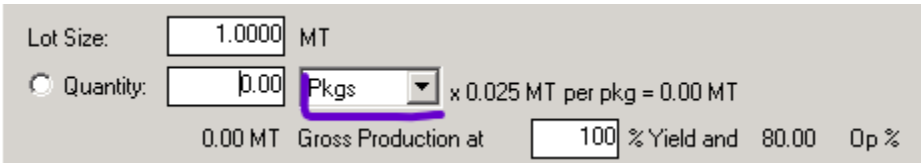
Units of measure and lot sizing

As long as they have been defined, other units of measure can be used

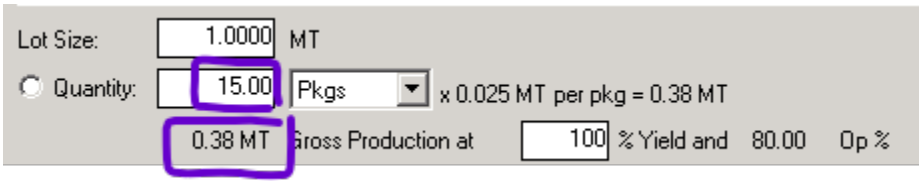


Package

Picking package let you enter quantity in multiple of a the material package code. Here, 25 kg bags. The 25 kg is defined in the packages table of ADM

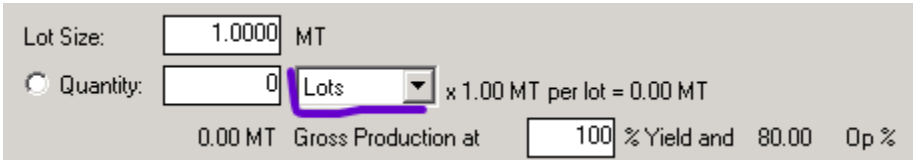


15 kg bags will therefore translate in a 380 kg run.



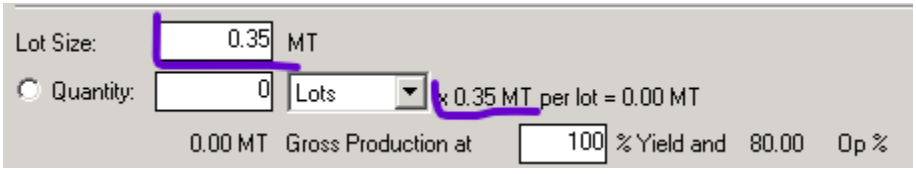
Lot size

Going with Lots let you enter quantity in multiple of one lot size. Here, 1 MT. The lot size comes from the Production Standard for this material on this line.

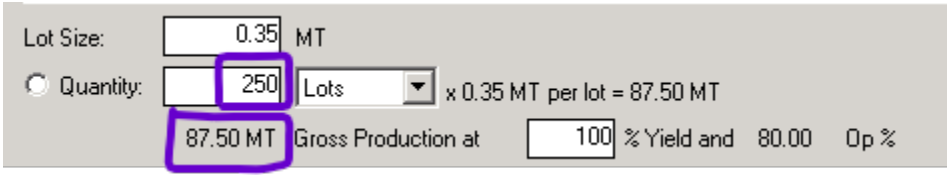


This default lot size can be modified in the run itself (and for the sake of this example, we will do just that). Lot size is now 0.35 MT per lot.

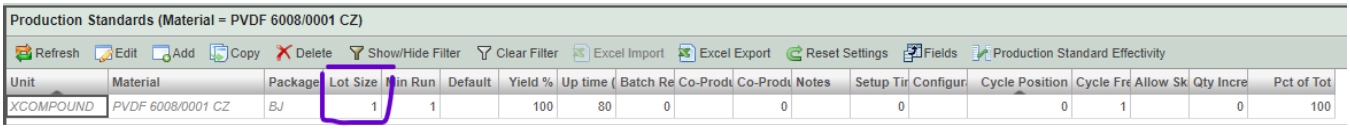
once modified in the run, it updates the corresponding production standard in ADM.



It is now much easier when thinking in lots: just enter the number of lots to be produced (here: 250 lots); Picaso will calculate how it translates in MT: 87.50 MT.



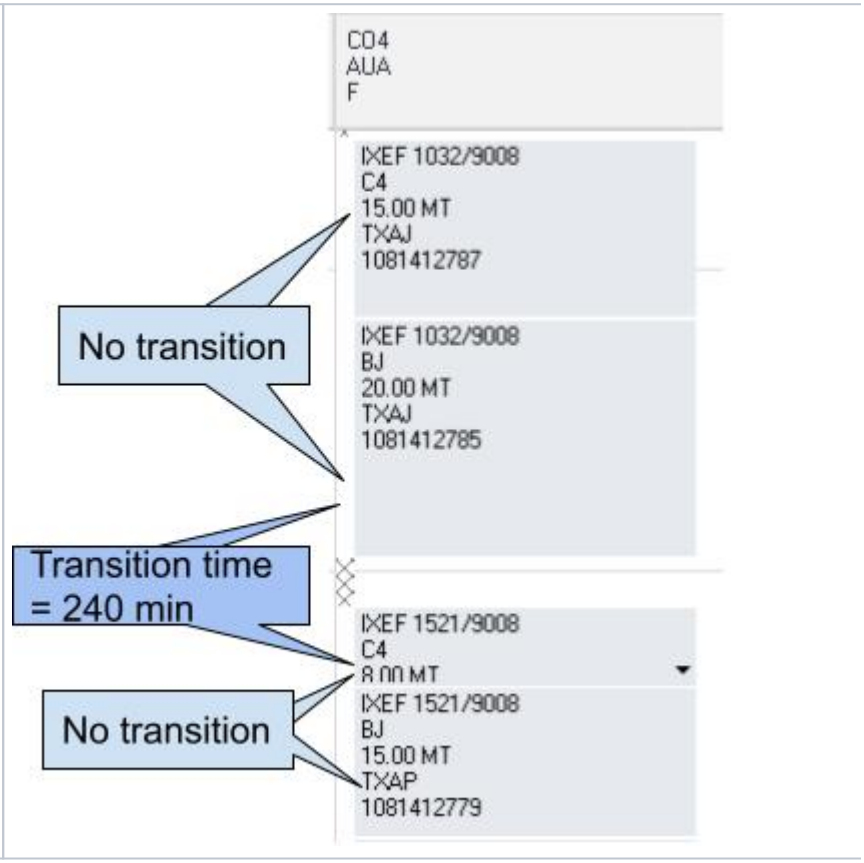
The lot size comes from the Production Standard for this material on this line:



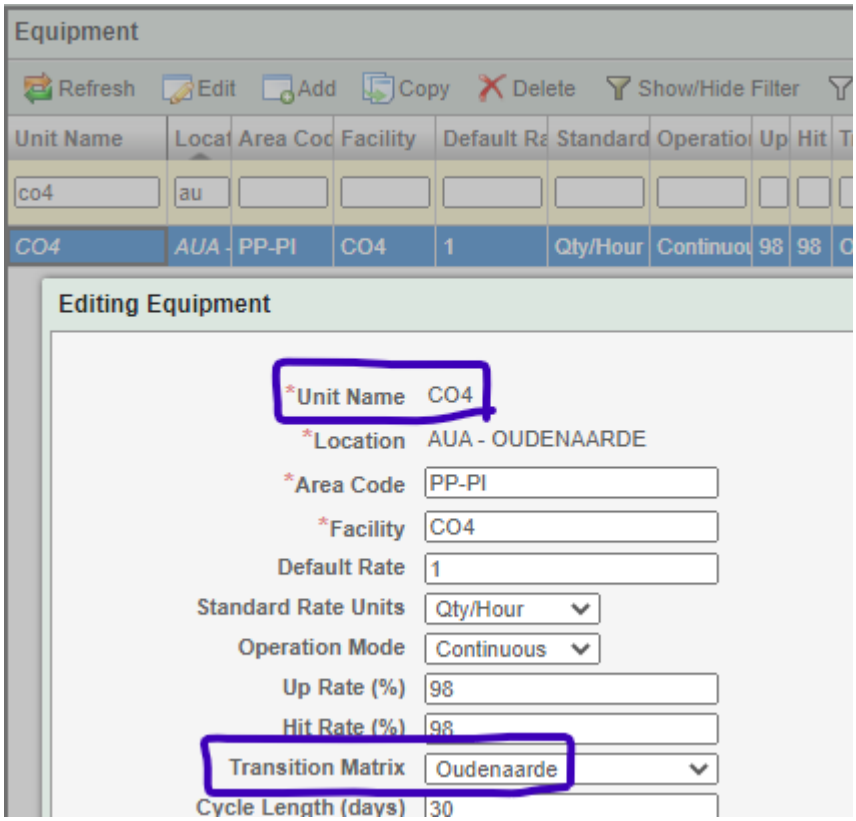
Transitions

Picaso calculates changeover times between runs (if configured in ADM).

The transition in the right-hand screen screenshot, indicated by XXX, is generated automatically.



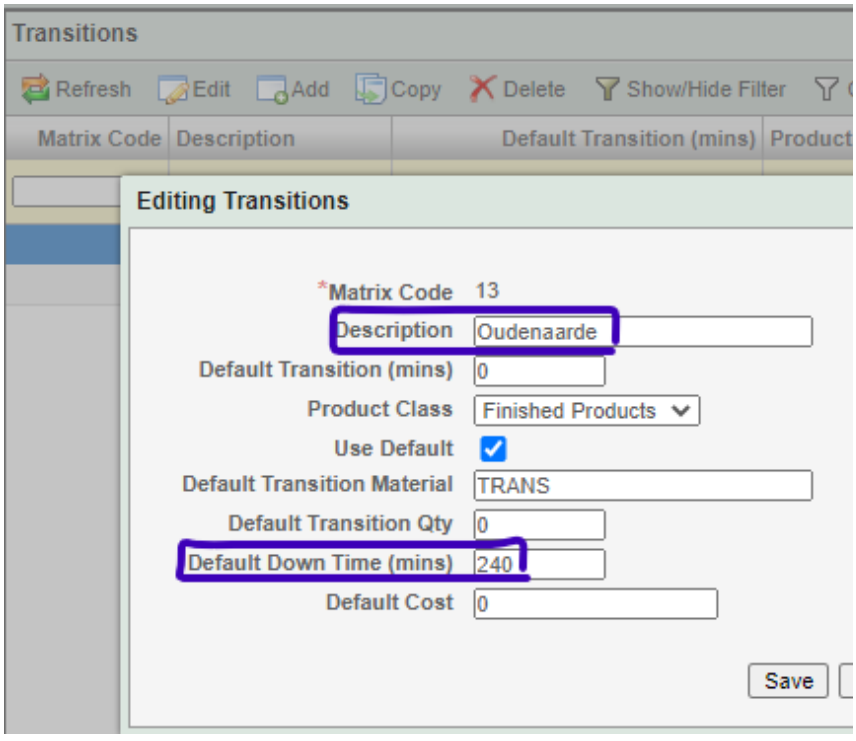
The duration is derived from the transition matrix assigned to the line (here, line CO4 in Oudenaarde) in the equipment table.



The transition matrix itself can be found in the ADM Transition Table.

If the Default checkbox is activated, the Default values are used.

Here, there is a default Down time of 240 min.

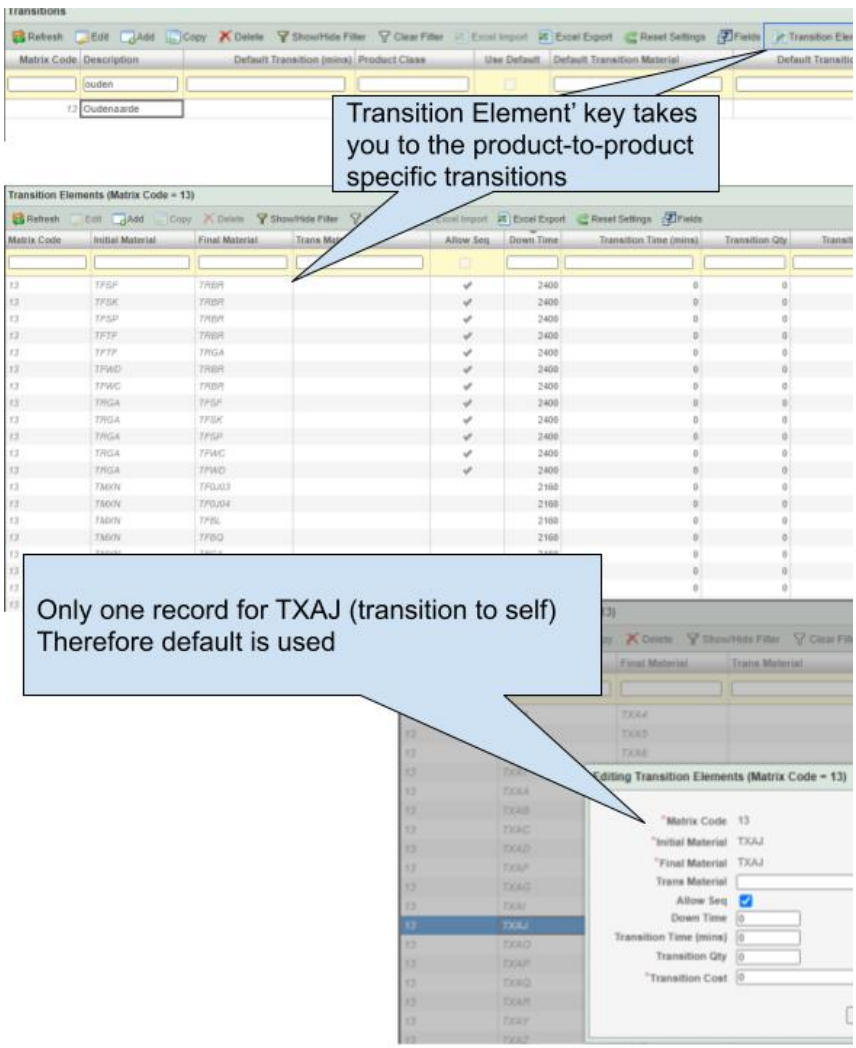


If a product specific transition is defined, it will take precedence over the default.

In this example, no product-to-product specific record match the actual run sequence.

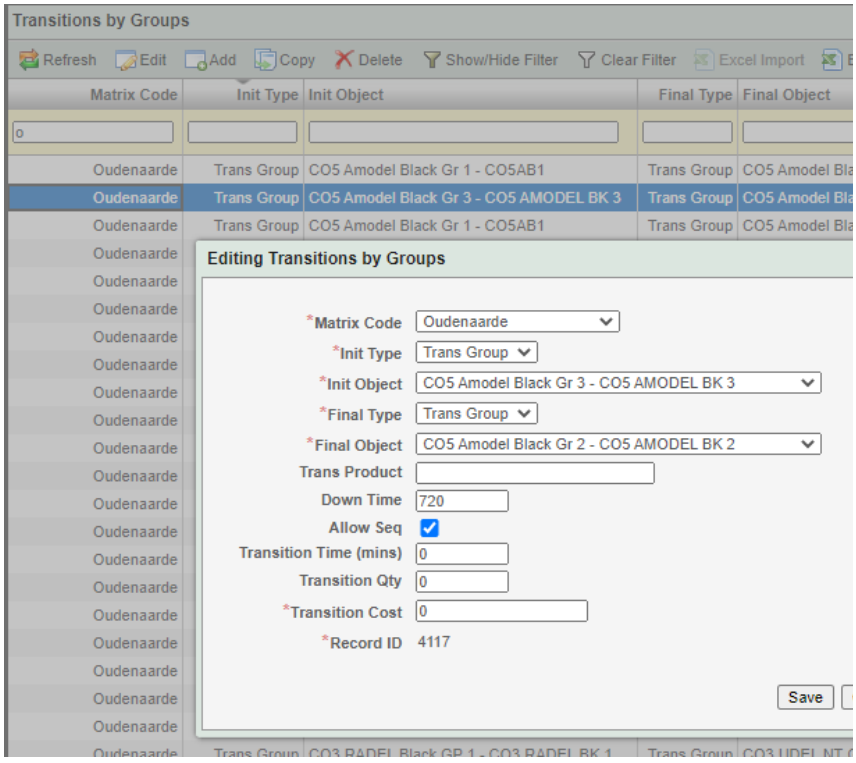
Hence, default duration being used (240 min).

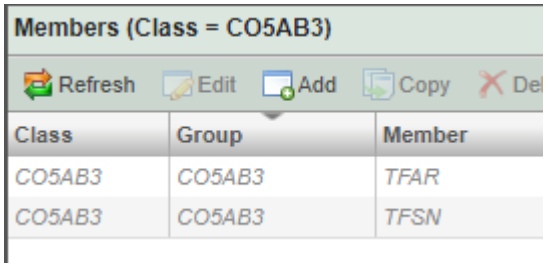
Note that the product to product transition table gets auto-populated overnight with product-to-self sequences, with a downtime of 0. This is what prevents transition times between runs of the same product.



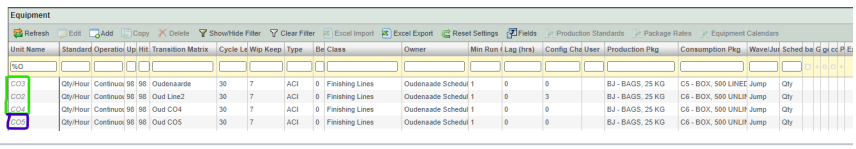
Alternative to product-to-product transition, a group-to-group transition makes the maintenance of transition matrices less labor intensive.

Instead of a list of product-to-product transition being maintained in the transition matrix, groups of products are defined. The transition rules are defined at group level.

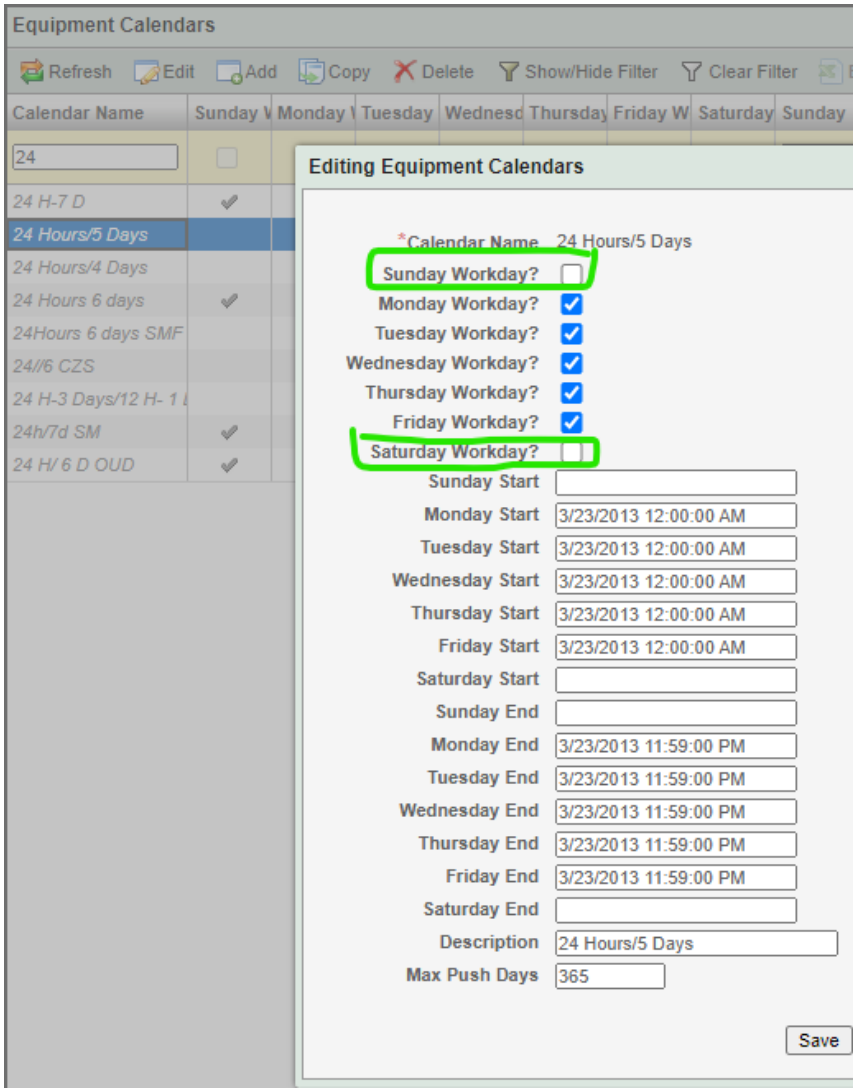


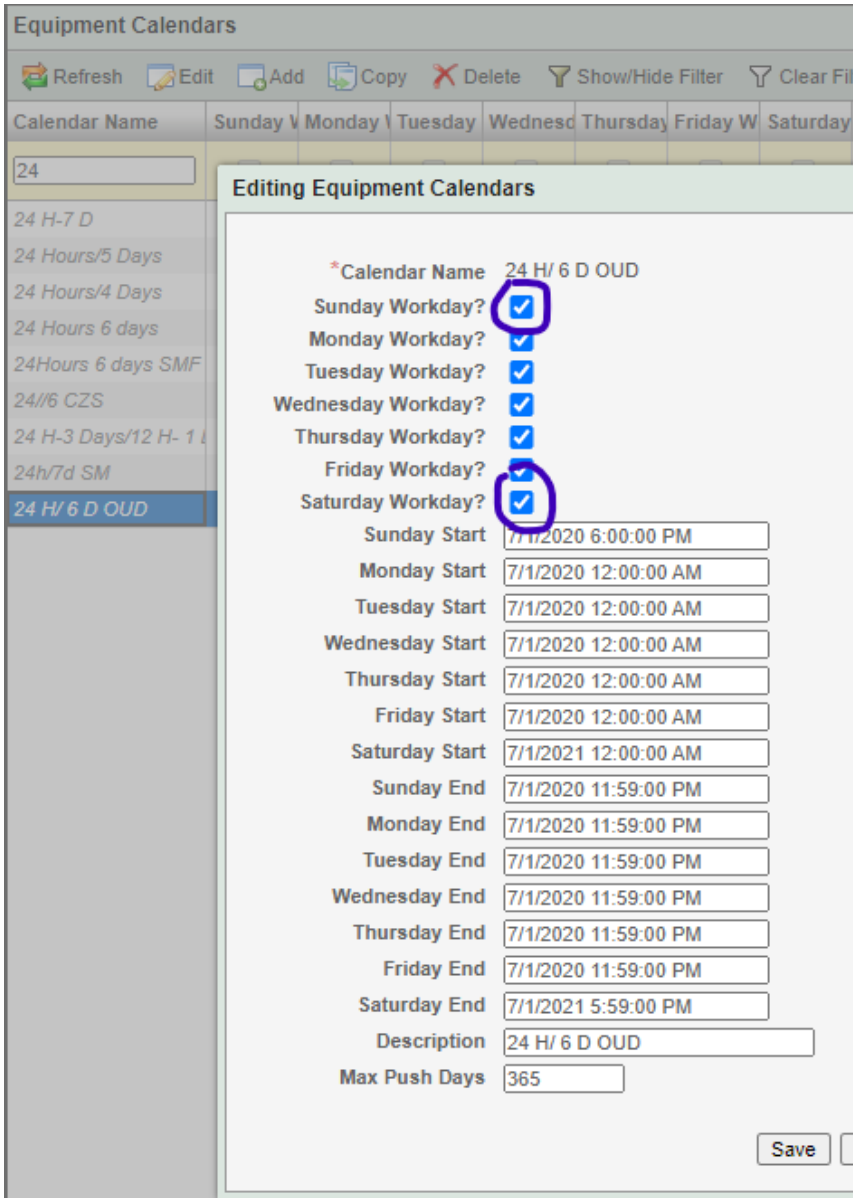
Groups are defined in the Classification table, and products are assigned to them.	

Equipment Calendars

Lines recurring downtimes (i.e. weekends, shifts, etc.) are maintained there. In this example, lines CO2, CO3 & CO4 are down every WE. Line CO5 is a 24/7 type line.	
Lines CO2 CO3 and CO4 are assigned to "**24 Hours/5 Days**" calendar Line CO5 is assigned to "**24 H/6 D OUD**" calendar.	

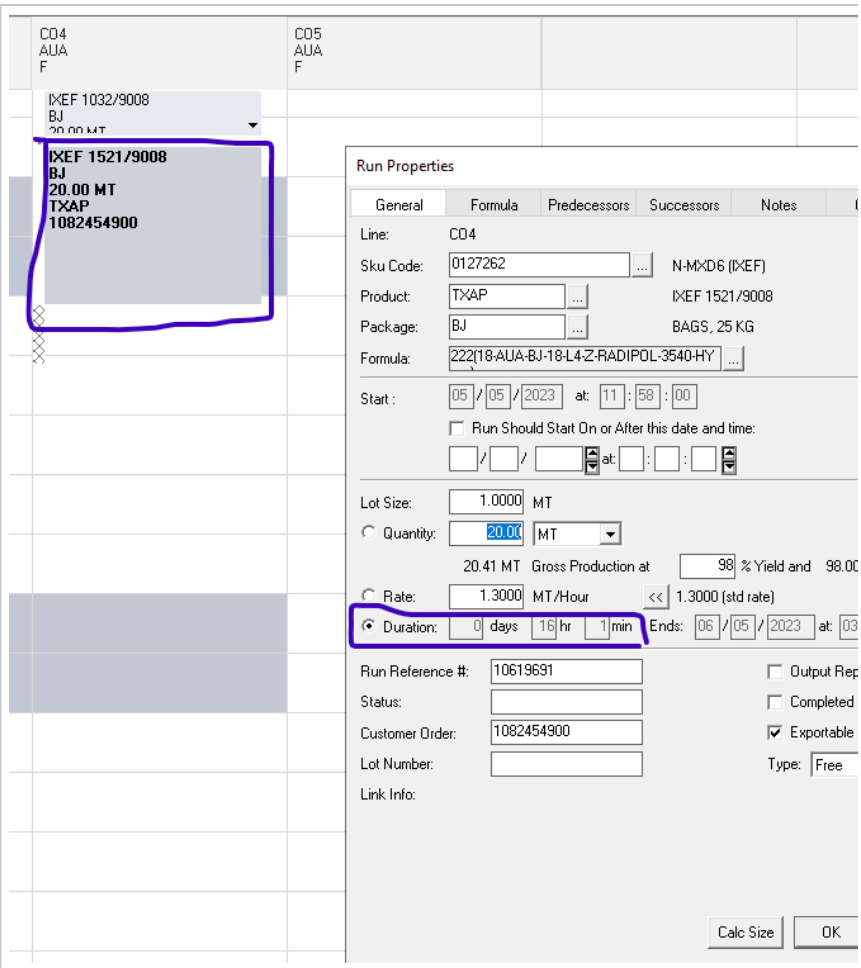
"**24 Hours/5 Days**" calendar shows that Sundays and Saturdays are off.



"**24 H/6 D OUD**" calendar configuration shows that all days are working days.	

note that runs will overlap no-working days. In this example, the run duration is 16h.

But it'll start Friday around noon, and complete early Monday morning.

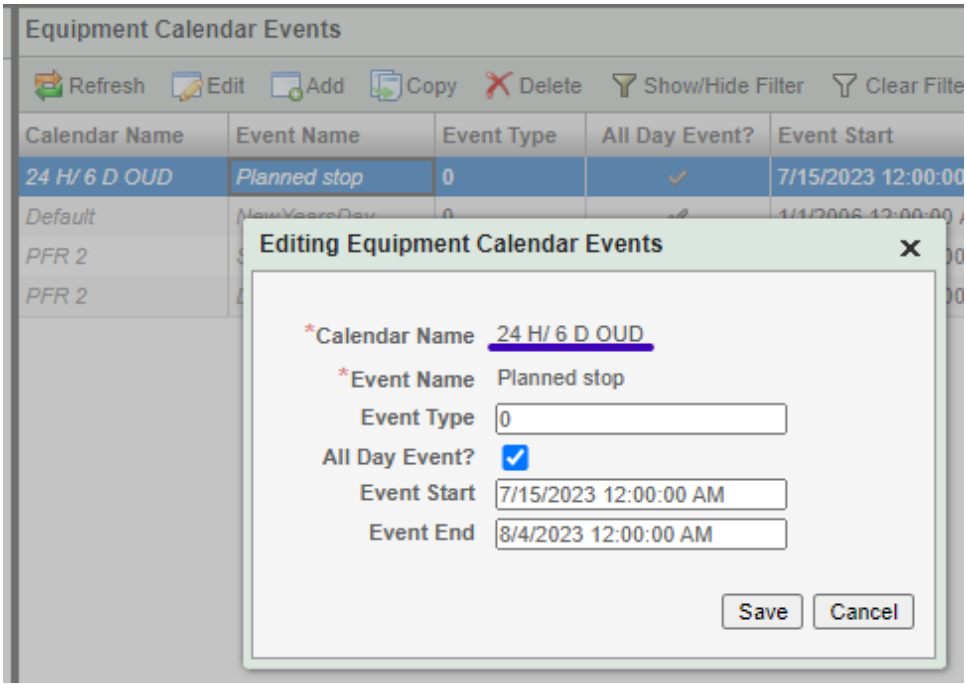


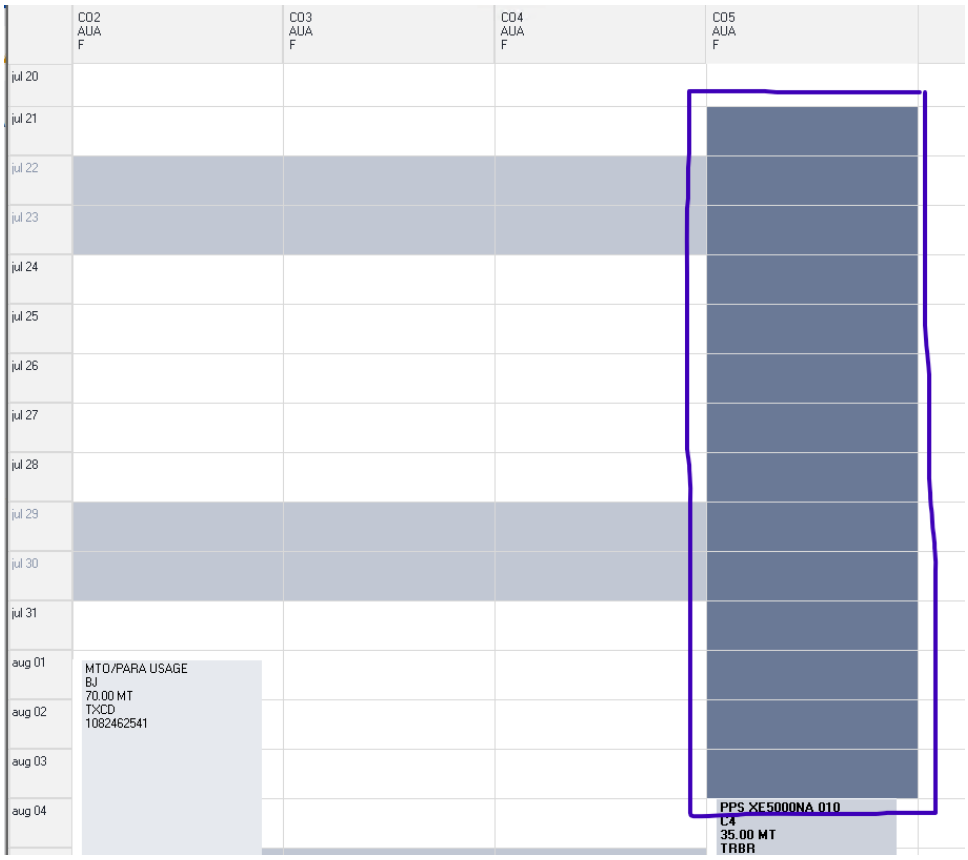
Equipment Calendar Events (fixed downtimes)

This is where you want to manage your shutdowns and fixed downtimes.

Contrary to floating downtimes, these events cannot move. They are therefore ideal to represent annual shutdown.

Insert a fixed downtime in the Equipment Calendar Events table.



It will create show on the Schedule that event will only update after the overnight jobs. Hence, 24h after the event is inserted in the calendar	
	Note that a fixed downtime applies to a calendar. Hence to all lines assigned to that calendar.

Saving a schedule

	Only one person may edit a schedule at a time. One person editing, other people displaying is fine.
blocked URL	Some plants created a Google Chat Room to check with other site planners when going in a schedule in edit mode

to Master Schedule

as a Scenario

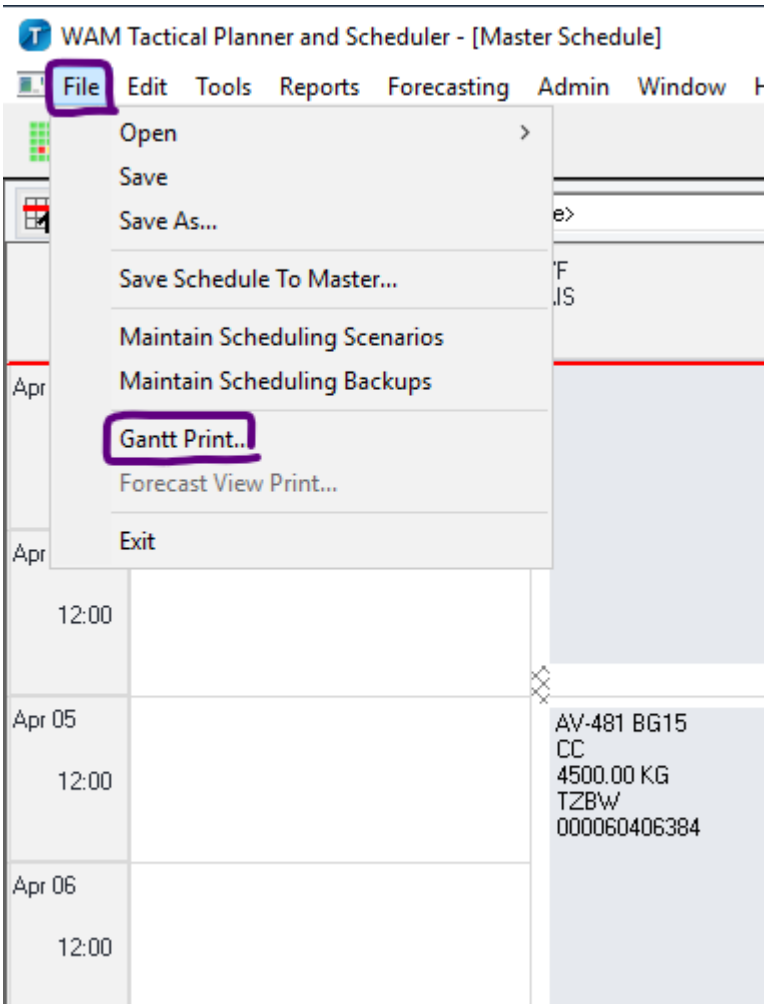
Production Schedule upload to SAP

The production schedule is uploaded once a day into SAP. For more on this, read the corresponding note.

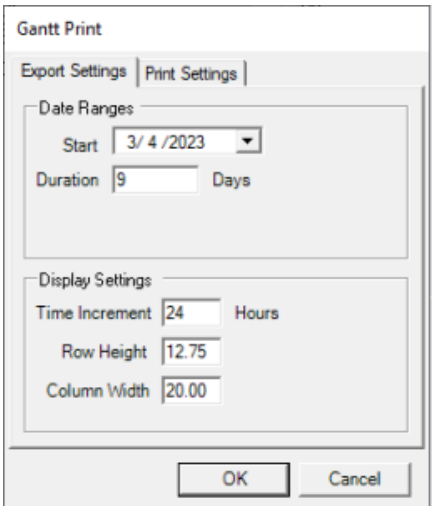
On-demand upload is also supported. Security must be given to a user to be allowed to upload the schedule. When running on-demand, runs on lines /locations that the user is allowed for are uploaded into SAP. More about this here.)

Print a schedule

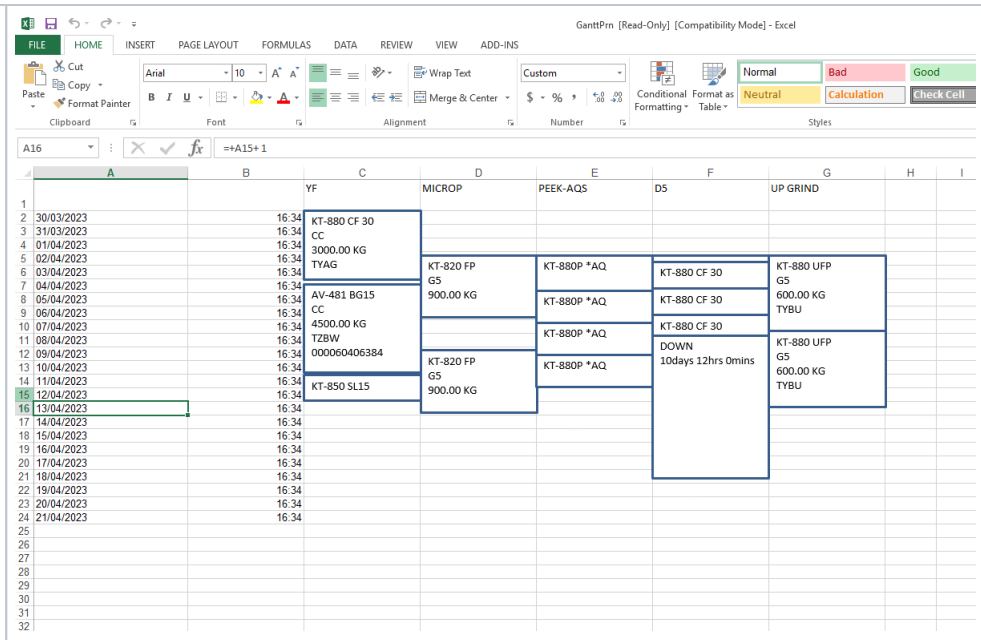
From the menu, pick "Gantt Print..."



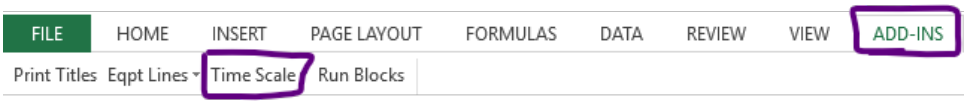
Hit 'OK'



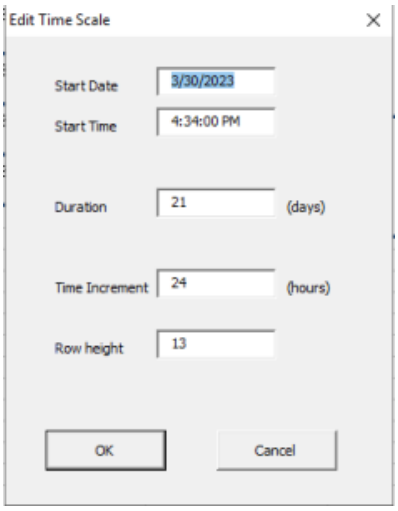
It opens an Excel spreadsheet.



The layout of the Gantt may be configured: click “Add-ins”, then “TimeScale”, then cho



ose “SetScale” from the drop down list, you should see an Edit Time Scale window open up (See demo screenshot below).

This is able to update the Time Increment value.	

Dynamic Scheduling

Dynamic Scheduling is an add-on to standard Picaso. It enables the generation of a production schedule with more sophisticated which, contrary to the standard, can account for the production wheel, production cycle, and other constraints that can be programmed.