

Highlights

The Innova 5.9.3 Release Notes include new functionality and improvements to existing functionality.

Highlights in this release include:

[New FleXicut Tail Trim product type](#)

[New Deboning descendent packing station configuration](#)

[New Trimming dashboard component](#)

[I-Cut Portioning editor improvements](#)

A number of exciting improvements have been made to QC Scanner:

[Defect classification](#)

[Improvements to reports](#)

[Salmon dashboards and reports now show color under 20](#)

In addition, [support has been added for the Maja V-Cut240](#) portioning machine.

Improvements and newly released functionality

Base

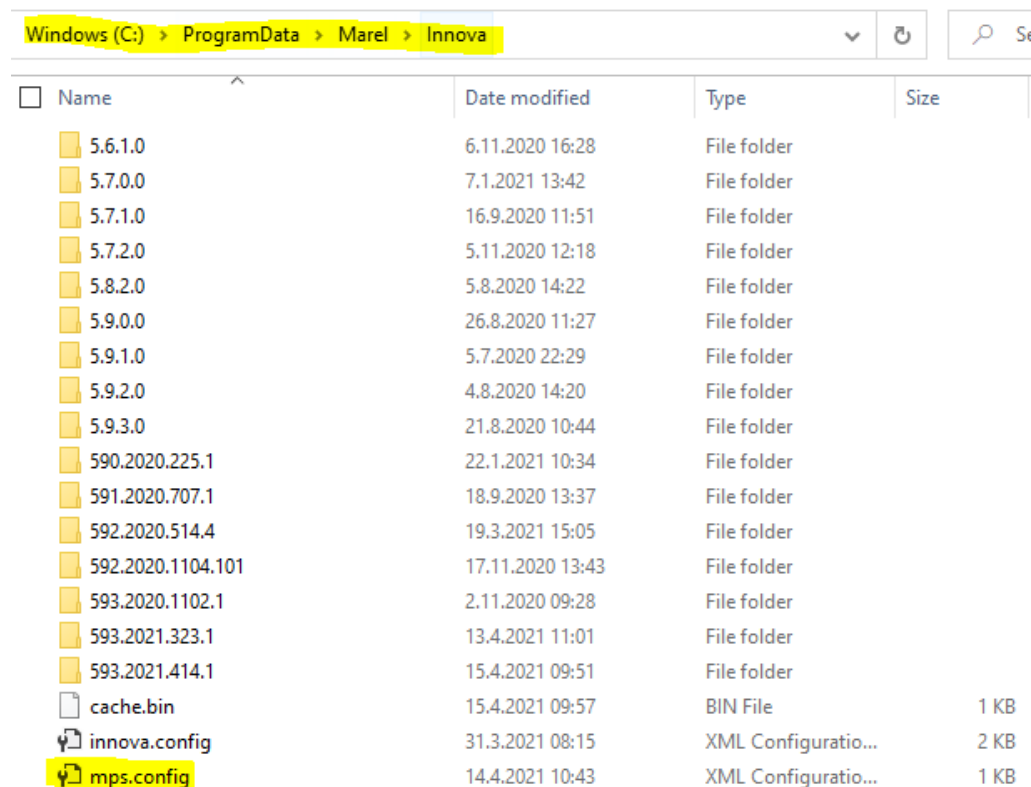
New default location for mps.config file

As of version 5.9.3, the default location for the mps.config file is **C:\ProgramData\Marel\Innova\mps.config**. Innova will use the mps.config from that path if the file exists there instead of installDir or MP5DIR as in previous versions. This change prevents the file being deleted during a Windows 10 update.

When upgrading from 5.9.x to 5.9.3, make sure to add and edit the backed up mps.config file to the new C:\ProgramData\Marel\Innova\mps.config path if needed and not the installDir.

When upgrading from 5.9.3 to 5.9.x, make sure to back up the mps.config file from the new C:\ProgramData\Marel\Innova\mps.config path.

For more information, see the *Innova Installation Manual*.



| Name | Date modified | Type | Size |
|-------------------|------------------|---------------------|------|
| 5.6.1.0 | 6.11.2020 16:28 | File folder | |
| 5.7.0.0 | 7.1.2021 13:42 | File folder | |
| 5.7.1.0 | 16.9.2020 11:51 | File folder | |
| 5.7.2.0 | 5.11.2020 12:18 | File folder | |
| 5.8.2.0 | 5.8.2020 14:22 | File folder | |
| 5.9.0.0 | 26.8.2020 11:27 | File folder | |
| 5.9.1.0 | 5.7.2020 22:29 | File folder | |
| 5.9.2.0 | 4.8.2020 14:20 | File folder | |
| 5.9.3.0 | 21.8.2020 10:44 | File folder | |
| 590.2020.225.1 | 22.1.2021 10:34 | File folder | |
| 591.2020.707.1 | 18.9.2020 13:37 | File folder | |
| 592.2020.514.4 | 19.3.2021 15:05 | File folder | |
| 592.2020.1104.101 | 17.11.2020 13:43 | File folder | |
| 593.2020.1102.1 | 2.11.2020 09:28 | File folder | |
| 593.2021.323.1 | 13.4.2021 11:01 | File folder | |
| 593.2021.414.1 | 15.4.2021 09:51 | File folder | |
| cache.bin | 15.4.2021 09:57 | BIN File | 1 KB |
| innova.config | 31.3.2021 08:15 | XML Configuratio... | 2 KB |
| mps.config | 14.4.2021 10:43 | XML Configuratio... | 1 KB |

In addition, the change fixes the following:

During manual installation, Distribute.exe failed with an exception because the mps.config file could not be found in the ProgramData folder and the MP5DIR folder was not used as a fallback.

The default path (first path) when loading the mps.config in the **DistributeApp** was set to **targetDirectory/inputDirectory**.

This loading path has now been removed from the DistributeApp, and when the app is executed in Normal or Reset mode, the first path attempted is **ProgramData/Marel/Innova** (see below).

Furthermore, **FileNotFoundException** is allowed when trying to load the config, so the next path (Mp5Dir - Environment variable) is also attempted.

Updated required .Net Framework version

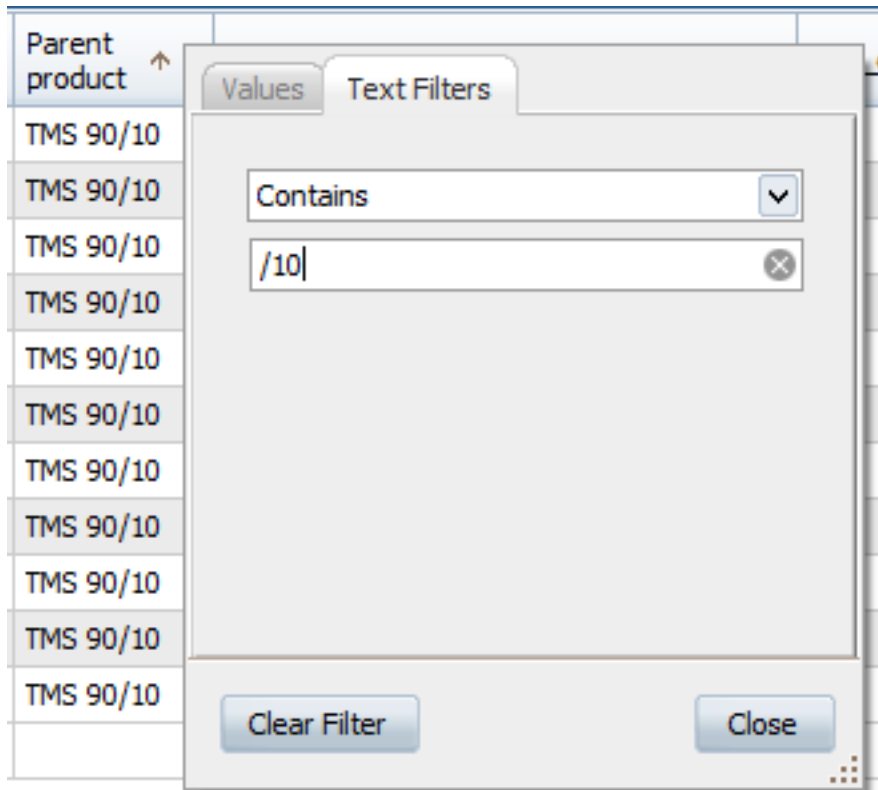
During installation and on startup, Innova required .Net Framework 3.5 to be installed even though it was no longer used. Now Innova requires .Net Framework 4.6.2 or newer to be installed.

Added Text Filters tab to column filter dialog on forms

When right-clicking in the upper right of a column on a form to open the column filter dialog, the Blanks option was missing from related tables in some columns.

A **Text Filters** tab was added to the column filter dialog to enable filtering the rows in the grid. This is similar to using the Auto filter, except that now it is possible to specify the filter type (Starts with, Contains, Is blank, and so on).

The filter behavior of the columns is now specified as **Display Text**, which enables this functionality.



Document system application restrictions no longer disregarded

The application restrictions defined in the XML data store were disregarded because of changes in the DocumentUC. To fix this, the toolbar access configuration was removed in the Documentation view extension and on the Documentation tab of the Unit Operations editor. The Documentation view extension and the Documentation tab in the Unit Operations editor now use the same application restrictions XML configuration as the rest of the Innova document system to exclude toolbar operations (Add, Edit, Delete and Save).

OrderMan improvements

On startup, OrderMan now bulk-loads assigned orders (500 at a time) and their associated orderlines.

Option added to ResourceScope to always add prefix to found items

A new option was added to the `-r` argument for WinUI.exe.

The `-r [option]` argument specifies different behavior for the translation system (ResourceScope) in Innova.

Available options are:

- Normal (default)
- ObjectNameIfNotFound
- ObjectNameAlways
- PrefixNotFound
- **PrefixFound (new)**

Example usage: "WinUI.exe -U 1 -m WinUI -r PrefixFound"

By starting WinUI with the -r PrefixFound option, all translatable text will get prefixed with different parameters depending on availability in the translation system.

1. Text that has a valid translation will get prefixed with a ¤ character.
2. Text that is not found will get prefixed with a ! character.
3. Text that is not found and no default value is provided will get prefixed with a !! character.
4. Text that has no prefix is not translatable.

For situations 2 and 3, the correct translation can be added to the correct place in the translation XML document. For situation 4, a code update must be made to make the text translatable.

Improved function that loads Queries

The function that loads Queries (Software Administration > User Interfaces > Queries) was improved. The new code is executed when the **Report designer** is opened. Database traffic was reduced, which is important when opening reports in systems with a long list of Queries on file.

Unit operation iterators can now be made inactive

Previously, when the **Active** checkbox was deselected on an iterator operation on the **Unit operation configuration** editor, the operation could still be run. Now when a service engineer or operation manager wants to create or manage a unit operation, they can make iterators inactive by removing the checkmark from the **Active** checkbox in the editor. This means that iterators now work the same way as other unit operations.

Database maintenance support files now installed with Innova

The support files needed for database maintenance (SMO) are now installed as part of the Innova Installation. These files were previously in a separate installation, which caused errors.

Can now use row filter as criteria for a grid control's lookup dataset

If the row filter can be converted to criteria, then the criteria is used when selecting a page for ExtDataSet. The data is filtered when the dataset is fetched, not in the UI after it has been fetched.

IsPersistant check is now included on standard criteria records

The previously missing check for **IsPersistant** is now included on standard criteria records before restoring persisted XML in the SystemCriteria constructor.

NOTE: The IsPersistant check only applies between sessions. If criteria are marked **IsPersistant = false**, they are not persisted between sessions. However, criteria are persisted during the same session even when marked IsPersistant = false. This is expected behavior.

This fix was added to versions 5.8.2 and later (nightly and stable).

Added support for Array variables in OpcUA

Support was added for Array variables.

SqlLookupColumn improvements

The SqlLookupColumn can now be saved to any column index in grids.

Fixed issue with Database maintenance form

An issue was fixed that caused the Database maintenance form to fail with a schema error. Now all instances of the SQL query that caused the error are capitalized so that localizations such as Turkish with a lower-case "i" will not cause an error.

Fixed Database options dropdown in Toolbox

When creating a new database in the Toolbox, the text boxes containing the paths to various directories were clipped. This has been fixed.

Fixed issue with WSServer losing connection

An issue was fixed where connection to WSServer was lost. The source of the problem was that in some cases the list of connected clients was duplicated or mixed up. The result was that the client lost the connection but still behaved as if the connection to the server was active.

Fixed trace output clearing

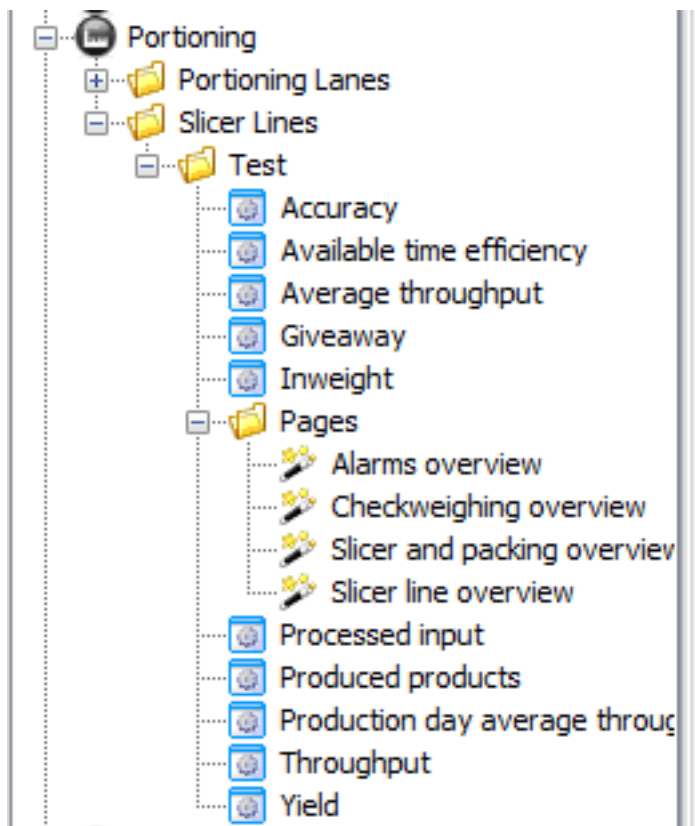
An issue was fixed with trace output clearing when logging the trace to the Unit Operation log. The fix was added to versions 5.9.2 (release/stable) and trunk.

Checkweighing

Support added for I-Slice3300 line

Support was added for including a checkweigher with the I-Slice3300 line, including the following updates to the Quick config, Slicing Line configuration and dashboard pages:

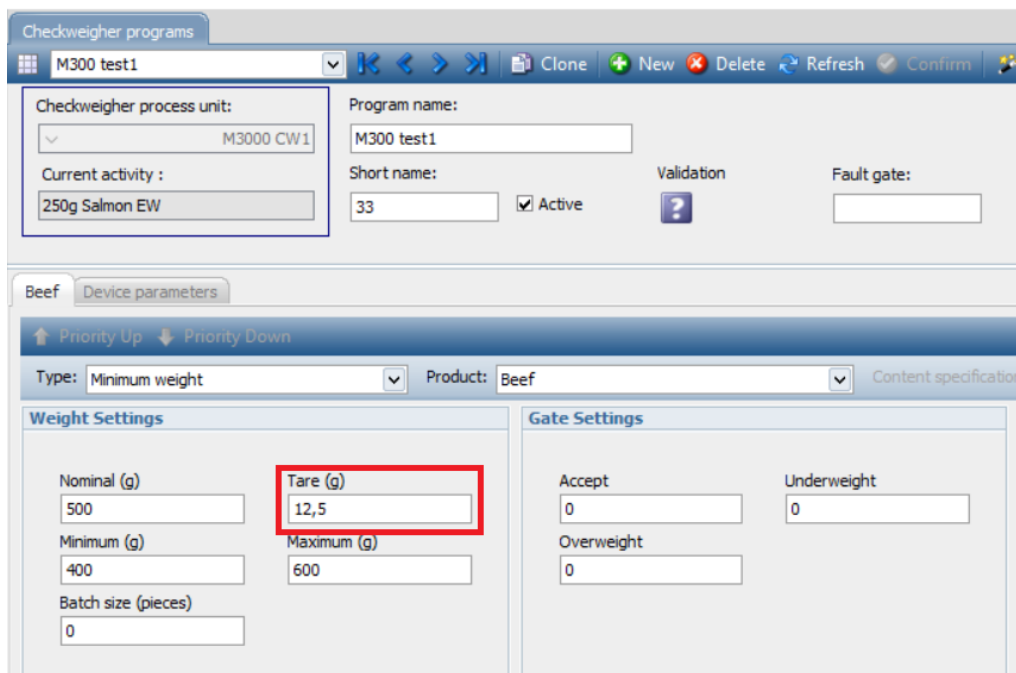
- The Quick config was updated to include a checkweigher when installing an I-Slice3300 line (for more information, see the Innova? Installation and Configuration Manual).
- In the Slicing Line configuration, the **InternalCheckweigher** option was removed from the **Checkweigher type** property. A new property, **Slicer checkweigher type**, was added with the following options:
 - **No Checkweigher**
 - **Internal Checkweigher** - The I-Slice 3300 line should use this option when the slicers have a built-in MSP checkweigher.
- The dashboard pages created in the Quick config are now available in the Dashboard Toolbox for each slicing line in the **Pages** folder.



M3000 A542 Checkweigher now supports program tare

Previously, the tare for the M3000 A542 Checkweigher was specified globally in the checkweigher program. However, the A542 requires tare to be specified per product.

To fix this issue, the **Tare** field in the Checkweighing program editor was moved to the details tab, and the value is now sent to the checkweigher as the product tare.



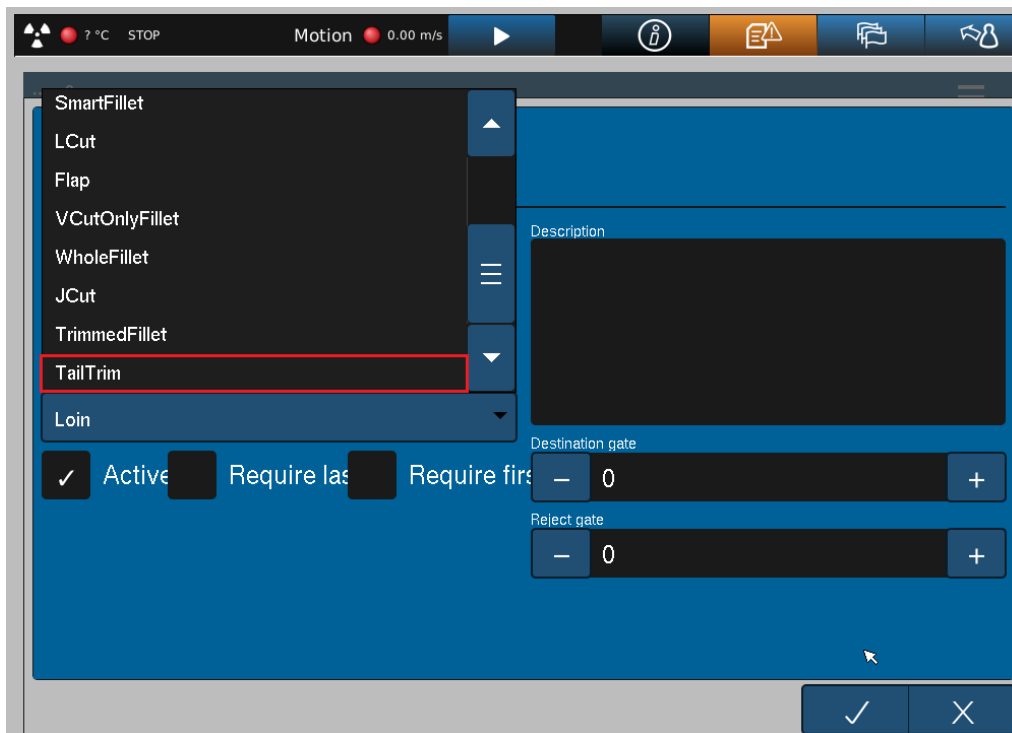
Fixed bug in Checkweighing editor

An issue was fixed where setting a product on a checkweighing program in the Checkweighing editor caused the WinUI to crash. It is now possible to store programs.

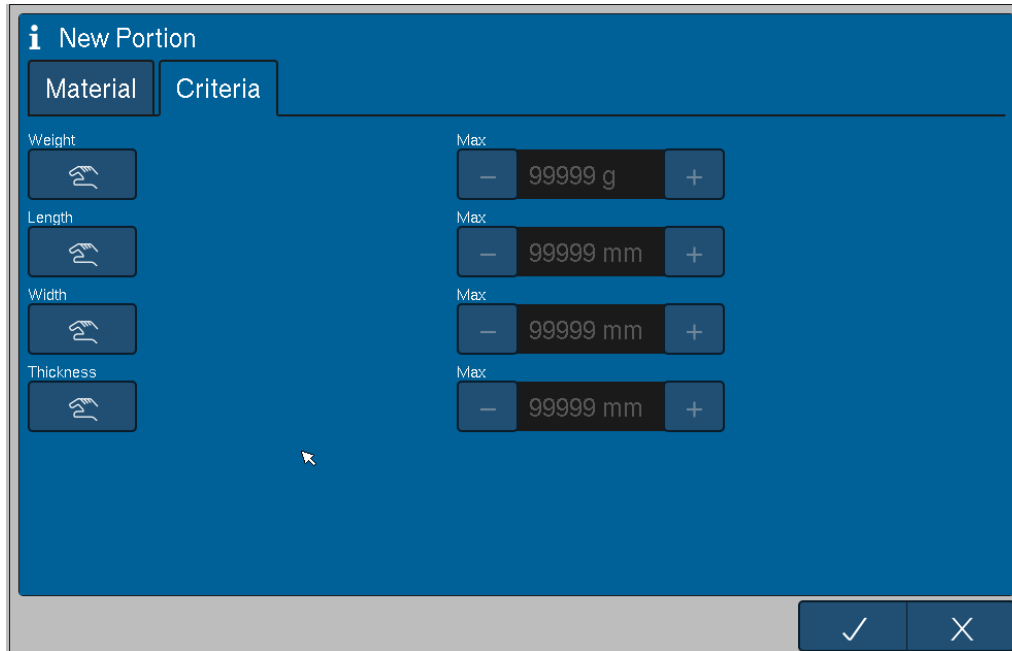
FleXicut

Added new Tail Trim product type

A new product type, **Tail trim**, was added for FleXicut portioning.



There are fewer criteria for this product type, with only a Max value for weight, length, width and thickness.



Added Refresh button to Product Setup dialog

Users can now refresh the material program setup modal in the FleXicut program editor to see an up-to-date list of available program setups.

FleXicut bug fixes

Issue when activating program from WinUI

When activating program from WinUI, the program data was being double encoded from UTF-16 to UTF-8. This has been fixed.

Slow loading

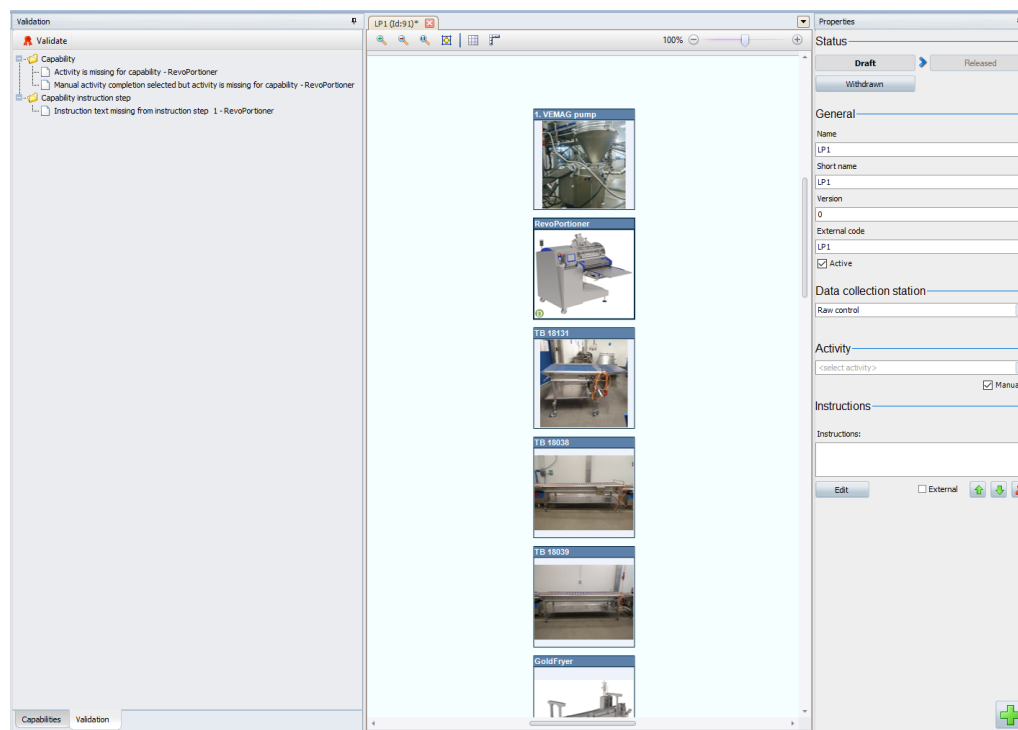
An issue with slow loading in FleXicut was fixed.

Further Processing

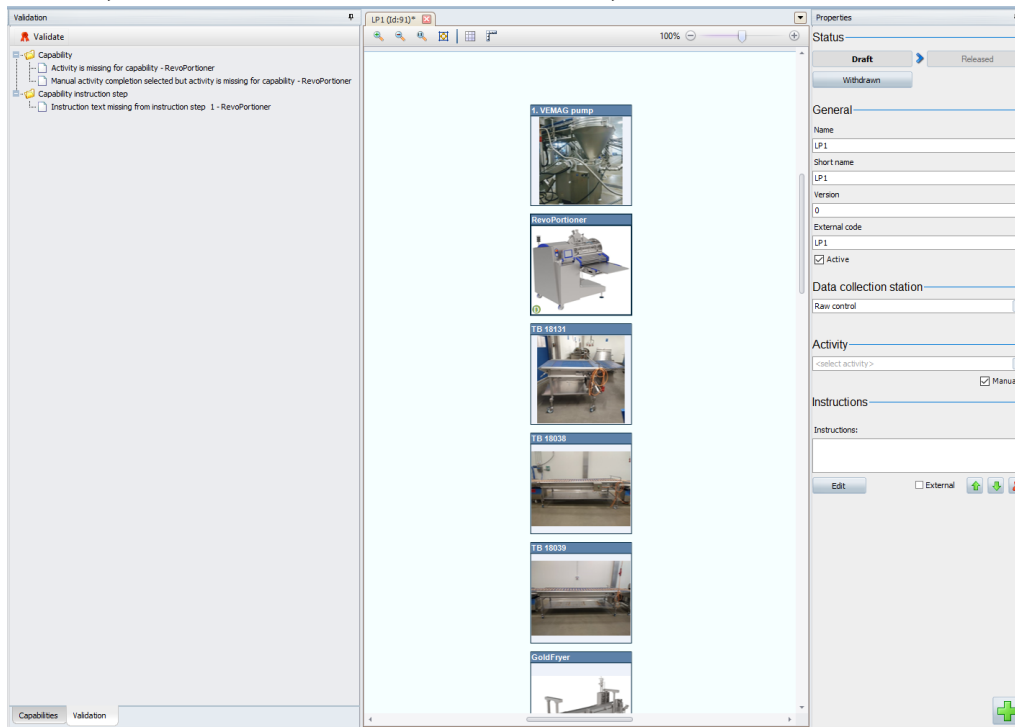
New Line Profiler validation checks

The following validation checks were added to the Line Profile editor:

- Users are now prevented from saving when an instruction step has been added without any Instruction text.



- An activity must now be selected when a manual activity method has also been selected.

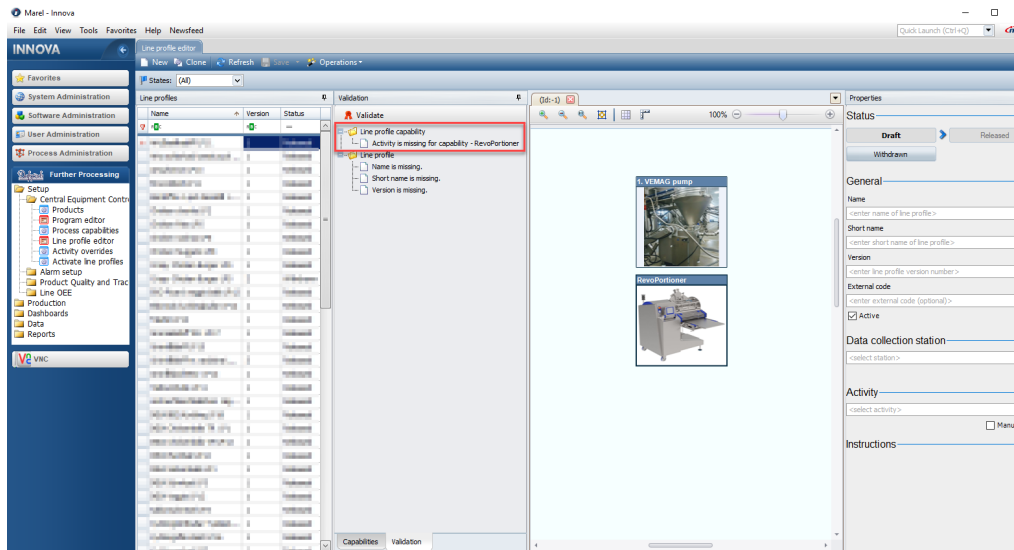
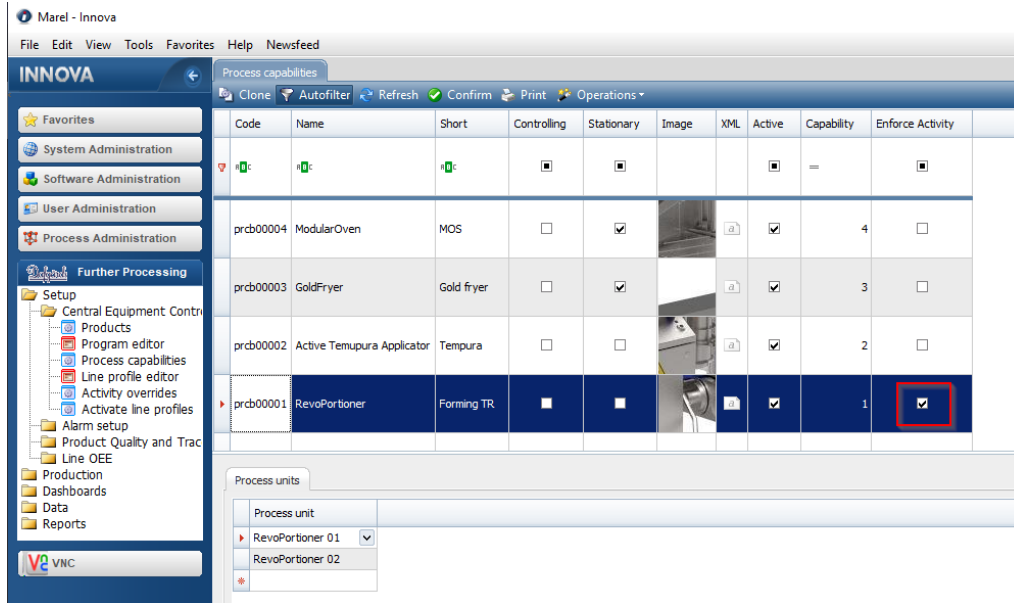


Can now enforce an activity in Line Profiler

An issue was fixed where a program was downloaded to the RevoPortioner even though no activity was selected in Line Profiler.

It is now possible to configure whether a process capability should enforce having an activity.

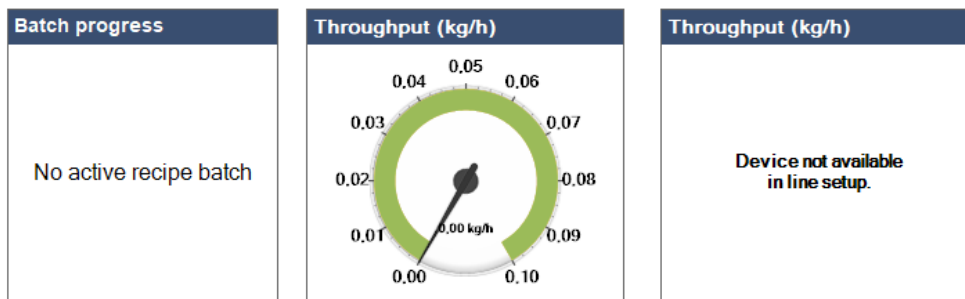
If this configuration is set to **True** in the **Process capabilities** grid, an error message appears if no activity was selected before trying to save a line profile that uses the capability.



Can now hide gauge in FP Gauge dashboard component

A new property was added to the **FP Gauge** dashboard component which allows the component to hide the gauge when the Station is not available in the current line setup.

| | |
|-----------------------------------|-------------------------------|
| ▼ Data | |
| Data info | Throughput (kg/h) |
| DataUnit | KilogramsPerHour |
| Hide gauge when not in line setup | True <input type="checkbox"/> |
| Page link | Throughput runchart |
| > Station configuration | RevoPortioner 01 |
| Station index | |



Added third-party device monitoring with an OPC UA connection

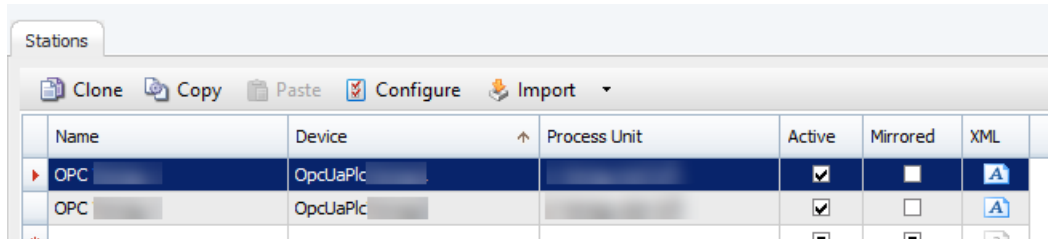
Third-party device monitoring using an OPC UA connection can now be added to a Further Processing (FP) system so that the data collected from these devices is stored and made available in the **RunChart** dashboard component.

Install third-party device monitoring

In the FP system setup, add a new entry to the system.

The device must be of the type **OPC UA PLC**.

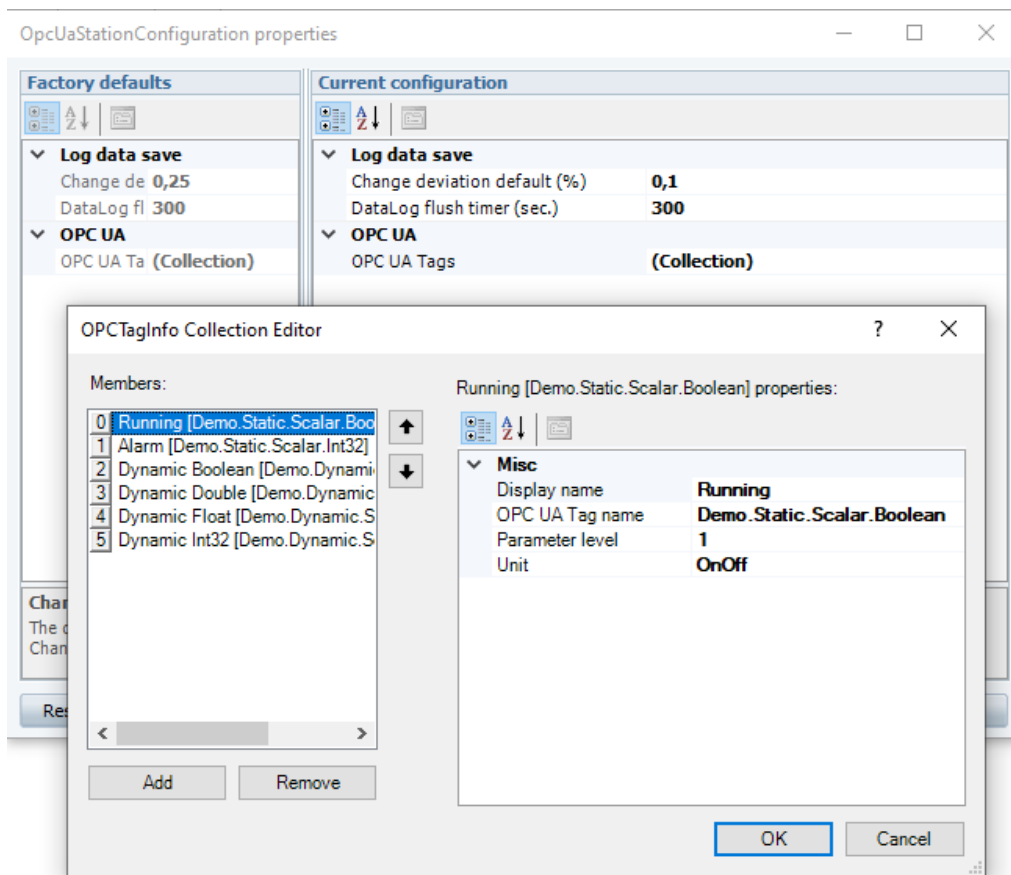
The process unit must have an **FP Program** configuration table.



After adding the station to the system, click Configure to configure which tags should be monitored and the information for each tag.

Multiple tags can be added.

The tag name must match the tag from the OPC UA Server.



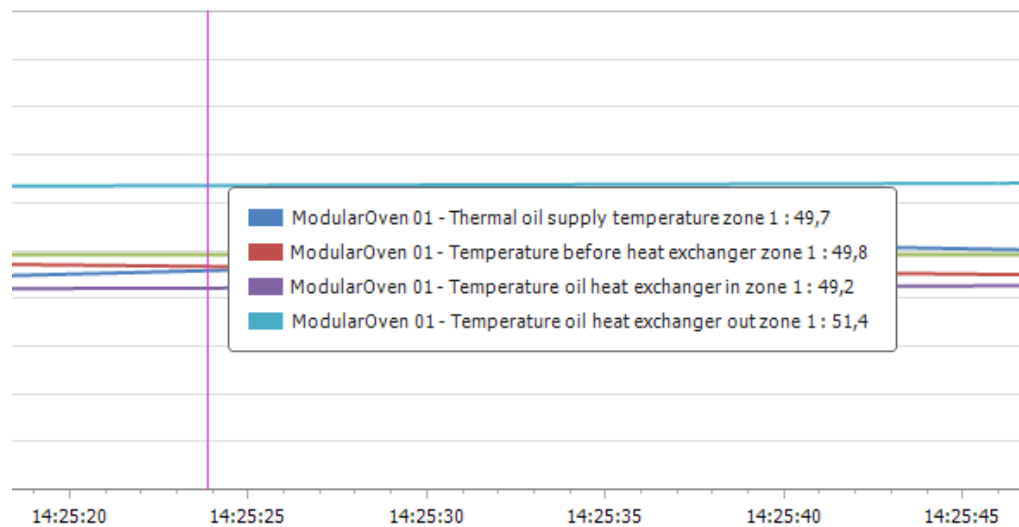
Fixed issues with program editor and new program dialog

An issue was fixed with loading the program editor when the **Product Type** filter was empty in the configuration.

Another issue was fixed where the **OK** and **Cancel** buttons were in incorrect locations when a new program dialog was opened for Revo Portioners without OEE.

Fixed vertical alignment of data points in the Runchart

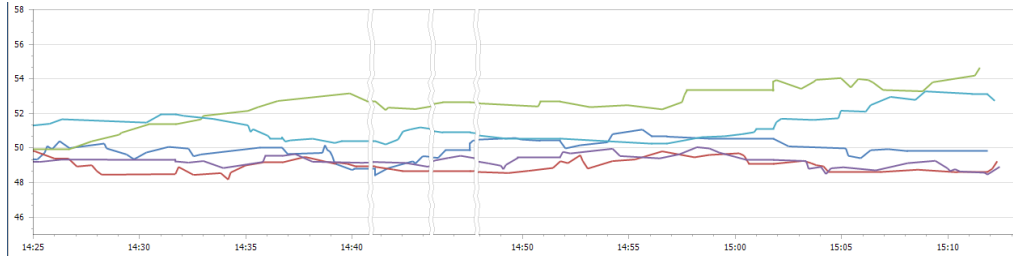
When hovering the cursor over the Runchart, the timestamp in the popup did not correlate with the cursor position, but rather to the closest data point. To fix the issue, the timestamp in the popup and the enlarged data points in the chart have been removed. The result is a smoother display of the lines in the chart.



The time labels on the X-axis have been updated to be scaled as follows, depending on the length of the time window being viewed (timestamp is added at every major tickmark):

- 0 - 2 minutes
 - Major tickmark every 5 seconds
 - Minor tickmark every second
- 2 - 5 minutes
 - Major tickmark every 15 seconds
 - Minor tickmark every 5 second
- 5 - 10 minutes
 - Major tickmark every 1 minute
 - Minor tickmark every 10 second

- 10 - 20 minutes
 - Major tickmark every 2 minutes
 - Minor tickmark every 30 seconds
- 20 - 90 minutes
 - Major tickmark every 5 minutes
 - Minor tickmark every 1 minute
- 1.5 - 3 hours
 - Major tickmark every 10 minute
 - Minor tickmark every 2 minutes
- 3 - 8 hours
 - Major tickmark every 15 minutes
 - Minor tickmark every 5 minutes
- 8 - 12 hours
 - Major tickmark every 30 minutes
 - Minor tickmark every 10 minutes
- 12 - 24 hours
 - Major tickmark every 45 minutes
 - Minor tickmark every 15 minutes
- 1 - 2 days
 - Major tickmark every 9 hours
 - Minor tickmark every 3 hours
- 2 - 5 days
 - Major tickmark every 12 hours
 - Minor tickmark every 2 hours
- 5 - 20 days
 - Major tickmark every 24 hours
 - Minor tickmark every 6 hours
- 20+ days
 - Major tickmark every 48 hours
 - Minor tickmark every 12 hours



SPC module improvements and bugfixes

The SPC module is now translatable and the following issues were fixed:

- Alarms were not raised.
- The Capability graph should show limits, but high limits were sometimes missing.
- The SPC Summary at capability contained data when no data exist.
- The mean on the capability graph is now a red dotted line, not a yellow line.
- "Target" has been renamed to "Mean" on the graph.
- "Spec limits" was always 75-85, even if no limit exist.
- The data table now only shows the last batch.
- When looking at real-time data, the page no longer switches to the graph page when a new registration is found.
- Rule changes were not reflected on the configuration page, which always showed "basic rules".

Grading

New grading system component

A new grading system component, **SetGradeMaterialToDestinationPrunitsComponent**, was added which updates the material for a destination process unit. For more information and details on how to configure process units and grading systems, see the *Innova Grading Installation and Configuration Manual*.

The component is configured and enabled on the **Components** tab of the **Grading systems** form.

Add a new line and enter the following details:

| Column | Value |
|---------------|---|
| Description | SetGradeMaterialToDestinationPrunitsComponent |
| Constructor | Marel.Mp5.Grading.Services.Managers.GradingManager |
| Class name | Marel.Mp5.Grading.Services.Plugins.SetGradeMaterialToDestinationPrunits |
| Assembly file | Marel.Mp5.Grading.Services |

Click **Save** and then **Refresh**.

The XML file for the component has three properties:

| Property | Description |
|----------------------------|---|
| AddProductPackagingToBatch | If True , then the product packaging details from the parent processing unit is inserted into the batch column of the destination process unit. This property is set to True by default. |
| SelectedGraders | If left blank, then the component handles material updates for all graders used by the selected grading system. To select only specific graders, enter the ID of each grader separated by comma (id,id). |
| SetProductAsPending | If True , then the product on the destination process unit is set as pending. Otherwise it is set directly. This property is set to True by default. |

Note that the Innova client must be restarted if changes are made to the configuration for the component.

Tracing can be enabled for the component on the **System programs** form by selecting the relevant Grading program(s) and selecting the component description under **Grading Manager**.

The activity method for the related process units can be set to **Change directly** or **Pending**. The configuration table value should be set as **Product** (Process Administration > Process Configuration > Process Unit).

Destination process units must also be defined for graders in the affected Grading system(s).

To see the functionality, go to **Grading > Production > Process units**.

Select a process unit that has been configured. Under **Pending activity**, select the material and start the activity. The product activity for the selected gates will be updated, either directly or set as pending.

Grader is currently offline. Grader will be configured when it comes online.

| Process Unit | Material | Gate | Activity | Quantity |
|----------------------|----------|--------------------|----------|----------|
| DCP.03.L.Medium.H... | Start | DCP.03.L.Light.Ham | 3904 | 3904 |
| Medium Ham 01 | | | 3905 | 3905 74 |
| Medium Ham 02 | | | 3906 | 3906 72 |
| Medium Ham 03 | | | 3907 | 3907 73 |
| Medium Ham 04 | | | 3908 | 3908 2 |
| Medium Ham 05 | | | 3909 | 3909 2 |
| Medium Ham 06 | | | 3910 | 3910 2 |
| Medium Ham 07 | | | 3911 | 3911 2 |
| | | | 3917 | 3917 |

New multi-lane grader plugin

A new grading plugin, **SetSourcePrunit**, allows the override of the SourcePrunit and ContextPrunit in product transactions for pieces processed by a grader. This can be done for gates and inputs/lanes.

The plugin is configured by adding an entry on the Components tab of the Grading systems form.

The screenshot shows the 'Grading systems' form for system 'A600'. The 'System settings' section includes fields for Name, Short name, Code, Application, Site, Default unit operation, System type, System program, Batch log details, Piece log details, XML, and checkboxes for Active, Use reduction, and Record nominal weight. The 'Components' tab is active, showing a table with the following data:

| Sequence | Description | Constructor | Constructor Id | Class name | Assembly file | XML |
|----------|-----------------|--|----------------|--|----------------------------|-----|
| 1 | SetSourcePrunit | Marel.Mp5.Grading.Services.Managers.GradingManager | | Marel.Mp5.Grading.Services.Plugins.SetSourcePrunit | Marel.Mp5.Grading.Services | [A] |

Set the following:

- Sequence
- Constructor: Marel.Mp5.Grading.Services.Managers.GradingManager
- Assembly file: Marel.Mp5.Grading.Services
- Class name: Marel.Mp5.Grading.Services.Plugins.SetSourcePrunit

Confirm and restart gsm.exe.

XML configuration example

The example configuration below has source two source prunits, one for each lane. It also has one context prunit for each crossover: lane 1 to gate 1 (11), etc. The destination process unit used for the product transaction comes from the gate configuration in the system setup.

```
<DataRoot>
<Marel.Mp5.Grading.Services.Plugins.SetSourcePrunit.Configuration>
<SourcePrunitSettings>
<SourcePrunitEntry>
<!--Input the source/context process units should be applied to.-->
<Input>1</Input>
<!--List of gates the source/context process units should be applied to. Leave empty
to apply to all gates for input.-->
<Gates>1</Gates>
<!--Source process unit to use.-->
<SourcePrunit>1</SourcePrunit>
<!--Context process unit to use.-->
<ContextPrunit>11</ContextPrunit>
</SourcePrunitEntry>
<SourcePrunitEntry>
<!--Input the source/context process units should be applied to.-->
<Input>1</Input>
<!--List of gates the source/context process units should be applied to. Leave empty
to apply to all gates for input.-->
<Gates>2</Gates>
<!--Source process unit to use.-->
<SourcePrunit>1</SourcePrunit>
<!--Context process unit to use.-->
<ContextPrunit>12</ContextPrunit>
</SourcePrunitEntry>
<SourcePrunitEntry>
<!--Input the source/context process units should be applied to.-->
<Input>2</Input>
<!--List of gates the source/context process units should be applied to. Leave empty
to apply to all gates for input.-->
<Gates>1</Gates>
<!--Source process unit to use.-->
<SourcePrunit>2</SourcePrunit>
<!--Context process unit to use.-->
<ContextPrunit>21</ContextPrunit>
</SourcePrunitEntry>
<SourcePrunitEntry>
<!--Input the source/context process units should be applied to.-->
<Input>2</Input>
<!--List of gates the source/context process units should be applied to. Leave empty
to apply to all gates for input.-->
<Gates>2</Gates>
<!--Source process unit to use.-->
<SourcePrunit>2</SourcePrunit>
<!--Context process unit to use.-->
<ContextPrunit>22</ContextPrunit>
</SourcePrunitEntry>
</SourcePrunitSettings>
</Marel.Mp5.Grading.Services.Plugins.SetSourcePrunit.Configuration>
<ConfigSections>
```

```

<Section
name
="Marel.Mp5.Grading.Services.Plugins.SetSourcePrunit.Configuration"
type="Marel.Mp5.Grading.Services.Plugins.SetSourcePrunit+Configuration,
Marel.Mp5.Grading.Services" serializer="Marel.Co-
mmon.Serialization.XmlDataSerializer, Marel.Common" />
</ConfigSections>
</DataRoot>
    
```

Added fillrate support for A600 grader

Fillrate can now be configured for an A600 grader in an Innova grading program. This can be used, for example, to maintain a given rate on a gate by allowing alternate products if not enough of the main product is available. For more information on how to configure fillrate, see the *Innova Grading Installation and Configuration Manual*.

Can now send Round Robin mode to A600 graders

Previously, the **Round robin type** in Product settings was always set to **None** in the program XML that was sent to the grader for simplegrading (batchmode=No batching) and to **RR=Piece** for simplebatching (batchbyweight or batchbycount). This meant that the Round Robin mode failed in Innova and had to be set locally on the A600.

The fix now properly allows and sends **None/Piece/Grouped** for simplegrading and **None/Piece/Batch** for simplebatching. See examples below. (Note that the round-robin parameter only applies to BatchByCount, BatchByWeight and None(NoBatching) batchmethods.)

Example 1:

| Sequence | Gate list | Material | Piece type | Minimum piece weight | Maximum piece weight | Batching mode | Round robin type | Minimum batch weight | Lin |
|----------|-----------|-----------|------------|----------------------|----------------------|---------------|------------------|----------------------|-----|
| 1 | 1 | Product 1 | | | | By count | Batch | | Fix |
| 2 | 2 | CL 75 | | | | By weight | Batch | | x |
| 3 | 3 | CL 85 | | | | None | None | | x |
| * | | | | | | | Piece | | |

| ID | Name | Subproducts | Locations | Min no. | Max no. | Box | Method |
|--------------------|-----------|-------------|-------------|---------|---------|-----|----------------|
| • 66 | Product 1 | default | 1 | 1 | 1 | 0 | simplebatching |
| • 67 | CL 75 | default | 2 | 1 | 1 | 0 | simplebatching |
| • 68 | CL 85 | default | 3 | 1 | 1 | 0 | simplegrading |
| <i>Not handled</i> | | | <i>None</i> | | | | |

batch
-
+
Both

Round robin type Both/Either

Example 2:

Product settings

| Sequence | Gate list | Material | Piece type | Minimum piece weight | Maximum piece weight | Batching mode | Round robin type | Minimum batch weight | Line |
|----------|-----------|-----------|------------|----------------------|----------------------|---------------|------------------|----------------------|------|
| 1 | 1 | Product 1 | | | | By count | Batch | | Fixe |
| 2 | 2 | CL 75 | | | | By weight | Piece | 10 | Fixe |
| 3 | 3 | CL 85 | | | | None | Batch | | xe |
| * | | | | | | | None | | |
| | | | | | | | Piece | | |

| ID | Name | Subproducts | Locations | Min no. | Max no. | Box | Method |
|--------------------|-----------|-------------|-------------|---------|---------|-----|----------------|
| • 66 | Product 1 | default | 1 | 1 | 1 | 0 | simplebatching |
| • 67 | CL 75 | default | 2 | 1 | 1 | 0 | simplebatching |
| • 68 | CL 85 | default | 3 | 1 | 1 | 0 | simplegrading |
| <i>Not handled</i> | | | <i>None</i> | | | | |

piece
-
+
Both

Round robin type Both/Either

Example 3:

Product settings

| Sequence | Gate list | Material | Piece type | Minimum piece weight | Maximum piece weight | Batching mode | Round robin type | Minimum batch weight | Line t |
|----------|-----------|-----------|------------|----------------------|----------------------|---------------|------------------|----------------------|--------|
| 1 | 1 | Product 1 | | | | By count | Batch | | Fixed |
| 2 | 2 | CL 75 | | | | By weight | Piece | 10 | Fixed |
| 3 | 3 | CL 85 | | | | None | Grouped | | Fixed |

| ID | Name | Subproducts | Locations | Min no. | Max no. | Box | Method |
|--------------------|-----------|-------------|-------------|---------|---------|-----|----------------|
| 66 | Product 1 | default | 1 | 1 | 1 | 0 | simplebatching |
| 67 | CL 75 | default | 2 | 1 | 1 | 0 | simplebatching |
| 68 | CL 85 | default | 3 | 1 | 1 | 0 | simplegrading |
| <i>Not handled</i> | | | <i>None</i> | | | | |

grouped - +
Round robin type

Can now disable CL buttons on Product Settings IPC screen

Innova service can now enable or disable the **Min piece CL**, **Max piece CL**, **Batch CL**, **Min CL deviation** and **Max CL deviation** buttons on the Product Settings IPC screen (Marel.Mp5.Grading.Gen2.UI.WebSocket.Applications.ProductSettings.Windows.ProductSettingsCE).

This was added to 5.7.2, 5.9.2 and trunk. If updating from 5.7.2 to 5.9.0 or later, the config must also be updated because in 5.7.2 there is only a single CL deviation button (which was split into Higher and Lower CL Dev from 5.9.0 onwards).

Update the Marel.Mp5.Grading.Gen2.UI.WebSocket.dll file and update the UI.WebSocket folder in the distribution folder and distribute it. You'll need to restart the head that runs the browser to clear the cache.

Can now move items on Product settings screen according to sequence

New functionality and new buttons were added to the **Product settings** IPC screen (ProductSettingsCE) to allow items to be moved to the top and bottom of the list according to their sequence number.

| Sequence | Code | Product name | Allowed | Assigned | Order | Order progress |
|----------|-----------|------------------------|---------|----------|----------|----------------|
| 1 | prma00115 | 10% PT standard Vack | | | Isdiag | 30% |
| 2 | prma00154 | 23% PT standard flask | 1,3 | 1,3 | Isdiag | 55.2% |
| 3 | prma00117 | 10% srs/krt standard | | | Isdiag | 96.3% |
| 4 | prma00158 | 10% KRAV vagn standard | | | No order | 0% |
| 5 | prma00125 | 23% srs/krt standard | 2,4 | 2,4 | Isdiag | 0% |
| 6 | prma00161 | 23% flask srs/krt | | | No order | 0% |
| 7 | prma00155 | 10% PT standard Flask | 11,9 | 9,11 | Isdiag | 65% |
| 8 | prma00151 | 10% pt HFG flask | | | No order | 0% |
| 9 | prma00107 | 10% pt vac SMK | | | No order | 0% |

| | | | | |
|--------------|--------------|-----------|------------------|------------------|
| Allowed | Min gates | Max gates | Min piece weight | Max piece weight |
| 78 % | 100 % | 89 % | 2 % | 2 % |
| Min piece CL | Max piece CL | Batch CL | Lower CL dev. | Higher CL dev. |
| | | | | 451 kg |

Improved error handling on Gates dashboard component

Error handling was improved on the Gates dashboard component, which displays a list of gates. A message is now displayed if there is a problem getting the gate details.

Fixed A600 default grade correlation (Grading Gen 1)

The **CorrelateByGradeId** configuration parameter in Marel.Mp5.Grading.Services.Devices.A600Grader.A600Configuration introduced in December 2019 had a default value of **False**, which caused issues with data registrations for A600 graders in grading Gen 1 systems (gsman.exe).

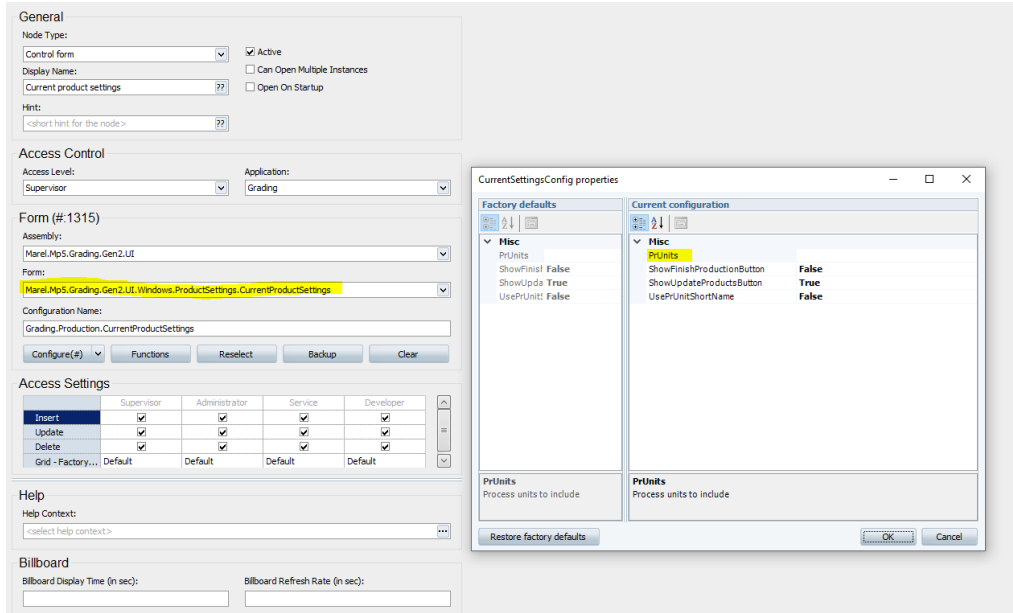
The workaround was to set the value to **True** in the XML config.

To fix the issue in the code, the default value was changed to **True**.

Fixed Current product settings filter (Gen 2 grading)

When configuring **Current product settings** with no process unit selected, the form applied a filter for the last-used process unit and it was not possible to see all process units, only the filtered process unit.

To fix the issue and show all process units for the application, the current process unit is excluded as a persistent filter if the **PrUnits** property is empty in the form configuration (Marel.Mp5.-grading.Gen2.UI.Windows.ProductSettings.CurrentProductSettings). The current process unit is included as a persistent filter only if the configuration contains a list of process units to include.



| Process unit | Sequence | Location | Assigned gates | Material | Flow type | Minimum piece weight | Maximum piece weight | Batch weight | Batch height/width | Batch height | Batching mode | Line type | Minimum piece CL | Maximum piece CL | Target CL of batch | Lower CL deviation | Upper CL deviation | Minimum piece age | Maximum amount... | Minimum amount... | Status | Order | Order size | Completed (%) | Completed Amount |
|--------------|----------|----------|----------------|-----------|-----------|----------------------|----------------------|--------------|--------------------|--------------|---------------|-----------|------------------|------------------|--------------------|--------------------|--------------------|-------------------|-------------------|-------------------|---------|-------|------------|---------------|------------------|
| Grading... | 1 15 | | | Pdbox 4kg | SUP | | | kg | batch | By weight | Fixed | | | | | | | | | | Not set | | | | |
| GradingTwo | 2 34 | | | Pdbox 4kg | SUP | | | kg | batch | By weight | Fixed | | | | | | | | | | Not set | | | | |
| GradingThree | 2 33 | | | Pdbox 4kg | SUP | | | kg | batch | By weight | Fixed | | | | | | | | | | Not set | | | | |

Fixed issue with graders remaining in the OEE "Running" state

An issue was fixed that caused 4700 to remain in the Running state in OEE due to incorrect timestamps used for production stops.

Fixed issue with secondary position option for label queues

Support was previously added for a second position point to trigger a unit operation for label queues (**HasLabelAtEndQueue** in the configuration). However, some controllers, for example, Spacker, were sending two batch position messages at the same time and triggering duplicate queue entries. This has been fixed and the secondary position option is now limited to the label queues.

This bug affected the following versions:

- 5.9.2 Nightly
- 5.9.2 Stable
- 5.9.1 Nightly (on or after May 28th)
- 5.7.2 Nightly (on or after May 28th)

The fix was applied in these versions:

- 5.9.2 Nightly (on or after Nov 17th)
- 5.9.2 Stable (on or after Nov 18th)
- 5.9.1 Nightly (on or after Nov 17th)
- 5.7.2 Nightly (on or after Nov 17th)

RecAtPos (REF) bug when SelectOutputQueueByNumber is True

Affected DLL: Marel.Mp5.Grading.Services.dll

Newly added support for POS=REF in RecAtPos message causes problems in the system when **SelectOutputQueueByNumber=True**.

The issue is that when the box gets to the end, it is not found in the takeaway in the grading system. The cause is that the POS=REF message triggers the premature removal of the pack from the takeaway.

The solution is to not allow the POS=REF message to trigger the removal. In this case, the message should be ignored so that the later POS=END message can be handled correctly and allow the pack to progress normally through the system.

Example:

```

POS=REF:
31 M3000RC.1.SureTrack      24.11.2020 19:03:05 MSG UP: <STX>
(70<HT>12<HT>3<HT>3<HT>1.867000e+01<HT>4<HT>2<HT>10<HT>7271<HT>28<HT>1<HT>26<HT>2426603<HT>14<HT>0<HT>11<HT>3<HT>27<HT>1<HT>1035<HT>96206<ETX>
38 TakeawayManager.1      24.11.2020 19:03:05 Processing batch position from Grader.1.bsde0001. Batch Id: 7271. Pos: 1 Out: 2
38 TakeawayManager.1      24.11.2020 19:03:05 Selecting output queue by number
39 Takeaway.1.TAW         24.11.2020 19:03:05 Removing pending batch 7271
39 Takeaway.1.TAW         24.11.2020 19:03:05 7 batches now pending
38 TakeawayManager.1      24.11.2020 19:03:05 Found output queue 2
38 TakeawayManager.1      24.11.2020 19:03:05 Inserting batch into Grading pack queue
38 TakeawayManager.1      24.11.2020 19:03:05 Inserting unit 20866603 from batch 7271 into Grading pack queue 3

POS=END
31 M3000RC.1.SureTrack      24.11.2020 19:03:16 MSG UP: <STX>
(70<HT>12<HT>3<HT>3<HT>1.867000e+01<HT>4<HT>2<HT>10<HT>7271<HT>28<HT>1<HT>26<HT>2426603<HT>14<HT>0<HT>11<HT>3<HT>27<HT>1<HT>1035<HT>96236<ETX>
38 TakeawayManager.1      24.11.2020 19:03:16 Processing batch position from Grader.1.bsde0001. Batch Id: 7271. Pos: 0 Out: 2
38 TakeawayManager.1      24.11.2020 19:03:16 Selecting output queue by number
38 TakeawayManager.1      24.11.2020 19:03:16 Found output queue 2
38 TakeawayManager.1      24.11.2020 19:03:16 Batch 7271 not found on any takeaway
    
```

Integration Services

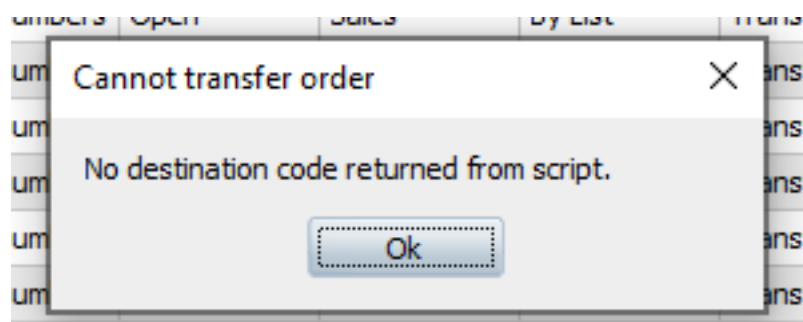
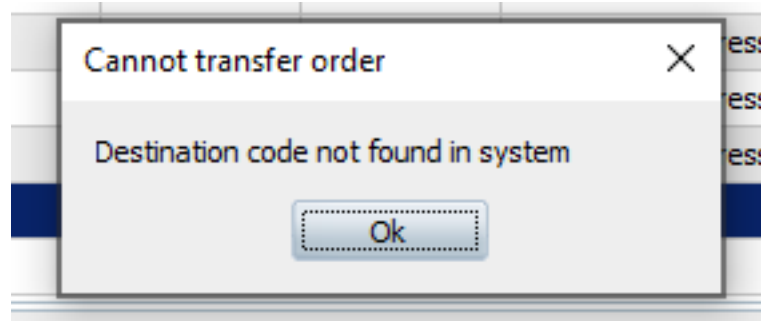
Added scripting support for Transfer Hub to select destination code

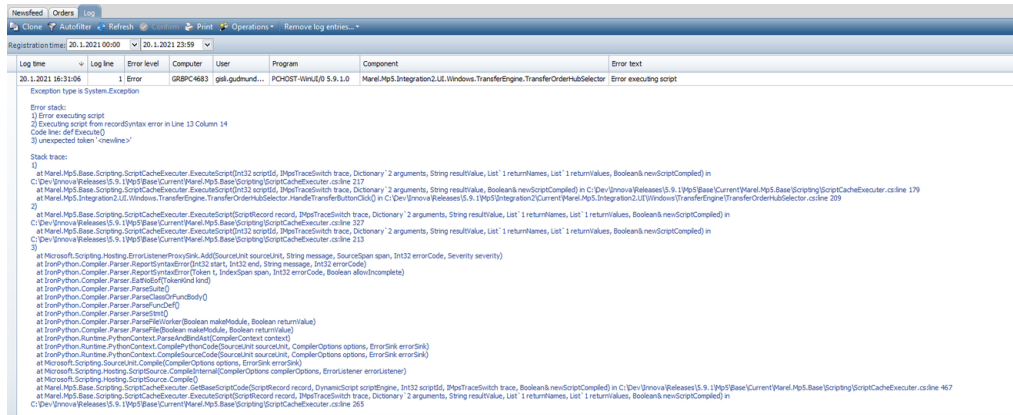
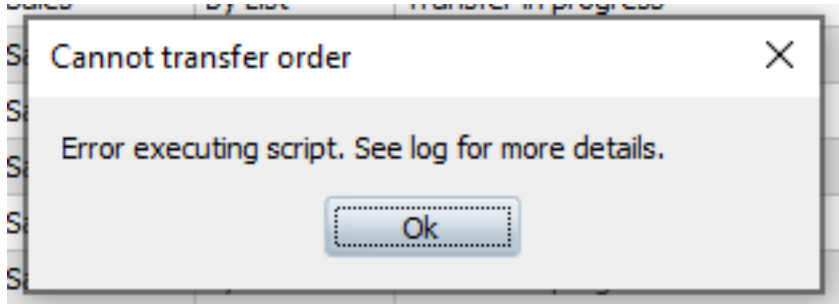
A new XML configuration, **Marel.Mp5.Integration2.TransferEngine.TEHubExportConfig**, stored in XML Data Store, was introduced. Currently, it has a single property, **DestinationCodeScriptId**, which supports overriding the destination code when transferring orders via TransferHub by using a return value from a script. This functionality is included in versions 5.9.1 and later.

By implementing a script that returns a string value (stored in a variable named **destinationCode**) and setting the **DestinationCodeScriptId** to reference the aforementioned script ID, the destination code value returned from the script will be used instead of the one referenced in the customer property of the order, which is to be transferred via the hub.

This functionality allows sender sites to use a customer on the order which is not a receiver site and instead use the destination code from the script (which represents a receiver site) to transfer the order to that site.

If the **DestinationCodeScriptId** value is set in the XML configuration, the script will be used to supply the destination code when transferring orders via the **Orders** form, or when re-transferring a failed order using the **Transfer History** form. The value returned from the script is verified against the code values in the **Sites** table (base_sites).





Configuration

Script

Create a script which stores and returns the destination code string to use, in a variable called **destinationCode**.

Script editor

| Active | Name | Short name | Code | Script type |
|-------------------------------------|-------------|------------|-----------|-------------|
| <input checked="" type="checkbox"/> | Destination | Destinato | bascc0002 | IronPython |

```

1 from Marel.Mp5.Base.Database import SiteRecordType
2 import System
3 from System import *
4 from System.Runtime import *
5
6 #####
7 # Author: Gisli Rafn Guðmundsson
8 # Date: 2021-01-20
9 # Find and return the correct destination code to use for order transfer.
10 #####
11 scriptName = "Get code for Order transfer"
12
13 def Execute():
14     ret = ""
15     site = SiteRecordType.Instance.SelectByKey(2)
16     if site is not None:
17         ret = site.Code
18
19     return ret
20
21 # traceOut
22 # Helper method that can be used to write to trace
23 def traceOut(traceMsg, "params"):
24     if trace.TraceInfo:
25         objects = System.Array.CreateInstance(object, len(params))
26         counter = 0
27         for x in params:
28             objects[counter] = x
29             counter = counter + 1
30
31         trace.Put(traceMsg, objects)
32
33 traceOut("-----{0} BEGIN-----", scriptName);
34 destinationCode = Execute()
35 traceOut("-----{0} END-----", scriptName);
36

```

TEHubExportConfig

Set the **DestinationCodeScriptId** to the ID of the script to execute, in the **TEHubExportConfig** XML configuration (in XML Data Store).

The screenshot shows the XML Data Store interface with a list of configuration items on the left and the XML configuration for 'TEHubExportConfig' on the right. The configuration includes the following XML snippet:

```

<DestinationCodeScriptId>bascc0002</DestinationCodeScriptId>
<Conflicts>
  <Conflicts>
    <Conflicts name="Marel.Mp5.Integration2.TransferEngine.TEHubExportConfig" type="Marel.Mp5.Integration2.TransferEngine.TEHubExportConfig" />
  </Conflicts>
</Conflicts>

```

NOTE: DestinationCodeScriptId is a nullable integer value. Leave it empty to use the destination code from the customer on the order being transferred.

NOTE: The XML configuration is generated when the transfer order dialog is constructed or when the TEHubExportHandler is initialized.

Master Data Management improvements

Support has been added for ObjectText (base_objectxlate) for Material Customer overrides (proc_materialc) in the MDM Process schema.

IRIS

Fixed order of Green and Red defects in loader data

An issue in the IRIS system caused the threshold for Green and Red defects to be swapped. If whole limits were edited and the Green threshold was changed, the change was actually applied to the Red threshold and vice versa. This has been fixed.

Labeling

New configuration settings for Intermec printers

A "Memory full" error that occurred on some printers when printing batches of labels caused the Innova mp5router to crash and require a manual restart.

To fix this issue, two new configuration settings were added for Intermec printers:

DisconnectOnMemoryFull - If **True**, the device router will disconnect the printer when the 1956 Memory full messages start to appear, and a printer restart will be required to reconnect in order to prevent the router from crashing.

PrintThrottleInMilliSeconds - Throttle/delay the print jobs with milliseconds.

These settings are not activated by default.

Added media type download for Zebra Printer continuous label

A new Media tracking option was added to the Zebra printer driver. When using cutters with variable label lengths, **Media tracking** must be set to **N - Continuous** and **Media handling** must be set to **Cutter**.

| Printers | | | | | |
|--|---------------------|--------|---------------|-----------------------|--|
| <a>Clone <a>Add <a>Edit <a>Print Test Page <a>Show | | | | | |
| Id | Printer | Status | Jobs in queue | Router | Printer type |
| 1 | Pack labels - Zebra | OK | 0 | Default device router | Model ZT410-200dpi, FW V75.20.01Z, 203 dpi, Mem 4096KB |

Printer Options

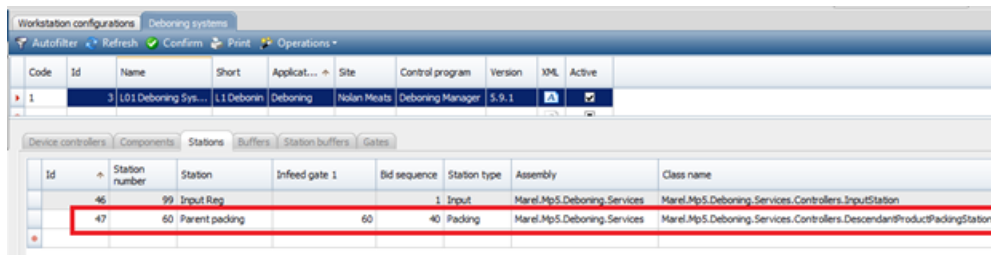
- Speed: 04 inch/s
- Print darkness: 15 - D15
- Print mode: D - Direct thermal
- Media handling: C - Cutter
- Media tracking: N - Continuous**
- Throttle print jobs
- Throttle percentage: 100,00%
- Empty buffer before print.

Meat Streamline

New packing station configuration

A new packing station configuration, **DescendantProductPackingStation**, was added to the Deboning module. The station finds available orders assigned to the station process unit from all descendant products (Product.Parent) from a piece product. The station lists the available orders for the piece and allows the operator to select the appropriate one. The station then records a new item with the selected product and to the selected order (depending on the final item operation that is configured).

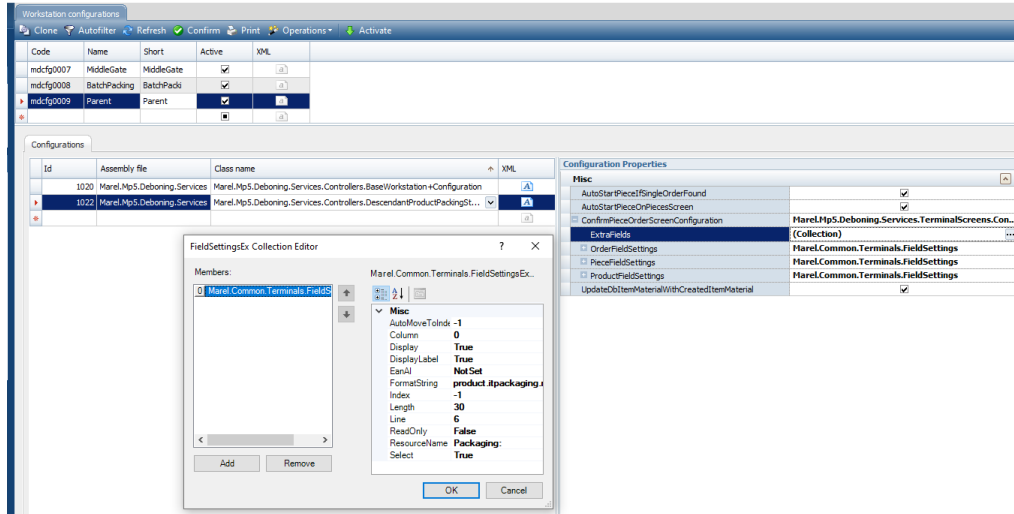
If no orders are found, then the operator can record the piece with the product that is assigned to it.



Configuration

The station is configured like other stations in the deboning system and includes the following configuration properties:

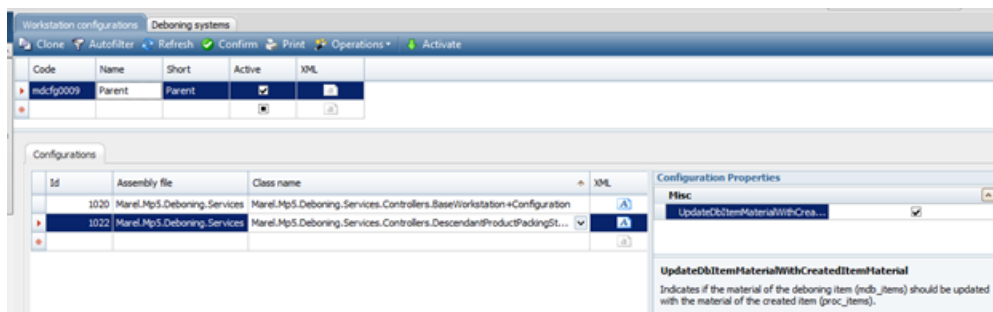
| Property | Description |
|--------------------------------------|--|
| AutoStartPieceIfSingleOrderFound | Starts the piece automatically if only a single order is found for the piece. |
| AutoStartPieceOnPiecesScreen | Starts the piece automatically on the pieces screen when a single piece appears. |
| ConfirmPieceOrderScreenConfiguration | <p>Configuration for the ConfirmPieceOrderScreen.</p> <p>ExtraFields - Settings for extra fields that appear on the screen, the root nodes are product, parentproduct, order and orderline. For example to display the product item packagin use "product.it-packaging.name":</p> <ul style="list-style-type: none"> • OrderFieldSettings - Settings for the order field. • ProductFieldSettings - Settings for the product field. • PieceFieldSettings - Settings for the piece field. |



New workstation configuration

Related to the new packing station, a new workstation configuration, **DescendantProductPackingStationConfiguration**, was added for the station.

the **UpdateDbItemMaterialWithCreatedItemMaterial** configuration property indicates if the material of the deboning item (mdb_items) should be updated with the material of the created item (proc_items).



Meat Streamline bugfixes

Missing column prevented upgrade to new platform

Any issue was fixed where a column was missing from PDS_VQM_Profiles, preventing a proper upgrade from V5 to the new V6 platform.

Issue with deboning terminals not updating values

An issue was fixed where breakup deboning terminals were not updating the values on the display according to the cutting pattern.

Fixed default locale on web terminals

If no locale was defined on Deboning web terminals, the loading screen was in Icelandic. This was fixed and the default locale is now EN.

Monitoring

Can now validate translations

By clicking **Validate resources** in the toolbar at the top of the UI form, all available alarm event definitions are validated against the alarm event translation files for the UI culture that is currently set.

When the analysis is done and there are non-translateable items found, the results are stored on disk in a .csv and .xml file. A message box will indicate the number of non-translateable items and the location where the result files can be found.

Changed naming conventions in Equipment Monitoring Quick Config

On the Equipment Monitoring Quick Config form, users can select plugins from a dropdown menu to add to the installation. Selecting a plugin opens a configuration dialog where device parameters can be specified.

The names of plugins available for selection in the dropdown menu have now been changed to make it easier for users to know which plugin they are adding. In addition, the naming convention for device name properties has been updated to reflect the new values.

For more information about the new naming conventions, see the *Innova Alarms Monitoring and Plugins Reference Manual*.

Fixed E-Plan import in Quick config

When importing E-Plan alarm configuration definition files in the EM Quick config, the import failed because the E-Plan file contains up to three LED plate definitions, but these all had identical names.

Therefore, when the file had more than one definition, the first alarm configuration created was overwritten with the contents of the next LED plate instance.

To fix the issue, a unique identifier module code was added to the name of the alarm configuration so that unique alarm configurations are now created for each LED plate instance.

Fixed bug in Alarm dashboard component

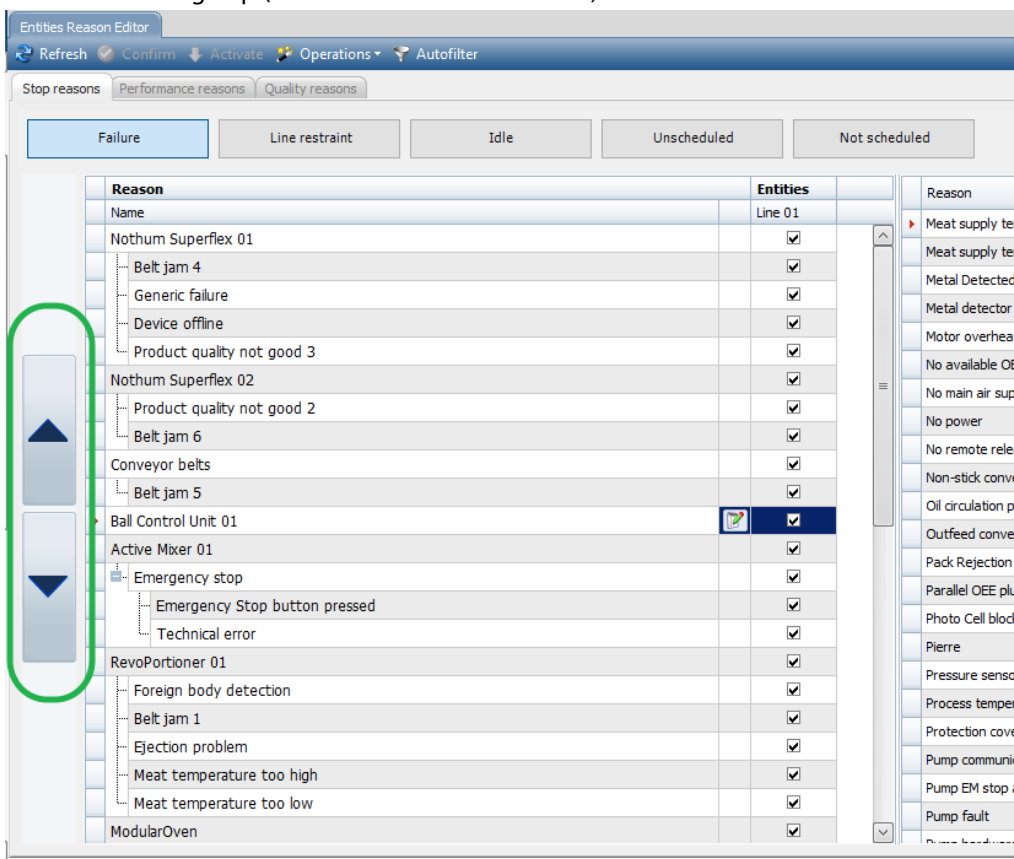
Sometimes the alarm dashboard component showed the error message "No image available" when there clearly was one available. This has been fixed.

OEE

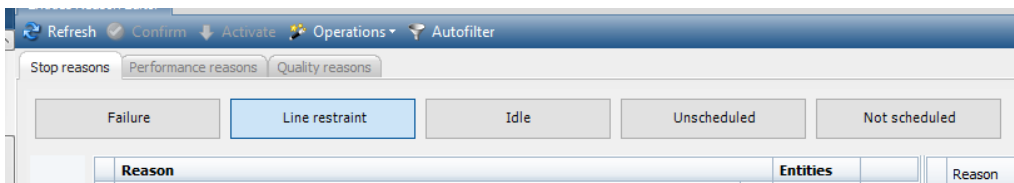
Improved Reasons editor

The following improvements were made to the Reasons editor user interface:

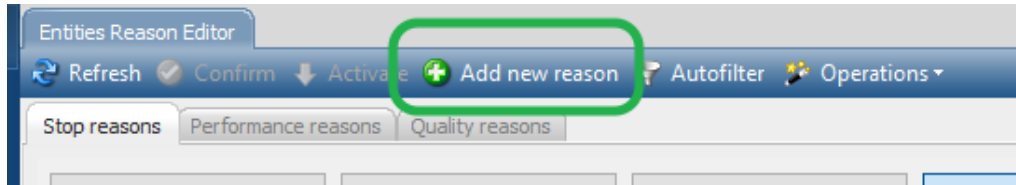
- Navigation buttons were added to move assigned reasons up or down. It is only possible to reasons up or down within the group (reasons within the same level).



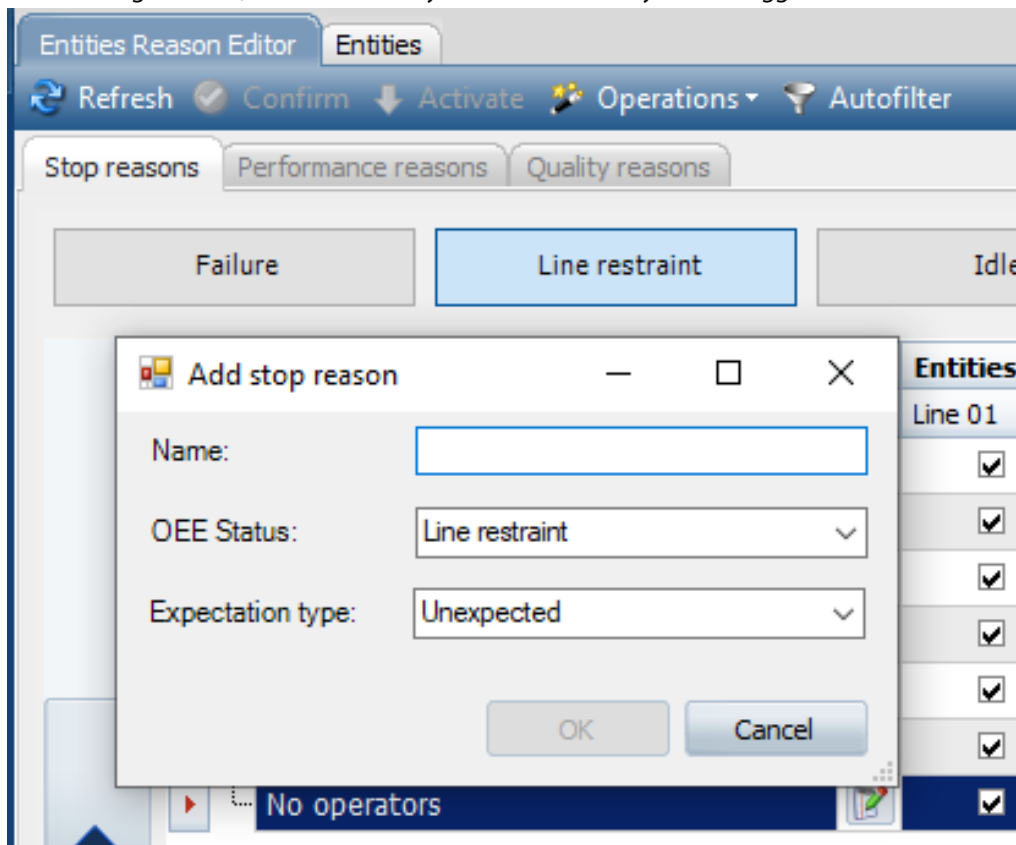
- The OEE Status filter buttons now act as radio buttons instead of the standard OEE colours and filter icon.



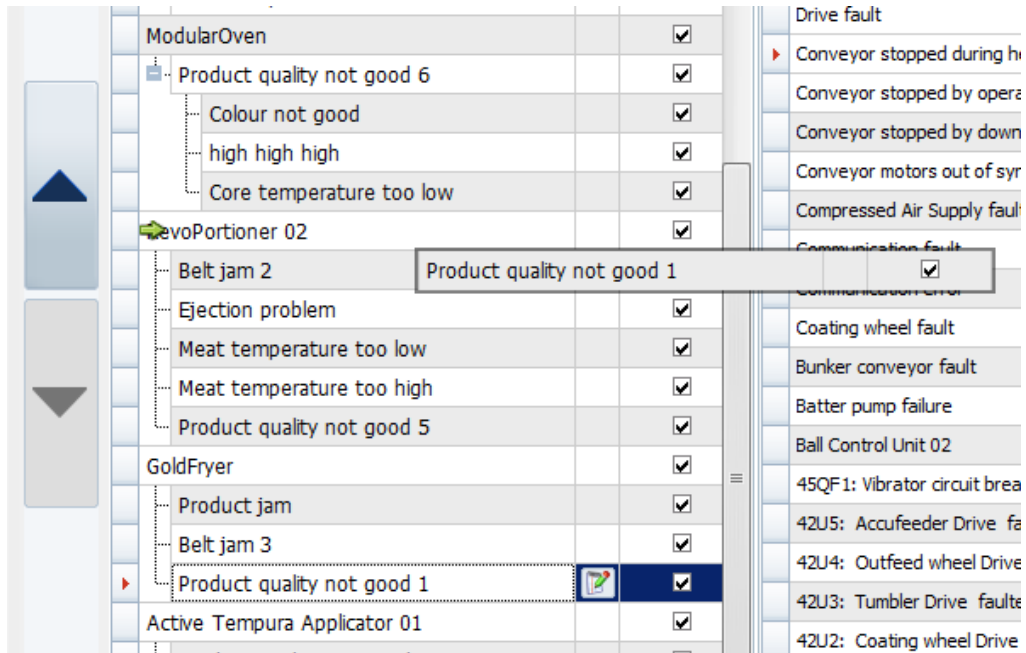
- An **Add new reason** button was added to the toolbar. It is still possible to add a new reason by clicking in the empty row at the bottom of the list.



- The **Add stop reason** dialog was improved. The Short name and Code are now automatically created and no longer visible, and the status for stop reasons is automatically set to the current selected in the tree list. After adding a reason, it is automatically selected and ready to be dragged.



- Reasons in the tree list can be dragged to the child of another node. In this example, Product quality not good 1 is dragged from the node GoldFryer to a child position under the node Revoportioner 2. The insert position is marked with a green arrow.



Once moved, the position within the group or level can be changed only by using the navigation buttons.

| | | |
|------------------------------|--|-------------------------------------|
| Meat temperature too low | | <input checked="" type="checkbox"/> |
| ModularOven | | <input checked="" type="checkbox"/> |
| Product quality not good 6 | | <input checked="" type="checkbox"/> |
| Colour not good | | <input checked="" type="checkbox"/> |
| high high high | | <input checked="" type="checkbox"/> |
| Core temperature too low | | <input checked="" type="checkbox"/> |
| RevoPortioner 02 | | <input checked="" type="checkbox"/> |
| Product quality not good 1 | | <input type="checkbox"/> |
| Belt jam 2 | | <input checked="" type="checkbox"/> |
| Ejection problem | | <input checked="" type="checkbox"/> |
| Meat temperature too low | | <input checked="" type="checkbox"/> |
| Meat temperature too high | | <input checked="" type="checkbox"/> |
| Product quality not good 5 | | <input checked="" type="checkbox"/> |
| GoldFryer | | <input checked="" type="checkbox"/> |
| Product jam | | <input checked="" type="checkbox"/> |
| Belt jam 3 | | <input checked="" type="checkbox"/> |
| Active Tempura Applicator 01 | | <input checked="" type="checkbox"/> |

Customer alarm description now shown in correct column in TOP10 report

When the customer alarm description was configured to be shown in the TOP10 report for both OEE and Equipment Monitoring, it was only shown in the System description column and not the Event description column. The Event description column showed the alarm description provided in the alarm configuration record.

This has been fixed and the customer alarm description is now shown in the Event description column (if configured and available).

Event editor bugfixes

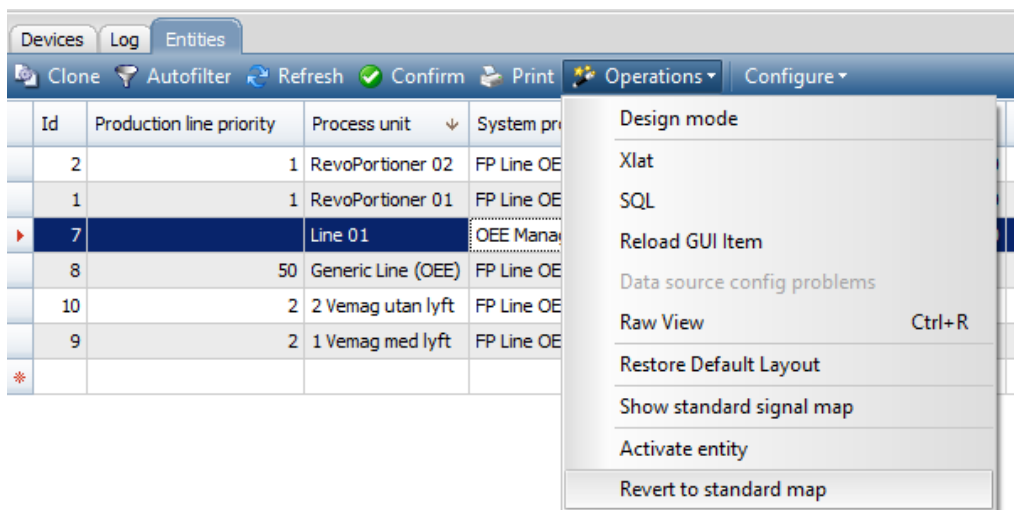
Added Device offline state

The OEE Event editor previously showed 100% availability on third-party equipment (Vemag device) even though stops had occurred on the machine.

To fix the issue, OEE for Further Processing Convenience lines has been updated to include a **Device offline** state.

Now when OEE device sources in the current line setup are offline, the resulting Line OEE will be in Failure with the stop reason "Device offline".

Existing OEE installations must perform the **Revert to standard map** operation on the Line OEE entity to apply the new Device offline signal after updating.



In addition, the OPC UA Servicer driver in Innova has been improved for better handling of disconnects and reconnects.

Fixed Details report translations

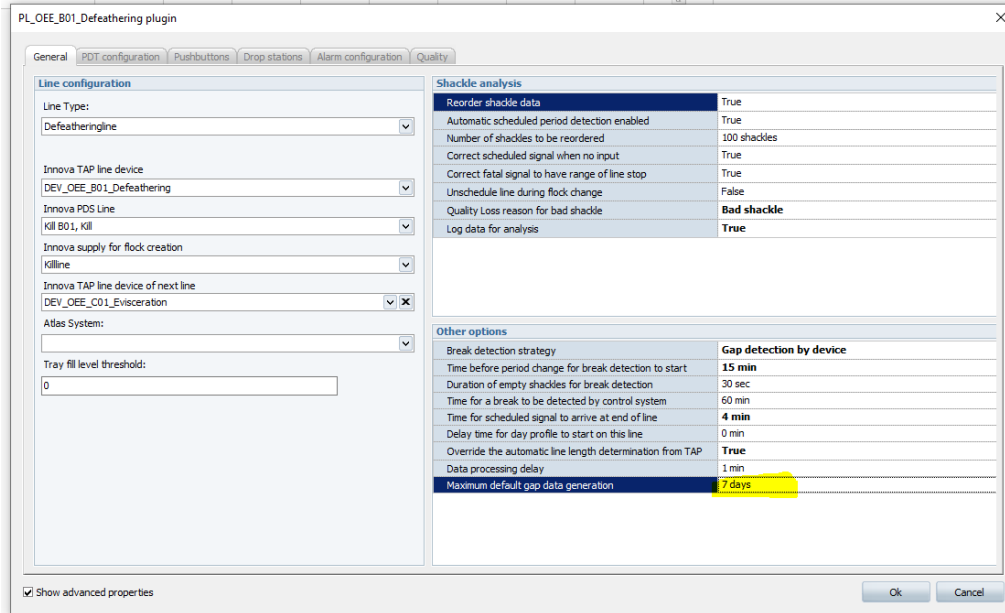
When the OEE Details report was viewed on an Innova instance that was set to a language other than English, the stop reasons shown in the report were not translated. With this bugfix, the correct translation resource files were added so that all content is translated to the set UI culture.

Fixed system disconnection with new line plug-in configuration setting

Normally when Innova is offline and comes online again, default production data for lines is generated between the time the system went offline and the time it came online again in order to get correct production day transitions and other data in the OEE measurement.

If the period was too long, the impact of this default data generation was that the system became less responsive while generating these records and disconnected the plugin host.

To fix the issue, a configuration setting, **Maximum default gap data generation**, was added that determines when default data is generated. If the gap is larger than the configured setting, no default data is created. The default value is **7 days**.



Fixed issue when adding stop reasons

An issue was fixed where adding new stop reasons to an entity required wserver.exe to be restarted before becoming available.

Packing

BMS configuration changes (packice.exe) for ice doser

Traditionally an ice doser in, for example, a salmon packing system, is controlled by an M3000 controller in two steps:

1. When a box arrives at the doser it is scanned and a request is made to Innova (packice.exe), which looks up the pack via barcode and responds with the amount of ice to drop in the box.
2. After dosing, the controller sends how much ice actually went into the box, and the pack record is updated accordingly.

While the ice doser is being transitioned to BMS, step 1 will be completed through BMS and step 2 will continue to be done through the M3000.

The following configuration changes were added to the program XML for packice.exe. This example is for box line number 1 ("bl.1"). If running more than one line, more instances of packice are used, and this configuration must be adjusted accordingly.

| Property | Default | Description |
|-----------------------------------|---|---|
| LoadPackWithPackId | false | Control whether pack information should be loaded from the pack ID or barcode. |
| DefaultIceDose | 0 = disabled | Default ice dosage to use for unrecognized packs or packs that do not have a dosage in their product specification. This amount is in the system weighing unit and will be converted to kg before sending to BMS. |
| BoxLineIceQueryTopic | msg.Logiflex.itemAtRefPoint.bl.1.iceQuery | The BMS message to listen to for ice amount requests. |
| BoxLineIceQueryChangeRequestTopic | msg.Logiflex.itemChangeRequest.bl.1 | The BMS message topic to send the ice amount to. |

```

<DataRoot>
  <Marel.Mp5.OptiPack.Server.PackIce.PackIceControllerConfiguration>
    ....
    <!--Use packid instead of barcode to load pack-->
    <LoadPackWithPackId>True</LoadPackWithPackId>
  
```

```
<!--Logiflex ice amount query message topic-->
<BoxLineIceQueryTopic>
msg.Logiflex.itemAtRefPoint.bl.1.iceQuery</BoxLineIceQueryTopic>
<!--Logiflex change request topic-->
<BoxLineIceQueryChangeRequestTopic>
msg.Logiflex.itemChangeRequest.bl.1</BoxLineIceQueryChangeRequestTopic>
<!--Default ice amount for unknown packs. 0 == disabled-->
<DefaultIceDose>3.5</DefaultIceDose>
</Marel.Mp5.OptiPack.Server.PackIce.PackIceControllerConfiguration>
<ConfigSections>
<Section
name
="Marel.Mp5.OptiPack.Server.PackIce.PackIceControllerConfiguration"
type="Marel.Mp5.OptiPack.Server.PackIce.PackIceControllerConfiguration,
packice" serializer="Marel.Common.Serialization.XmlDataSerializer, Marel.Common" />
</ConfigSections>
</DataRoot>
```

Usage

To use this new functionality, the device ID of the BMS system should be passed as an argument to a new command line parameter, **-J**.

```
packice.exe -I <icedoser-deviceid> -J <bms-deviceid> <... other params ...>
```

Port configuration when both M3000 and BMS are on same controller

Because IIC on BMS (Pluto) and the M3000 both listen on 5010, then IIC must be moved to another port for both device connections to be active in Innova.

For example, if Port 4999 is selected, then in the XML configuration for the Pluto device, the MessageSocketPort parameter must set to 4999 and on the embedded device, IIC must be configured to listen on 4999.

Support added for film type in BMS

BMS can now receive the film type to use for a box in the same change request message, sent as a response to the ice amount request (iceQuery) in the ATT_FILM_REQUEST field.

Note that in later updates, a standard method via packaging will be supported which will require a database change.

Example values sent to BMS:

ATT_FILM_REQUEST = FilmSmall

ATT_FILM_REQUEST = FilmMedium

ATT_FILM_REQUEST = NO_FILM (this will trigger some default selection in BMS)

A default film type can be specified if one can not be determined for the product.

XML configuration

```

<DataRoot>
<Marel.Mp5.OptiPack.Server.PackIce.PackIceControllerConfiguration>
    ...
    <!--Send film type in info query response-->
    <IncludeFilmType>False</IncludeFilmType>
    <!--Default film type if none is determined, leave empty to disable default film
    type-->
    <DefaultFilmType />
    <!--Read film type from custom table-->
    <UseCustomFilmType>False</UseCustomFilmType>
    <!--External column on packaging referencing custom filmtime table.-->
    <PackagingExternalColumnForFilmType />
    <!--SQL statement to lookup filmtime in custom table, use {0} as placeholder,
    e.g. select value from table where id = {0}-->
    <CustomFilmTypeLookupStatement />
    ...
</Marel.Mp5.OptiPack.Server.PackIce.PackIceControllerConfiguration>
<ConfigSections>
<Section
name
="Marel.Mp5.OptiPack.Server.PackIce.PackIceControllerConfiguration"
type="Marel.Mp5.OptiPack.Server.PackIce.PackIceControllerConfiguration,
packice" serializer="Marel.Common.Serialization.XmlDataSerializer, Marel.Common" />
</ConfigSections>
</DataRoot>
    
```

XML parameter description

| Parameter | Description | Default |
|-----------------|--|---------------------------|
| IncludeFilmType | If True , then the ATT_FILM_REQUEST will be included in the change request message sent in response to the iceQuery message from BMS. | False |
| DefaultFilmType | The default film value to send if one cannot be determined for the product.. This amount is in the sys- | Empty Example: NO_FILM |

| | | |
|------------------------------------|--|--------------------------------|
| | tem weighing unit and will be converted to kg before sending to BMS. | |
| UseCustomFilmType | If True , then the film type will be determined from a custom table via an external column on the packaging table. | False |
| PackagingExternalColumnForFilmType | The name of the external column in the packaging table that is a foreign key to the custom table containing film type values. | Empty Example: cust_filmtyp |
| CustomFilmTypeLookupStatement | SQL statement to look up filmtyp in custom table, use {0} as placeholder, Example: select filmtyp from cust_pkgfilmtyp where id = {0} | |

Example external column on packaging

```
EXEC dbo.Mgm_AddExColumn @TableName = N'proc_materials', @ColumnName = N'cust_filmtyp', @ExColumnNameType='int', @ColumnType = N'int', @AllowNulls = 1, @DefaultValue = Null, @EnumName = Null, @AssemblyName = Null, @LookupQuery = N'SELECT id, filmtyp from cust_pkgfilmtyp', @ReCreate = 0
```

Example custom table (cust_pkgfilmtyp)

| id (primary key) | filmtyp (string) |
|------------------|-----------------------|
| 3 | NO_FILM |
| e2 | FilmMedium to send if |
| 1 | IFilmSmall |

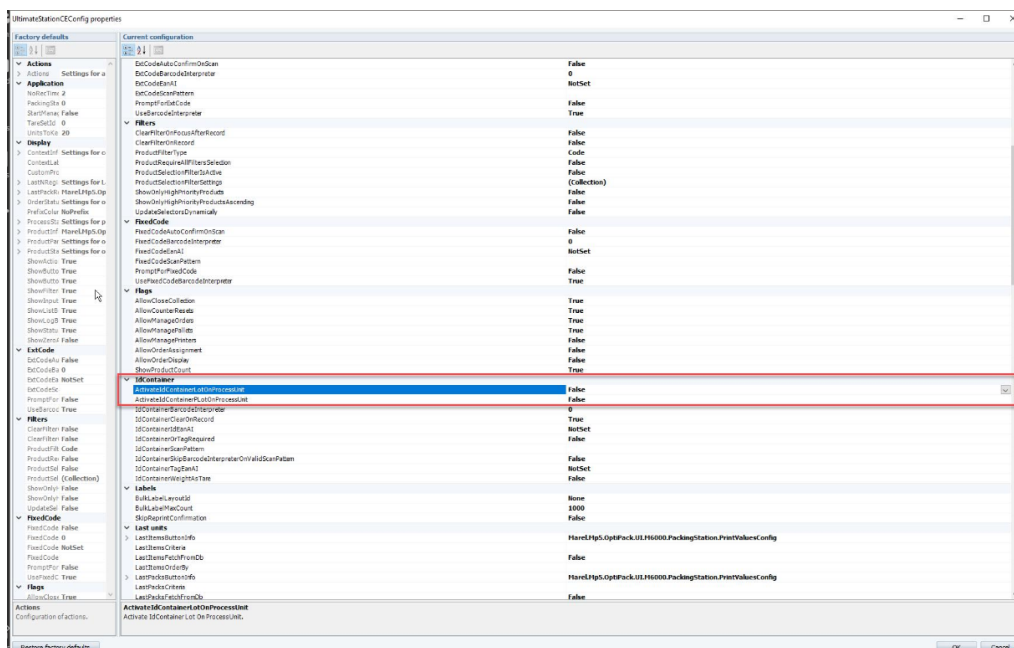
New unit operation for rejected boxes

An optional unit operation, **OtherRejectUO**, was added in the pack queue XML for **queueplc** for rejected boxes other than label rejects.

New configuration properties for UltimateStation

New configuration properties were added for **UltimateStation** (Marel.Mp5.OptiPack-.UI.M6000.PackingStation.UltimateStationCEConfig):

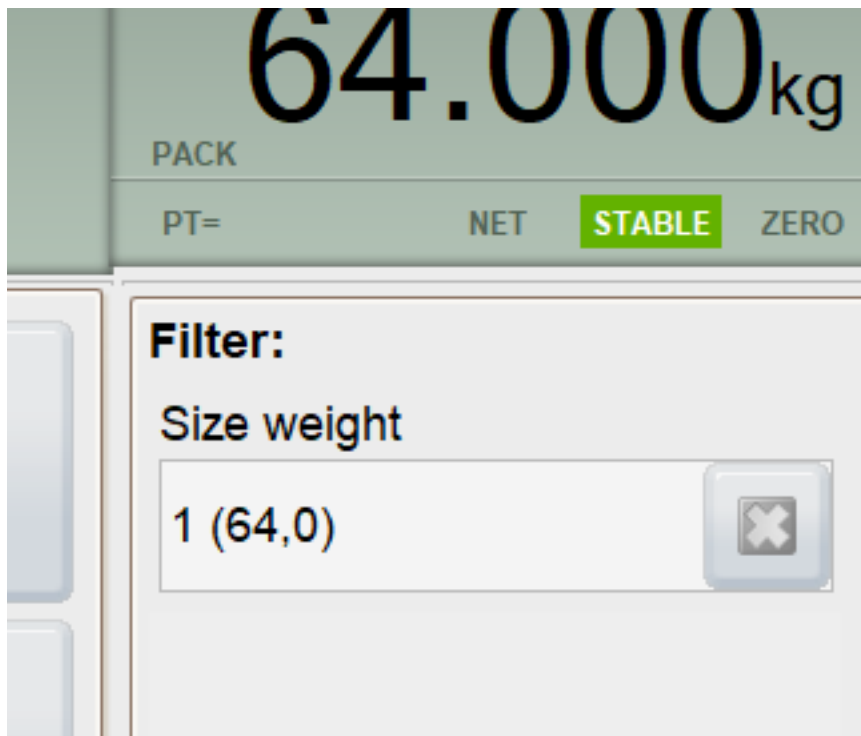
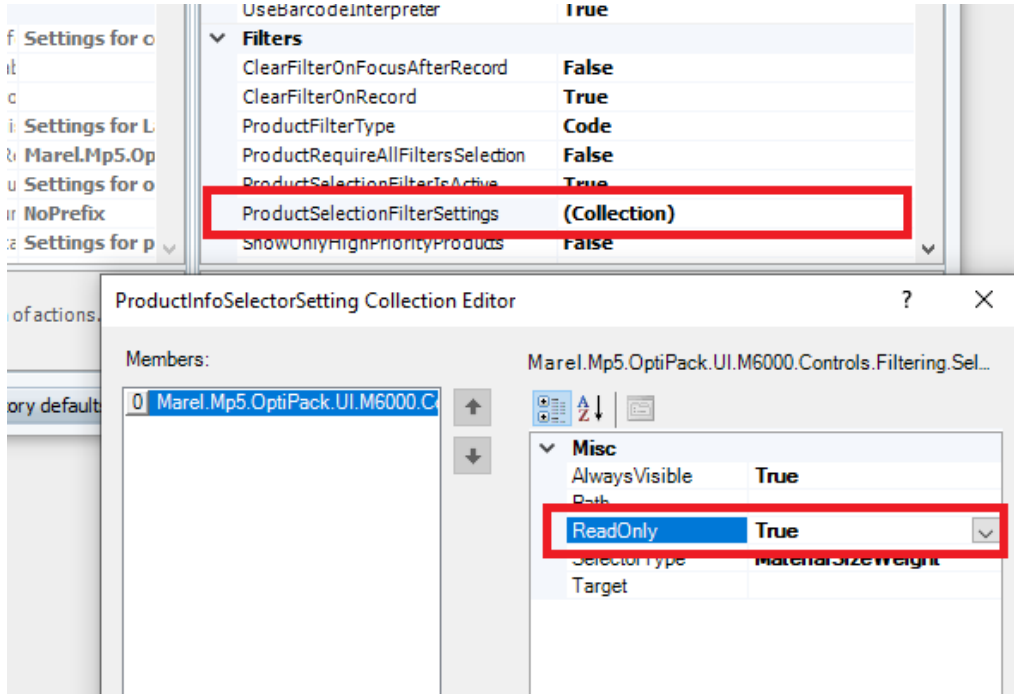
- **ActivateIdContainerLotOnProcessUnit** - If **True**, Activate IdContainer Lot On ProcessUnit.
- **ActivateIdContainerPLotOnProcessUnit** - If **True**, Activate IdContainer Production Lot On ProcessUnit.



In the Rail section of the UltimateStationCE configuration, the property **IgnoreRepeatedCurrentRailEvent** was added to configure the PLC to resend the rail event if it does not receive a response in a timely manner. If the IPC is still processing the previous (same) rail event, then the new event is ignored if the configuration parameter is set to **True**. For backwards compatibility, the default value is **False**.

Added ReadOnly mode to ProductSelectionFilterSettings on UltimateStation

Filters can now be set to **ReadOnly** mode in **ProductSelectionFilterSettings** in UltimateStationCE. When the filter is in ReadOnly, the operator on the station cannot change or clear the value.



Added missing translations

Text for the **Previous** and **Next** buttons were added to the Lithuanian translation file for the Optipack M6000 packing station.

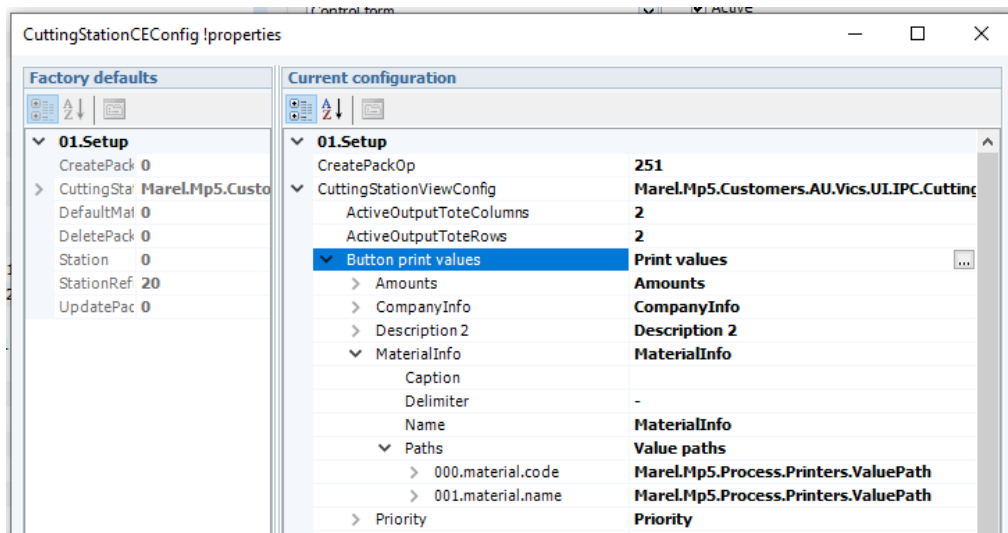
Orderline curamount now updates after deleting pack on Orderline packing station

An issue was fixed where the orderline curamount did not update when a pack was deleted on an Orderline Packing station (Marel.Mp5.OptiPack.UI.M6000.PackingStation.UltimateOrderLineConfigStationCE).

Can now configure order buttons for packing stations

Order buttons for packing stations are now configurable.

Use the new **User interface** editor to configure the view in the stations.



The **Button print values** setting should contain a list of properties to be displayed. Click the **Print values** option to open a dialog to add list items with names and paths for the data to be displayed. Note that in the image above, the list is sorted alphabetically but when the text is displayed on a button, the order from the Print values dialog is used.

Specify a **Caption** if a fixed text is needed, and a **Delimiter** if more than one property should be displayed in a single line. The result of the settings above looks like this on the packing station:



If **Button print values** have not been defined or no properties are selected or found, the station will fall back and use the older method to display button texts.

Packing bugfixes

Issue creating group Conformats with two or more OCM lines

If a system contains two or more OCM9500 lines, and the OCMs are equipped with two or more print heads, then creating the group Comformat could fail because they used the same temporary file. This was fixed by adding the device ID to the temporary filename.

The issue was fixed in Innova versions 5.9.0, 5.9.1 and 5.9.2, stable and release.

Bug in Packservices.exe

A bug was fixed where Packservices.exe could crash under certain situations when trace was activated.

PDA

Can now select multiple items on PDA ListPage

Support was added for multiple item selection in the PDA **ListPage** view.

A new property was added in the page configuration, **SelectMultipleItems**, which controls whether the operator can select multiple items. The resulting context object for the items contains the item.Identifier as a string array.

SelectMultipleItems also works with any filters, so it is possible to select multiple items within multiple filters.

For example, in a list of orders assigned to a process unit, the operator can select multiple orders and click the orderlines to view orderlines for the selected orders. The selected orders are added to the context object 'selectedOrders'. In the next list page, the list of orderlines is fetched by using the 'ListFromSql' list handler with SQL such as the following:

```
'SELECT ol.id, ol.extcode, m.[name], o.[name], "  
  
FROM proc_orderl ol  
  
JOIN proc_materials m ON m.material = ol.material  
  
JOIN proc_orders o ON o.[order] = ol.[order]  
  
WHERE ol.[order] IN ({{list:SelectedOrders}})'
```

| Orders | Menu |
|--|------|
| > < a-g h-n o-u v-z | |
| Parent Test 1 | |
| pror000002 | |
| Parent Test 2 | |
| pror000003 | |
| Test Order | |
| pror000004 | |
| Test Order 2 | |
| pror000005 | |
| Test Order 3 | |
| pror000006 | |
| A order | |
| pror000007 | |

Added Android support for Zebra scanners

The Android PDA app now supports Zebra MC9300 scanners.

Fixed issue with Android PDA license

An update was made to prevent a license error on Android Honeywell devices. **ProgramId** was appended to the instance name to ensure that each device has a unique name.

Fixed bug in ScaleCommandHandler

A bug was fixed in ScaleCommandHandler that occurred when setting the tare.

PDS

New PDS configuration

A new configuration property, **SendLotCode**, was added to the plugin **Marel.Mp5.Pd-snt.Services.Flock.PrunitFlockNotifierConfig** which allows the lot code to be sent to TAP instead of the flock number. This overrides SendLotId.

Fixed SmartWeigher timeout

When the tare backup was not available, the settings download by the guardian took two minutes because it was waiting on an event that never occurred. This has been fixed.

Fixed logging button bug

A bug was fixed where the logging **Start** and **Stop** buttons for dynamic weighing were not correct.

Portioning

Added lite support for MAJA V-Cut240

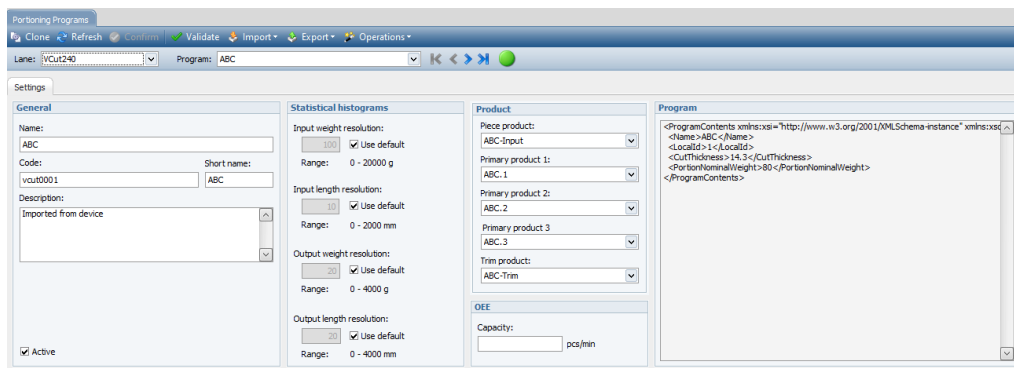
Innova now has lite support for the Marel (Maja) V-Cut240 portioning machine.

The machine is part of the Innova portioning system. The *Innova Portioning Installation and Configuration Manual* and *Innova Portioning User Manual* are also valid for the V-Cut240.

Program editor

A simple program editor was created for the V-Cut240, which uses the standard Portioning Programs editor to show the frame for each program received from the machine. Programs on the machine can also be imported or exported manually from the standard portioning editor. The OE capacity and standard setup for histograms can also be set on the program editor.

With lite support, it is not possible to create or edit program parameters in the V-Cut240 program editor. Programs are created automatically in Innova and contain name, product and program parameters (which are hidden from the operator). When creating and editing programs on the machine, the programs are sent to Innova for storage in the DB and later retransmission to the machine.

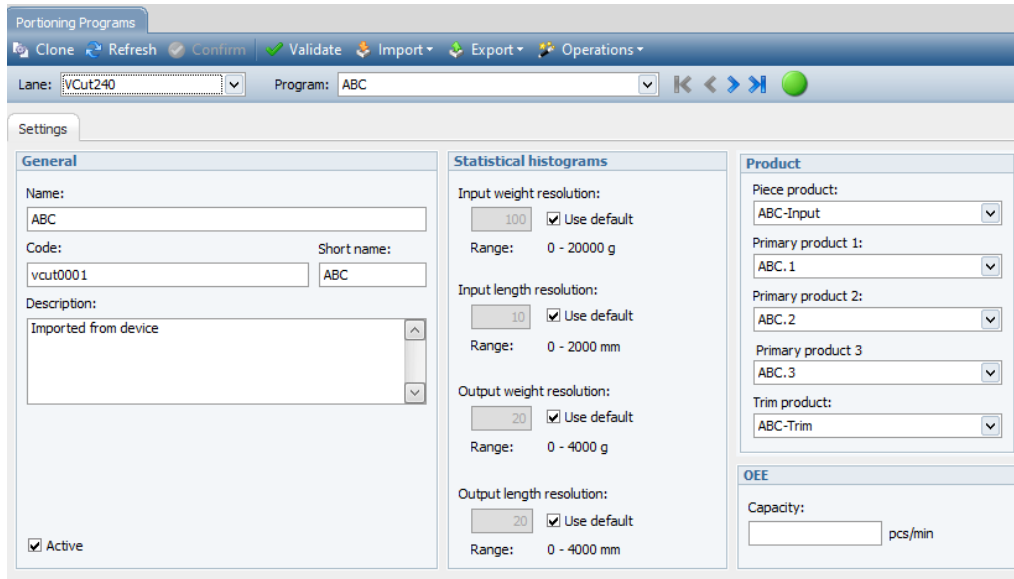


Supported products

Five Innova products are used for the data produced by the V-Cut240: **Piece**, **Primary 1**, **Primary 2**, **Primary 3** and **Trim**. The portion messages from the V-Cut240 contain a Primary (1-3) or Trim portion type. The device controller assigns the Innova product specified in the current program for the portion type and makes a recording. The data from the machine is stored as normal in Innova.

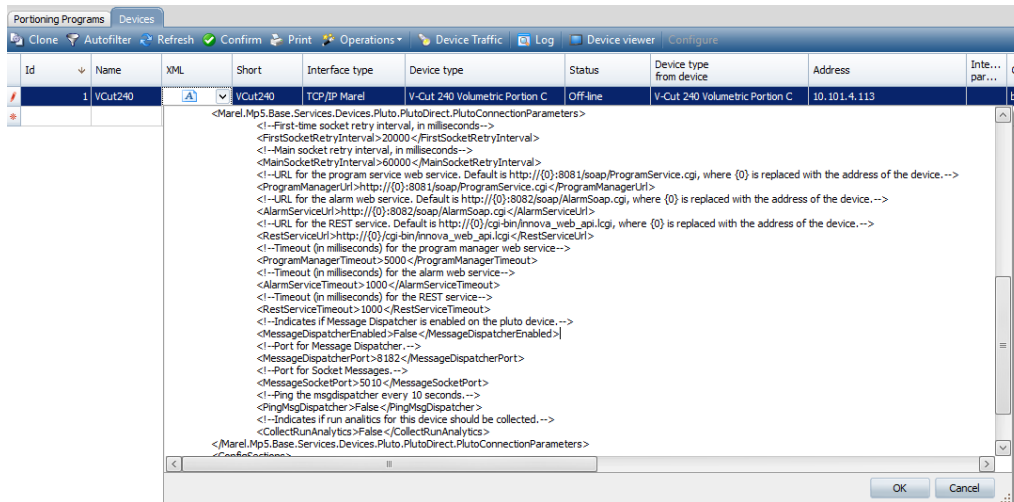
| | | | |
|-----------------------|----|---------|--|
| FieldType.PortionType | 71 | integer | Portion Type. Specifies the type of portion cut used for statistical purpose in reports and dashboards. <i>For FP 240: 1 = Primary 1, 2 = Primary 2, 3 = Primary 3, 4 = Trim.</i> |
|-----------------------|----|---------|--|

On import of programs, Innova automatically creates the products needed for the program.

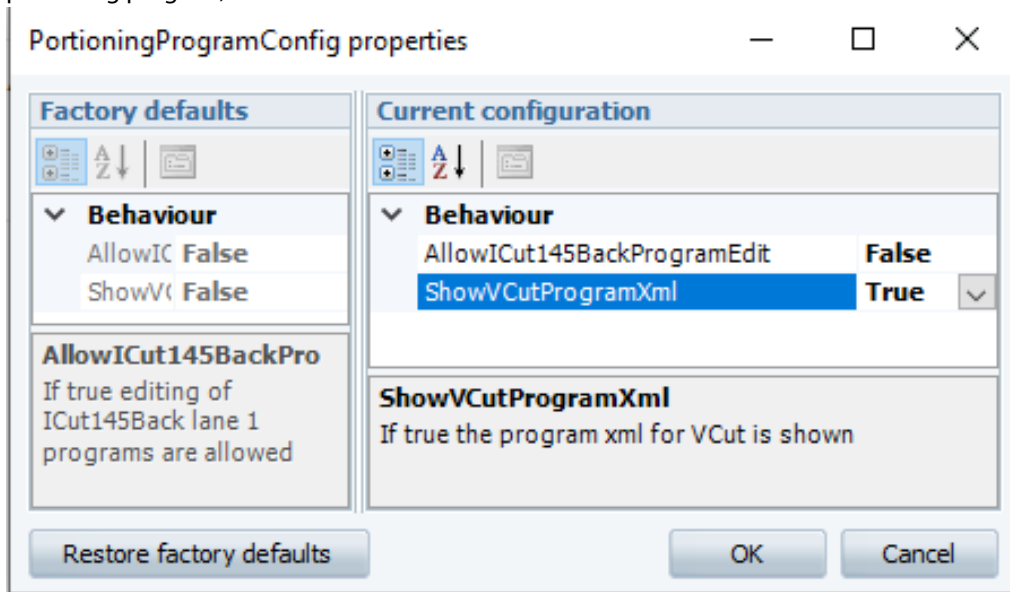


Setup and configuration

The system and machine setup are standard for Innova.



It is possible to show the program XML for the machine. This must be enabled in the UI setup configuration for the portioning program, if desired.



Because the V-Cut240 is Pluto-based, **Vcut240DeviceConfig** contains some of the same parameters as other Pluto devices, as well as two new items (the first two items in the following table). The machine does not currently support alarms.

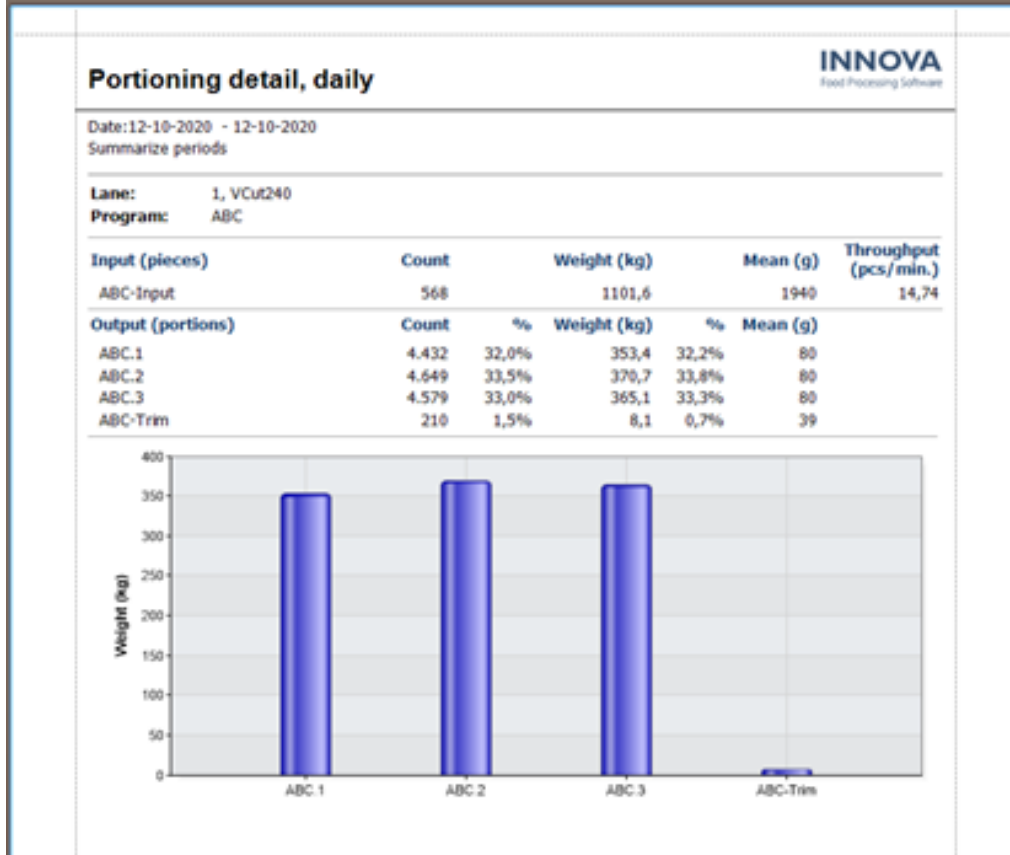
| Parameter | Description | Values |
|-------------------------|---|--|
| AutoCreateProducts | If True , then Piece, Portion and Trim products are automatically created when programs are imported | True/False |
| ConfigureOnline | Synchronize the Innova active program with the Device active program when the device comes online. | SendInnovaProgram - Send and activate the process unit active program to the device. UseDeviceProgram - Change program to match the active program in device. |
| IgnoreParameterChanges | If True , then Innova will ignore all parameter changes received from the machine. | Not supported |
| ActivateConfirmTimeout | The time the server shall wait for activation confirmation from the device (in sec). | Seconds |
| RegisterAlarmsOnStartup | If True , then alarms should be registered on startup if none exist. | Not currently supported |
| AlarmPollInterval | Alarm poll interval (in sec). | Not currently supported |

Dashboards and reports

The V-Cut240 Quick Config includes a standard dashboard layout which consists of five dashboard components: **Input**, **Throughput**, **Output**, **ATE** and **Detail**. The dashboard layout is resizeable but not all of the components are resizable.

| V-Cut 240 | | | | | | |
|--|--------------|-------------|---------------|-------------|-----------------|---------------|
| VCut240 - Input | | | | | | |
| Total Pieces | 568 pcs | | | | | |
| Average Weight | 1940 g | | | | | |
| Total | 1101,6 kg | | | | | |
| VCut240 - Throughput | | | | | | |
| Total | 1101,6 kg | | | | | |
| Throughput | 1715,4 kg/hr | | | | | |
| ActiveTime | 00:38:32 | | | | | |
| VCut240 - Output | | | | | | |
| Primary | 99,3 % | | | | | |
| Tertiary | 0,7 % | | | | | |
| VCut240 - Available time efficiency | | | | | | |
| Running: | 81,1% | | | | | |
| End of day: | 96,0% | | | | | |
| VCut240 - Detail View | | | | | | |
| Material | Count | % | Weight (kg) | % | Avg. Weight (g) | % Yield input |
| Primary | | | | | | |
| ABC.2 | 4649 | 33,5 | 370,7 | 33,8 | 80 | 33,7 |
| ABC.1 | 4432 | 32,0 | 353,4 | 32,2 | 80 | 32,1 |
| ABC.3 | 4579 | 33,0 | 365,1 | 33,3 | 80 | 33,1 |
| Primary total | 13660 | 98,5 | 1089,2 | 99,3 | | 99,9 |
| Tertiary | | | | | | |
| ABC-Trim | 210 | 1,5 | 8,1 | 0,7 | 39 | 0,7 |
| Tertiary total | 210 | 1,5 | 8,1 | 0,7 | | 0,7 |
| Total | 13870 | | 1097,3 | | | 99,6 |
| Grand total | 13870 | | 1097,4 | | | |

Reports are the same as standard Portioning reports.



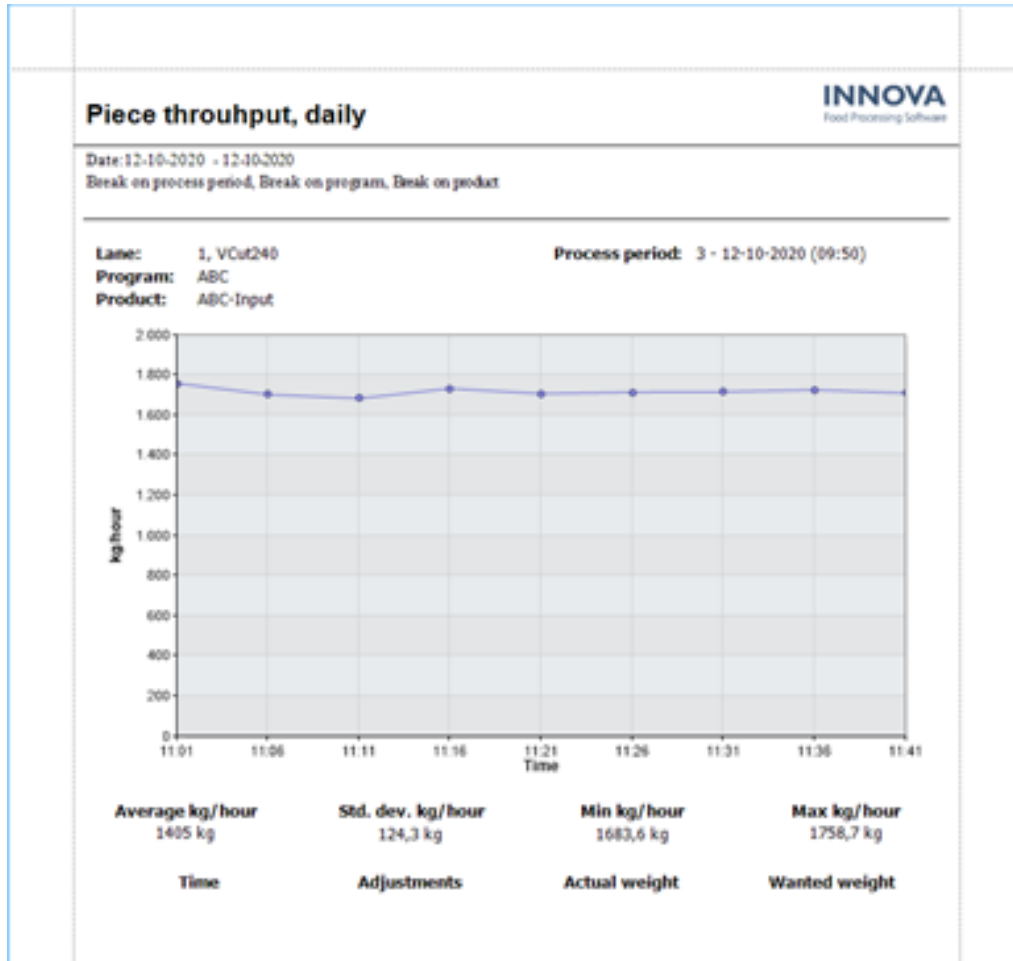
Portioning summary, daily

INNOVA
Food Processing Software

Date: 12-10-2020 - 12-10-2020
Summarize periods, Break on process unit

Process unit: Proc_VCut240

| Program: | Input | | | | Primary | | Secondary | | Tertiary | | Other | |
|----------|------------|----------------|--------------------|---------------------|---------------|----------------|-----------|-------------|------------|-------------|----------|-------------|
| | Pieces | Weight (kg) | Throughput kg/hour | Throughput pcs/min. | Pieces | Weight (kg) | Pieces | Weight (kg) | Pieces | Weight (kg) | Pieces | Weight (kg) |
| ABC | 568 | 1.101,6 | 1.715,4 | 14,7 | 13.660 | 1.089,3 | 0 | 0,0 | 210 | 8,1 | 0 | 0,0 |
| | 568 | 1.101,6 | 1.715,4 | 14,7 | 13.660 | 1.089,3 | 0 | 0,0 | 210 | 8,1 | 0 | 0,0 |



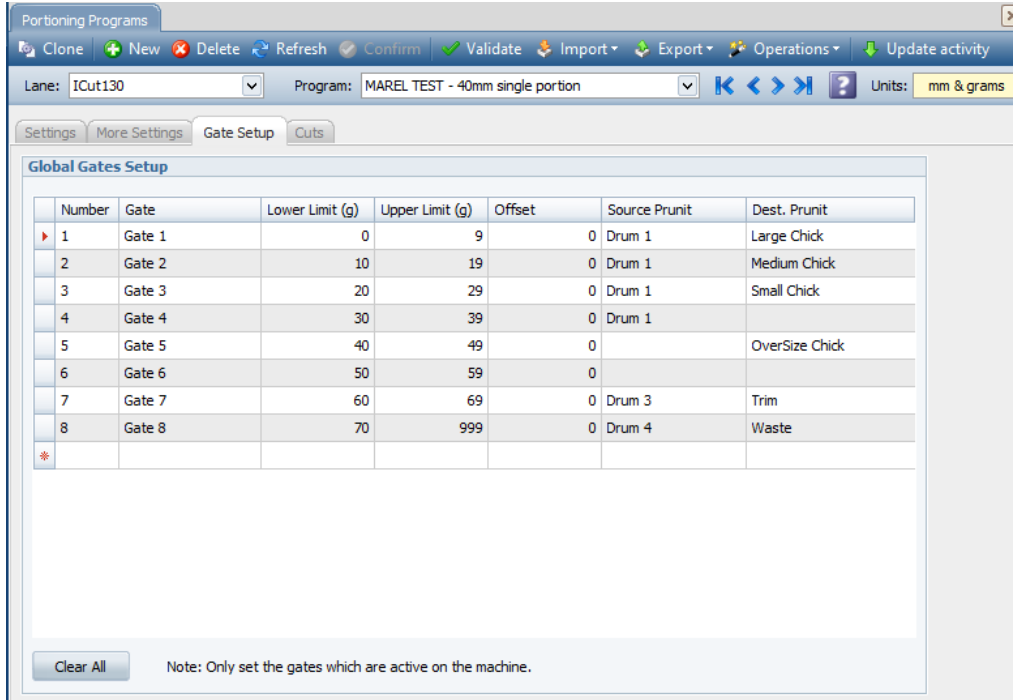
Can now define custom source and destination process units for gates on I-Cut130

In the Portioning Programs editor for the I-Cut130 family of portion cutters, it is possible to define overrides for the destination and source process unit used when a portion transaction is made.

When a transaction is made for a portion to a gate, the source process unit is the process unit for the lane by default. The lane is checked for gate settings for the destination, which will be used if present. If no gate settings are found, the destination process unit for the lane will be used.

Both the source and destination process units can then be overridden by these new definitions made in the portioning program.

It is only possible to define transaction overrides for gates defined on the machine (imported). Gate 0 is not defined on the portioning machine, but is used as the default gate when no appropriate gate can be found. Transactions for this gate cannot be overridden.



Local Knife Offset now allows editing for both lanes on I-Cut610 and I-Cut610M

In the Portioning Program editor, the editing of Local Knife Offset for the ICut610M / ICut610 1xScreen was changed to allow editing for both lanes, as with the I-CUT122.

Machine Setup

Settings

Water Mode:
Water full mode

Speedsort strategy:
Normally closed

Long Item Mode

90°

100 mm/s

100 mm/s

0 mm

Belt Speed

Outfeed Speed: mm/s Same Speed Infeed Speed: mm/s

Local knife offset

Lane 1 mm Lane 2 mm

Process

New SelectOrder configuration property

Previously, when there were two order lines with the same order for the same product but different prdaymin and prdaymax criteria, the following happened:

- When both lines were open and the operator scanned a carton to fit the second order line but not the first, an error indicated that the range of the carton was not appropriate. This happened because SelectOrder picked up the first order line it found for the product and did not take the pack prday into account.
- When the status of the first order line was changed and the operator attempted to scan to the order again, the operation completed successfully because the second line was appropriate for that carton.

To fix this issue, a new configuration property, **CheckExpireLimits**, was added that checks the expiry and production day limits on the order line. This allows SelectOrder to match on PrDay and Expire1,2,3 when selecting an order, in a similar way as PackToOrder and ItemToOrder.

New custom Orderby option for pallet selection

A new property, **PalletSelectionOrderBy**, was added to the default PalletReservationSelector to include a custom OrderBy option for pallet selection.

New unit operation

A new unit operation was created, **PrepareItemForPOrderReuse**, which works in a similar way as PreparePackForPOrderReuse.

Can now set status flag in TSOR messages

A new configuration flag was added to RailHandler, **OptionalParameter**, which adds the ability to set the status flag in TSOR messages.

Pack to Inventory now writes to stocktakep table

Packs created with **autocreate** are now added to the **stocktakep** table.

Fixed error on Process units form when selecting a production lot

An issue was fixed that caused an error when activating a pending production lot on the Process units form.

Fixed issue with supply methods when using delay

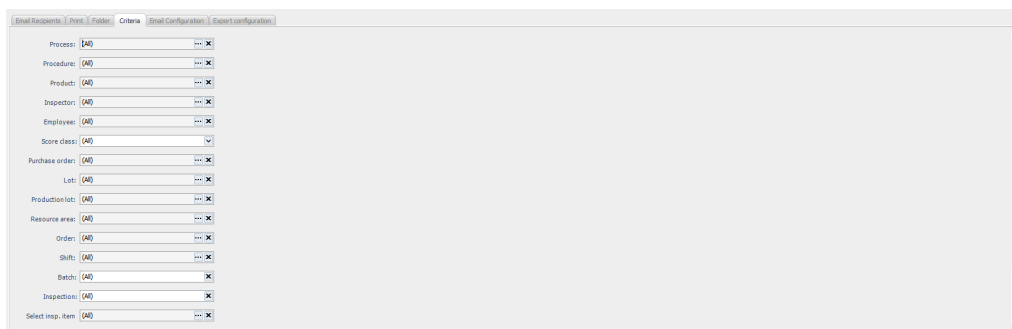
An issue was fixed where supply lines were not being correctly deactivated when using **AddActiveExclusive** or **AddInactiveExclusive** combined with a delay.

Fixed translations on IPC stations

An issue was fixed where translated text did not fit on the buttons on IPC stations. To fix the issue, buttons were resized and repositioned. In addition, labels and texts that were missing translation files were added in **Select collection** and **Select item**.

Fixed Report Exporter scroll bar

The scroll bar was missing in the following Report Exporter detail tabs: Print, Folder, Criteria (where the problem was discovered), Email Configuration and Export Configuration. The scroll bar has now been added and will only appear when the size of the tab exceeds the size of the parent section/view. The change was applied to Innova versions 5.9.0 and higher.



QC

Added scanner support to Vet QC Station

Four new configuration properties were added under the "Barcode" category in the Vet QC station user interface configuration (MareI.Mp5.KillFloor2.Ul.Ipc.VInspection.VInspectionCE):

LookupAnimalOnBarcodeScan - If **True**, a barcode scan will be used to look up the animal. Use BarcodeProfile and AnimalLookupEanAI to configure how fields are interpreted (see below).

AnimalLookupEanAI - EAN AI of the barcode field to look up an Animal.

FromBarcodeAnimalLookupFromIdContainer - Indicates if the animal lookup should be from the IdContainer when receiving barcode. The ID from the barcode is used as a lookup in the proc_rcids table and from that, the animal record is found from the IdContainer.Unitid.

FromBarcodeCreateNewAnimalIfNotFoundUO - If set, then if an animal is not found from the lookup, the animal is automatically created with a Unit operation.

QC bugfixes

Issue with screens not updating on Inspections form

An issue was fixed where screens were not updating properly on the Inspections form.

Issue with QC inspection on PDA

An error was fixed in QC inspection on PDA where the result panel was not cleared properly before displaying new results.

QC Scanner

New defect classification grading option







Defect classification was added as an optional grading possibility for QC Scanners. Customers can define their own defect classes and the exact criteria required for each class. These can be used to identify the severity of salmon defects and to support claims against a provider of defective raw material (for example, weight not according to specs, too many melanin spots, too many blood spots, etc.).

The criteria for defect classification is specified for each program, which allows different rules to be applied depending on the raw material used.

A **DefectClass** column has also been added to data registration forms for QC Scanner.

Setup

To set up defect classification, defect classes are created on the **Defect classes** form.

| Defect classes | | | | | | |
|---|----------------|------------|----------|---------|-------------------------------------|--|
|  Clone  Autofilter  Refresh  Confirm  Print  Operations ▾ | | | | | | |
| | Name | Short name | Code | Pattern | Active | |
| ▶ | Waste | Waste | defc0001 | | <input checked="" type="checkbox"/> | |
| | Industry | Industry | defc0002 | | <input checked="" type="checkbox"/> | |
| | 501 3+ (22... | 501 3+ (22 | defc0003 | | <input checked="" type="checkbox"/> | |
| | 501 3- (22-... | 501 3- (22 | defc0004 | | <input checked="" type="checkbox"/> | |
| | 502 3+ (20... | 502 3+ (20 | defc0005 | | <input checked="" type="checkbox"/> | |
| | 502 3- (20-... | 502 3- (20 | defc0006 | | <input checked="" type="checkbox"/> | |
| | 500 | 500 | defc0007 | | <input checked="" type="checkbox"/> | |
| * | | | | | <input type="checkbox"/> | |

Next, defect classification rules are defined in the **Program Editor** for each program.

| Program Editor | | | | | | |
|----------------|------------------|------------|-----------------|---------|--------------------|--|
| Programs | | | | | | |
| Code | Name | Short name | QC Scanner | Product | Program type | |
| qcspr00020 | L1-1 C-trim | L1-1 C-tri | L1-QC scanner 1 | | Salmon - Meat s... | |
| qcspr00018 | L1-1 D-trim (3+) | L1-1 D-tri | L1-QC scanner 1 | | Salmon - Meat s... | |
| qcspr00023 | L1-2 C-trim 1-3 | L1-2 C-tri | L1-QC-scanner 2 | | Salmon - Meat s... | |

| Defect classification | | |
|-----------------------|----------------|--|
| Priority | Defect class | Classification rule |
| 1 | Waste | [Color] < 20 Or [Melanin (mm ²)] > 200 |
| 2 | Industry | [Melanin (mm ²)] > 100 |
| 3 | 501 3+ (22-24) | 24 > [Color] And [Color] >= 22 |
| 4 | 502 3+ (20-22) | 22 > [Color] And [Color] >= 20 |
| 5 | 500 | [Melanin (mm ²)] > 50 Or [Blood (mm ²)] > 50 |

When adding rules, the **Expression editor** opens to provide help and context for creating rules.

Expression editor ✕

[Color] < 20 Or [Melanin (mm²)] > 200 Or Blo

Blood (mm²)

Invalid column: 'Blo'.

Data fields

Operators

Enter text to search...

- ==
- !=
- <
- <=
- >=
- >
- In
- Between
- And
- Or
- Not

Performs a logical disjunction on two Boolean expressions.

OK Cancel

Defect classification report

A **Defect classification** report was also added. The report can be used to see the defect classification results of a production.

The report includes configuration options to show/hide the results of scanning (distribution into Categories+Abnormal/Misplaced) and to show/hide the color distribution chart.

Defect classification report

Production day: 17.3.2021 17.3.2021

QC Scanner: prpr0033

Process period: (All)

Purchase order: 117737-H111

Lot: (All)

Batch: (All)

Shift: (All)

Program: (All)

Category: (All)

Breakdown by: Lot

OK Cancel

Defect classification report

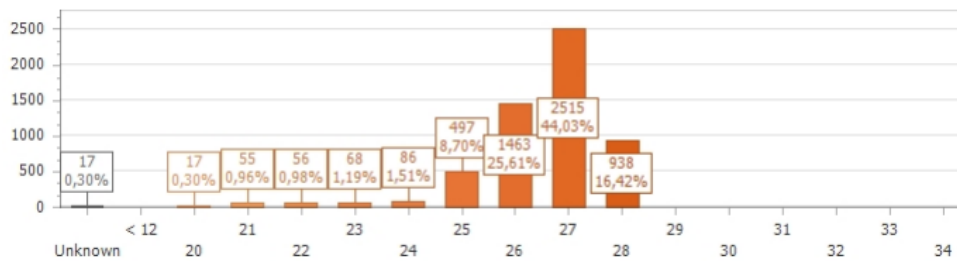
Date: 16.3.2021 - 17.3.2021
 Breakdown by: = Lot

| Lot code | Lot name | First regtime | Last regtime | Avg. weight (kg) |
|-----------|--------------|------------------|------------------|------------------|
| L1-111201 | L1-PL-111202 | 16-03-2021 19:09 | 16-03-2021 19:09 | 0,88 |

Defect classification

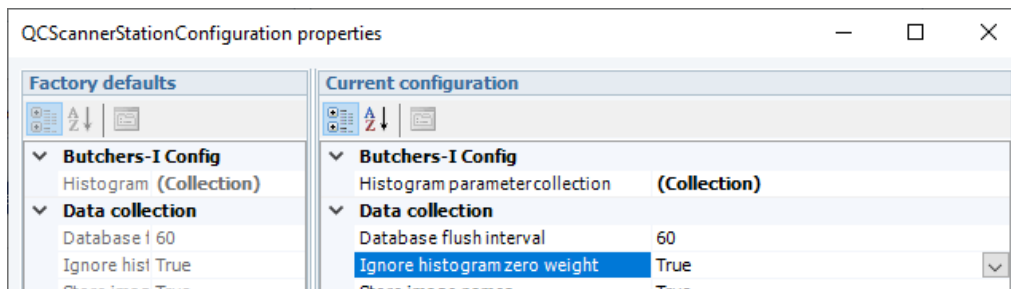
| Defect class | Count | % | Weight | % |
|----------------|--------------|---------------|-----------------|---------------|
| OK | 3.970 | 69,5% | 3.485,7 kg | 69,7% |
| Waste | 650 | 11,4% | 598,7 kg | 12,0% |
| Industry | 405 | 7,1% | 358,7 kg | 7,2% |
| 501 3+ (22-24) | 103 | 1,8% | 70,6 kg | 1,4% |
| 502 3+ (20-22) | 63 | 1,1% | 38,8 kg | 0,8% |
| 500 | 521 | 9,1% | 452,2 kg | 9,0% |
| Total | 5.712 | 100,0% | 5.004,66 | 100,0% |

Color distribution:



New configuration option for Salmon QC Scanner

A new configuration option was added to the Salmon QC Scanner (QC Scanner System Setup) to ignore histogram collection when the Weight received for a fillet equals 0. This option is **True** by default. When QC Scanner is unable to measure weight because the machine is missing a 3D vision camera (such as for Skin side machines), then the weight received by innova is 0.



Salmon QC Scanner now detects colors under 20

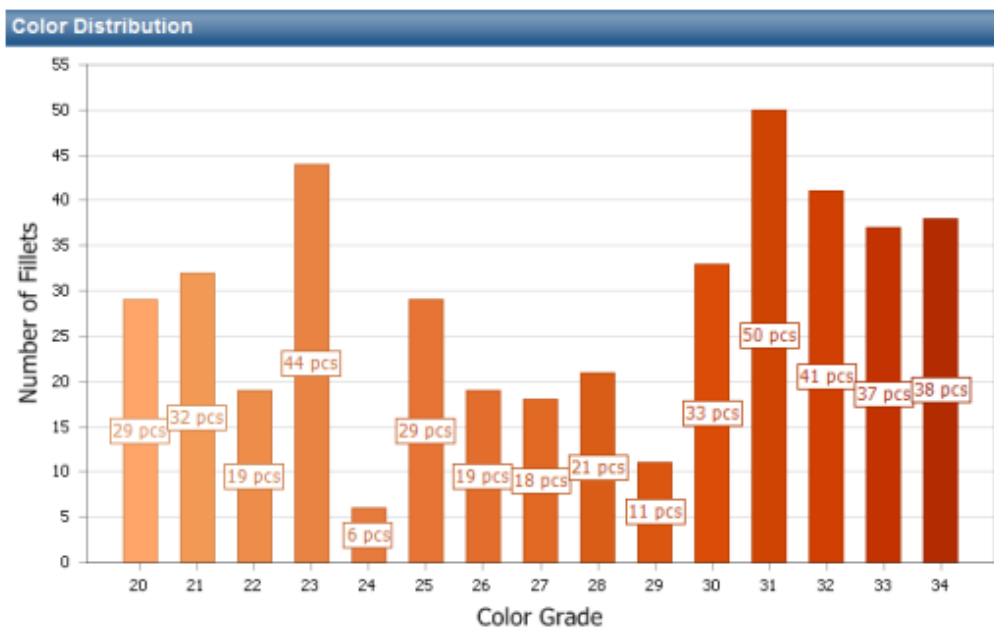
The Salmon QC Scanner can now detect salmon color distribution under 20. In these cases, the machine will send the color as **value = 1** (Value = 0 = Unknown).

Updated dashboards and reports

Innova for QC Scanner dashboards and reports that show color distribution now have an extra column to show values under 20.

In the **Color distribution** dashboard, **Color = 1** is now shown as "< 20".

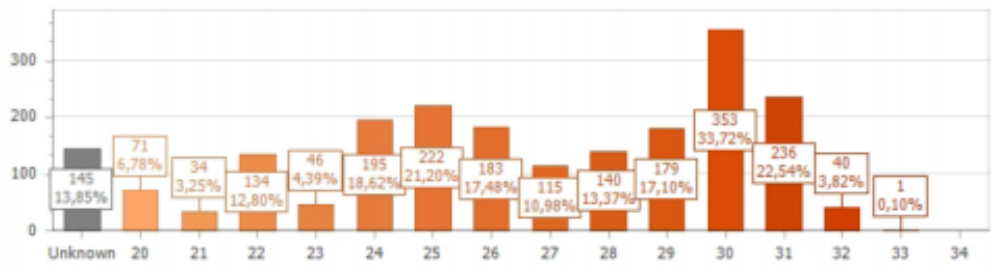
(Charts already show Color 0 as "Unknown").



In Salmon reports that include color distribution charts, such as Production Quality and Shipment Quality reports, charts now show **Color = 1** as "< 20".

(Charts already show Color 0 as "Unknown").

Color distribution:

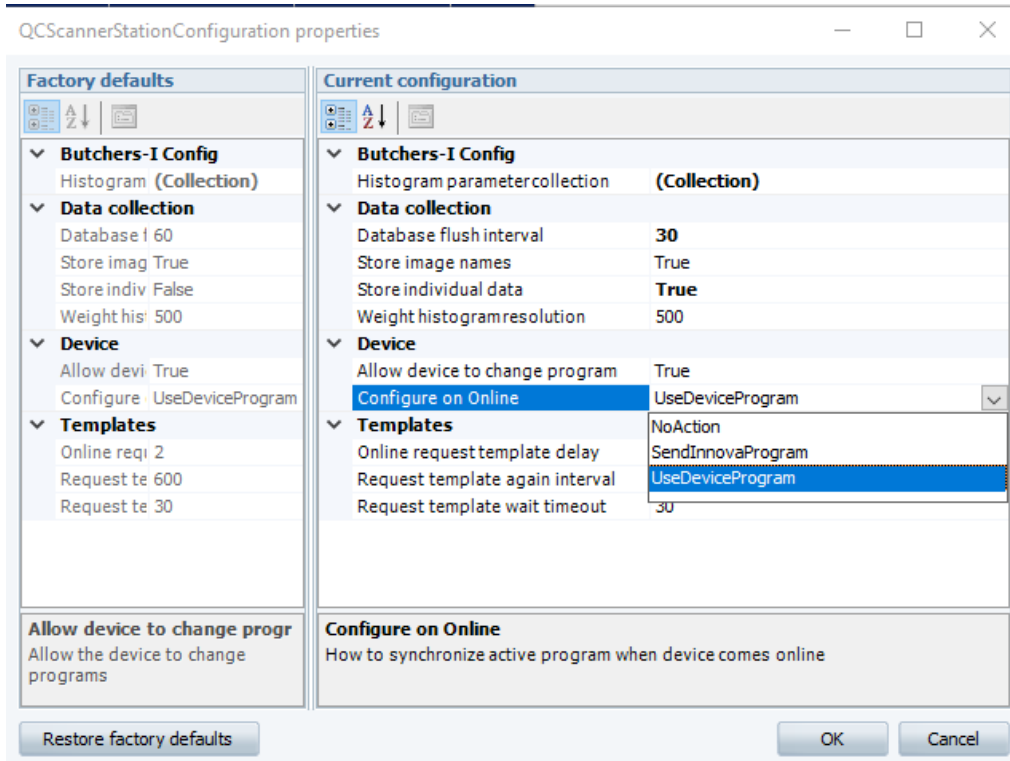


Improved synchronization of active program

Synchronization of the active program between Innova and QC Scanner when the device comes online was improved by adding a new configuration property in the system setup.

The QC Scanner station configuration now includes the property **Configure on Online**, which sets the following:

| Setting | Description |
|-------------------|--|
| NoAction | No action is taken when QC Scanner comes online. |
| SendInnovaProgram | When QC Scanner comes online, the active program in Innova is sent to the device. |
| UseDeviceProgram | When QC Scanner comes online, the active program in Innova is updated to match the program from the device. (Default option) |



Note that when no active program is loaded in Innova, Innova will load the device program instead, thus making sure Innova and the device are in sync.

Program editor usability improvements

Two new usability improvements were made to the Program editor:

- When a quality has been disabled for the whole program, all fields for the selected quality are disabled.
- When selecting a destination for a quality, users can now select from a drop-down list instead of manually entering a destination value.

| Program details | | Quality 1 | | | Quality 2 | | |
|-----------------------------------|-------------------------------------|-----------|--------|-------------------------------------|-----------|--------|-------------------------------------|
| Name | Value | Min. | Max. | Enable | Min. | Max. | Enable |
| General | | | | | | | |
| Head first | <input checked="" type="checkbox"/> | | | | | | |
| Conveyor speed | 365 mm/s | | | | | | |
| Object count before warning/alarm | 20 Pieces | | | | | | |
| Volume to weight (left) | 0,9050 g/cm ³ | | | | | | |
| Volume to weight (right) | 0,9050 g/cm ³ | | | | | | |
| Max. object length | 800 mm | | | | | | |
| Min. object length | 120 mm | | | | | | |
| Quality 1 enabled | <input checked="" type="checkbox"/> | | | | | | |
| Quality 2 enabled | <input type="checkbox"/> | | | | | | |
| Destination default quality | Default downstream | | | | | | |
| Destination quality 1 | Gate 2 | | | | | | |
| Destination quality 2 | Gate 1 | | | | | | |
| ProductSetup | | | | | | | |
| Back zone 1 | | 0 % | 10,0 % | <input type="checkbox"/> | 0,0 % | 40,0 % | <input checked="" type="checkbox"/> |
| Back zone 2 | | 0 % | 10,0 % | <input type="checkbox"/> | 0,0 % | 65,0 % | <input checked="" type="checkbox"/> |
| Back zone 3 | | 0 % | 10,0 % | <input type="checkbox"/> | 0,0 % | 40,0 % | <input checked="" type="checkbox"/> |
| Back loin | | 0 % | 10,0 % | <input type="checkbox"/> | 0,0 % | 40,0 % | <input checked="" type="checkbox"/> |
| Belly zone 1 | | 0 % | 10,0 % | <input checked="" type="checkbox"/> | 0,0 % | 40,0 % | <input checked="" type="checkbox"/> |
| Belly zone 2 | | 0 % | 10,0 % | <input checked="" type="checkbox"/> | 0,0 % | 40,0 % | <input checked="" type="checkbox"/> |
| Belly zone 3 | | 0 % | 10,0 % | <input checked="" type="checkbox"/> | 0,0 % | 40,0 % | <input checked="" type="checkbox"/> |
| Belly zone 4 | | 0 % | 10,0 % | <input checked="" type="checkbox"/> | 0,0 % | 40,0 % | <input checked="" type="checkbox"/> |
| Belly zone 5 | | 0 % | 10,0 % | <input checked="" type="checkbox"/> | 0,0 % | 40,0 % | <input checked="" type="checkbox"/> |

Innova now compares InnovaProgramId in data message with running program

Innova now checks whether the data transmission from a QC Scanner machine includes information about which program is running on the machine. If the program information is available, Innova compares the device program with what is applied in Innova and makes sure Innova has selected the same program as the machine is using.

Fixed exception error in dashboards

An issue was fixed where an exception error was showing in QC Scanner dashboard components when no station source was selected.

Fixed Salmon report charts

An issue was fixed in QC Scanner Salmon reports where empty charts were displayed when **Break on Program** was selected.

Improvements to reports

The following improvements were made to QC Scanner reports.

Production Overview Report

The Production Overview Report now shows weight information for salmon fillets. The number of abnormal and misplaced fillets are now also included in the Overview report.

| Production Overview Report | | | | | | | | | | | INNOVA Food Processing Software | |
|--|----------------|----------------|--------------|-------------|-----------|------------|----------------------|---------------|-----|----------|------------------------------------|-------|
| Date: 21.1.2021 - 21.1.2021 | | | | | | | | | | | | |
| Breakdown by: = Lot, Break on process unit | | | | | | | | | | | | |
| Lot code | Lot name | Salmon fillets | Total weight | Quality 1 | Quality 2 | Quality 3 | Abnormal / Misplaced | Fillets / min | | | | |
| L1-103401 | L1-PL-103402 | 11.470 | 8.136,3 kg | 3.584,7 kg | 5.475 | 4.334,6 kg | 5.699 | 159,7 kg | 232 | 57,3 kg | 64 | 16,99 |
| | L1-QC-scanner1 | 5.751 | 3.780,8 kg | 3.584,7 kg | 5.475 | 0,0 kg | 0 | 147,9 kg | 219 | 48,2 kg | 57 | 17,22 |
| | L1-QC-scanner2 | 5.719 | 4.355,5 kg | 0,0 kg | 0 | 4.334,6 kg | 5.699 | 11,8 kg | 13 | 9,1 kg | 7 | 16,76 |
| L2-103401 | L2-PL-103402 | 18.917 | 22.150,3 kg | 18.172,6 kg | 15.319 | 3.117,9 kg | 2.837 | 739,8 kg | 691 | 120,0 kg | 70 | 23,41 |
| | L2-QC-scanner1 | 9.405 | 11.383,5 kg | 10.769,8 kg | 8.905 | 0,0 kg | 0 | 587,9 kg | 478 | 25,8 kg | 22 | 23,87 |
| | L2-QC-scanner2 | 9.512 | 10.766,8 kg | 7.402,8 kg | 6.414 | 3.117,9 kg | 2.837 | 151,9 kg | 213 | 94,1 kg | 48 | 22,96 |

Note that the first registration time and last registration time values have been removed to make room for the added information.

Production Quality Report

The Production Quality Report now shows weight information for salmon fillets. The report also now shows the number of abnormal and misplaced fillets. The layout of the report has been adjusted to accommodate these additional values.

Production Quality Report

INNOVA
Food Processing Software

Date: 21.1.2021 - 21.1.2021
Lot: = L2-PL-103402, Breakdown by: = Lot

| Lot code | Lot name | First regtime | Last regtime | Avg. weight(g) | Fillets/ min |
|-----------|--------------|------------------|------------------|----------------|--------------|
| L2-103401 | L2-PL-103402 | 21-01-2021 06:58 | 21-01-2021 15:03 | 1.168,90 | 23,32 |

| | Fillets | Weight |
|--------------|---------------|-----------------|
| Quality 1 | 15.319 | 18.172,6 |
| Quality 2 | 2.837 | 3.117,9 |
| Quality 3 | 691 | 739,8 |
| Total | 18.847 | 22.030,3 |

Not included in totals

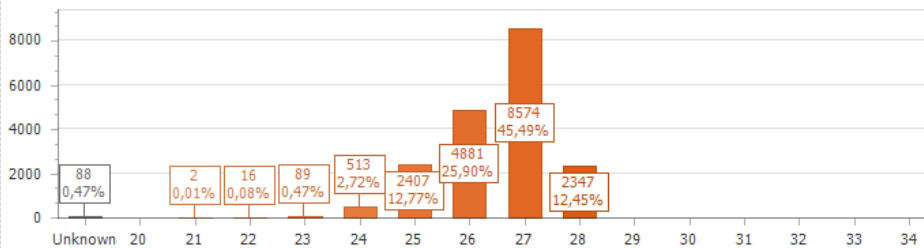
| | Fillets | Weight |
|-----------|---------|--------|
| Abnormal | 70 | 120,0 |
| Misplaced | 0 | 0,0 |

Any Report limit 0

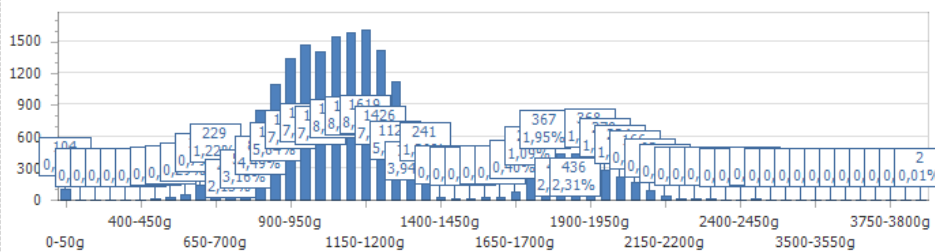
Report limit results:

| Parameter | Limit | Under | Over | % Over |
|-----------|-------|-------|------|--------|
|-----------|-------|-------|------|--------|

Color distribution:



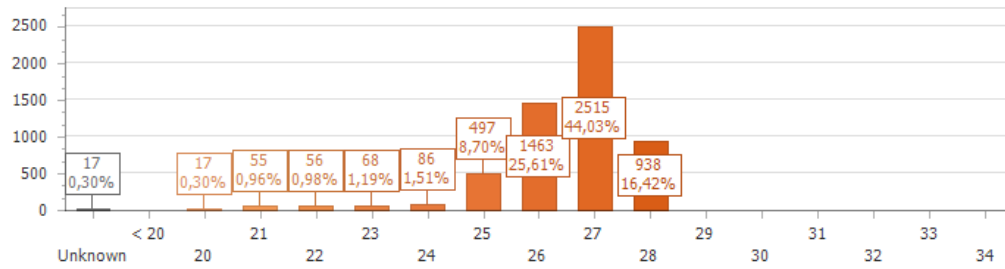
Weight distribution:



Color distribution now shows values under 20

The latest firmware for Salmon QC Scanner detects fillet color with a value under 20. Innova for QC Scanner dashboards and reports that show colour distribution now have an extra column to show values under 20.

Color distribution:



Recipe

Fixed error when using Quality Check on PDA

An issue was fixed where running the Quality Check step on PDAs caused an error. Operators can now use the Quality Check step on PDAs.

RoboBatcher Flex

New Robobatcher Flex reject status code

A new reject status code, **(29) Item too wide for tool** was added for the Robobatcher Flex.

Added Unicode support for Robobatcher Flex

Robot SW version 2.3.16 adds Unicode support to allow recipe names, etc. to use UFT-8 encoding characters (e.g. Cyrillic, Chinese, etc.).

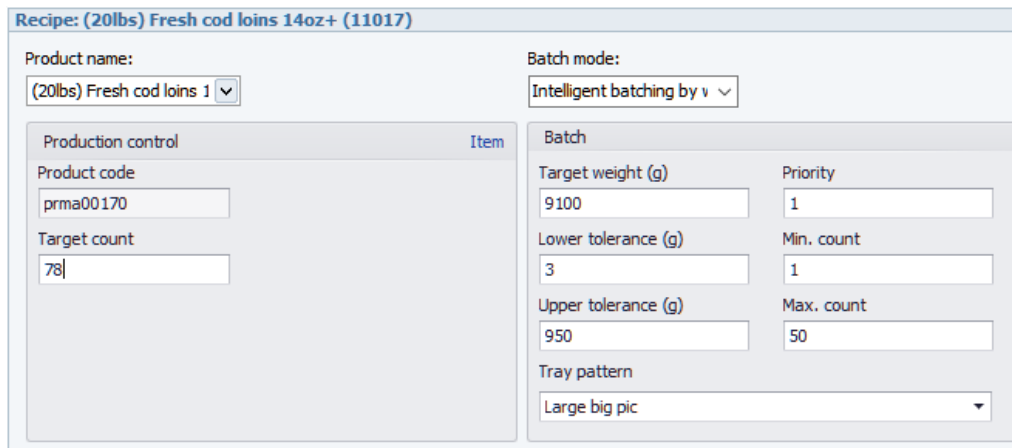
To enable this in Innova, set the **codepage** for the Robobatcher Flex device to 65001 (UTF-8) and change the Grader XML setting `Marel.Mp5.Grading.Configuration.RobobatcherFlexConfiguration/UseCharacterEncoding = False`.

New Robobatcher recipe parameters

Two new recipe parameters were added for Robobatcher:

- **TARGETCOUNT** - The preferred number of items in each batch.
- **PRODUCTCODE** - Contains the product code for the recipe product (`proc_materials.code`).

The parameters are available on the Production Control tab of the Recipe editor when the UI configuration has **ShowProductionControl** set to **True**.



The screenshot shows the 'Recipe: (20lbs) Fresh cod loins 14oz+ (11017)' editor. It features a 'Production control' tab with the following fields:

- Product name: (20lbs) Fresh cod loins 1
- Batch mode: Intelligent batching by v
- Product code: prma00170
- Target count: 78

The 'Batch' section includes:

- Target weight (g): 9100
- Priority: 1
- Lower tolerance (g): 3
- Min. count: 1
- Upper tolerance (g): 950
- Max. count: 50
- Tray pattern: Large big pic

The TARGETCOUNT and PRODUCTCODE parameters were also added to **Distribution** and **Product monitor** dashboards to allow for quick adjustments of running recipe parameters.

Added Robobatcher support in Grmatrix

Support for Robobatcher was added in Grmatrix with the following configuration changes:

If the grader device type has a family = SV4700, then Grmatrix will listen to RecAtPos messages from that device.

Two new command line switches were added:

- [-p <PAM suffix>] PAM suffix for handover flag, for example: 79
- [-f] Use default controller for unknown items.

Both of these new command line parameters are optional.

If -p is set to, e.g. "79", then the handover is performed by writing the following PAM address: .W.10.5.79:1

If -p is omitted, then the older drop request PAM address is used.

If -f is specified and a position message arrives for an unknown item, then a handover is performed using the default controller (the first one).

Fixed issue with RESIDUEBATCH value from Robobatcher

An issue was fixed where the RESIDUEBATCH value was interpreted incorrectly in the BatchTransfer record from Robobatcher. The value was sent as true/false instead of the expected 0/1 by Innova.

Slaughter Control

New configurations for grid fields in KillFloor2 system

Two new configuration properties have been added to grid fields in the KillFloor2 system to fix an issue with sorting on the Dentition IPC screen.

- **AllowSort** - Indicates if the operator can sort columns in the grid.
- **CanSelectRow** - Indicates if the operator can select a row in the grid.

Added Autofom support in KillFloor2

Support was added for a new rs232 serial device, **FrontMatecAutofom**:

- **Marel.Mp5.KillFloor2.Ui.Ipc.ClassificationGroup.ButtonEnableConfiguration** - Used to enable and disable buttons on the ClassificationGroupStation
- **Marel.Mp5.KillFloor2.Ui.Ipc.ClassificationGroup.CustomGradingDeviceDataHandler** - Used for custom data handling when receiving data from a grading device.
- **Marel.Mp5.KillFloor2.Ui.Ipc.ClassificationGroup.GenerateKillNumberMethod** - Method to create killnumber automatically and populate the KillNumber field if being used.

Solutions

New configuration property for sorting devices

A new configuration property was added in Marel.Mp5.Solutions.Pas.Services.Sorting.ThirdPartyScaleControllerConfiguration:

InitializeRailLocationsForGates indicates whether to initialize rail locations for gates. If **True**, then rail locations are initialized. If **False**, then rail locations are not initialized. If rail locations are not initialized, there is no trigger or read actions for those gates.

Added PriorityMatrix functionality to BoxSorter

Customer product parameters are defined as external columns in the proc_materialsc table:

```
--Commands to generate external columns to store details of slaughterhouses and
slaughterday offset
--for details about the Mgm_AddExColumn stored procedure see:
--https://my-
marel.atlassian.net/wiki/spaces/IKB/pages/2228589/How+to+manage+external+columns

EXEC dbo.Mgm_AddExColumn @TableName = N'proc_materialc', @ColumnName = N'monday-
offsets1day', @ExColumnType='int', @ColumnType = N'int', @AllowNulls = 1,
@DefaultValue = Null, @EnumName = Null, @AssemblyName = 'Marel.Mp5.Process.UI',
@LookupQuery = NULL, @ReCreate = 0
EXEC dbo.Mgm_AddExColumn @TableName = N'proc_materialc', @ColumnName = N'tues-
dayoffsets1day', @ExColumnType='int', @ColumnType = N'int',
@AllowNulls = 1, @DefaultValue = Null, @EnumName = Null,
@AssemblyName = 'Marel.Mp5.Process.UI', @LookupQuery = NULL, @ReCreate = 0
EXEC dbo.Mgm_AddExColumn @TableName = N'proc_materialc', @ColumnName = N'wed-
nesdayoffsets1day', @ExColumnType='int', @ColumnType = N'int', @Al-
lowNulls = 1, @DefaultValue = Null, @EnumName = Null,
@AssemblyName = 'Marel.Mp5.Process.UI', @LookupQuery = NULL, @ReCreate = 0
EXEC dbo.Mgm_AddExColumn @TableName = N'proc_materialc', @ColumnName = N'thursday-
offsets1day', @ExColumnType='int', @ColumnType = N'int', @AllowNulls = 1,
@DefaultValue = Null, @EnumName = Null, @AssemblyName = 'Marel.Mp5.Process.UI',
@LookupQuery = NULL, @ReCreate = 0
EXEC dbo.Mgm_AddExColumn @TableName = N'proc_materialc', @ColumnName = N'fri-
dayoffsets1day', @ExColumnType='int', @ColumnType = N'int',
@AllowNulls = 1, @DefaultValue = Null, @EnumName = Null,
@AssemblyName = 'Marel.Mp5.Process.UI', @LookupQuery = NULL, @ReCreate = 0
EXEC dbo.Mgm_AddExColumn @TableName = N'proc_materialc', @ColumnName = N'sat-
urdayoffsets1day', @ExColumnType='int', @ColumnType = N'int',
@AllowNulls = 1, @DefaultValue = Null, @EnumName = Null,
@AssemblyName = 'Marel.Mp5.Process.UI', @LookupQuery = NULL, @ReCreate = 0
EXEC dbo.Mgm_AddExColumn @TableName = N'proc_materialc', @ColumnName = N'sunday-
offsets1day', @ExColumnType='int', @ColumnType = N'int', @AllowNulls = 1,
@DefaultValue = Null, @EnumName = Null, @AssemblyName = 'Marel.Mp5.Process.UI',
@LookupQuery = NULL, @ReCreate = 0
EXEC dbo.Mgm_AddExColumn @TableName = N'proc_materialc', @ColumnName = N'slaughter-
```

```
houses', @ExColumnName='text', @ColumnName = N'text', @AllowNulls = 1,
@DefaultValue = Null, @EnumName = Null, @AssemblyName = 'Marel.Mp5.Process.UI',
@LookupQuery = 'select company,name from base_companies where issupplier = 1 and active = 1', @ReCreate = 0
```



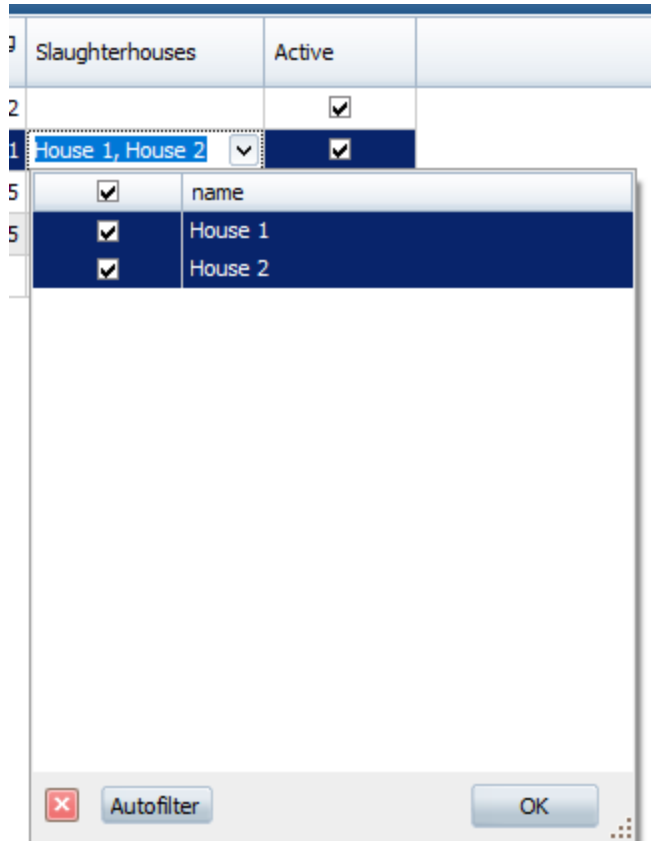
| Product | Customer | Slaughterhouse 1 | Slaughterhouse 2 | Slaughterhouse 3 | Slaughterhouse 4 | Slaughterhouse 5 | Max processing days- Sun. | Max processing days- Mon. | Max processing days- Tue. | Max processing days- Wed. | Max processing days- Thu. | Max processing days- Fri. | Max processing days- Sat. |
|---------|-----------------|------------------|------------------|------------------|------------------|------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Pork | Bonus | House 1 | | | | | 2 | 4 | 2 | 2 | 2 | 2 | 2 |
| Pork | Meatbank | House 1 | House 2 | | | | 4 | 4 | 2 | 2 | 2 | 2 | 1 |
| Beef | Hamburgerfac... | House 1 | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 |

Grid header texts can be localized.

The slaughter day offset defines the maximum number of days between slaughter day and production day. If the offset is 2 and there are two days or less between the slaughter day and the production day, the offset is considered within range.

The items in the **Slaughterhouses** list are fetched from the **Company** list. One or more active suppliers can be selected.

The list must be set up to allow multi-select.



If parameters are undefined for the customer and Product, then the offset/date range is determined to be within range.

If the offset is not set for weekdays, then the offset is determined to be within range.

If the lot does not contain slaughter day details, then the offset is determined to be within range.

If qamark1 is undefined for both the unit and order line, the qamark is considered to be OK.

BoxSorter improvements

Added plug-in support for TSSM

BoxSorter plug-ins can now act on TSSM telegrams from PLC. Custom BoxSorter plug-ins can now be programmed to act on TSSM telegrams.

New configuration property to handle TSSM telegrams in BoxSorter

A Boolean configuration property, **HandleTSSMWhenNoUnitFound**, was added to Marel.Mp5.Solutions.Pas.Services.Sorting.ThirdPartyScaleControllerConfiguration.

If **True**, TSSM telegrams are handled for when no unit is found. If **False**, the TSSM telegram is aborted when no unit is found.

New BoxSorter gate type

A new gate type, **FinalDestination**, was added to the GateType column for gates in the sorting system setup for BoxSorter (Marel.Mp5.Solutions.Pas).

New configuration for Lightman

Configuration was added to the **Pendinghandler type** so that if the pending context (Activity/Lot/Plot) is the same as the current one, then the light can be turned on or not.

Can now add a rail location without restarting the device router

Now when a device configuration is (re)activated, the existing connection is closed, allowing re-adding.

Bizerba scale driver bugfixes and simulator

Bugfixes were made to the Bizerba scale driver to improve reliability. A Bizerba simulator was also created for internal use.

Fixed issues in Wholesale Pack Terminal

Two issues were fixed in the Wholesale Pack Terminal (wholesalepackterm.exe):

- Now when a unit operation rolls back, the material change on the scanned pack also rolls back.
- The message returned when a product has no remainder has been improved and no longer causes an error.

Fixed issue with OrderUnitOpCE crashing on IPCs

To fix this issue, UnitOpView cleanup was removed from OrderUnitOpCE and instances of constructed views were kept. This fix was added to versions 5.9.1 and higher.

Fixed SkipMaterialConstraint bug in SelectOrder unit operation

When using **SkipMaterialConstraint** in the **SelectOrder** unit operation, **OrderVisibility** must be set to **DirectOrderOrderLine**. The OrderVisibility property was not used correctly everywhere in SelectOrder because of private/public variable access issues, and SkipMaterialConstraint was not working.

This has been fixed and nothing should change for the user.

Fixed incorrect summary in Purchase report for notes

When displaying the purchase report for notes, the quantity of the note lines in notes that are flagged as "Post Payment" should not be included - only the monetary value should be added. This has been fixed.

Checkout bugfixes

xlat was added and the following bugs were fixed:

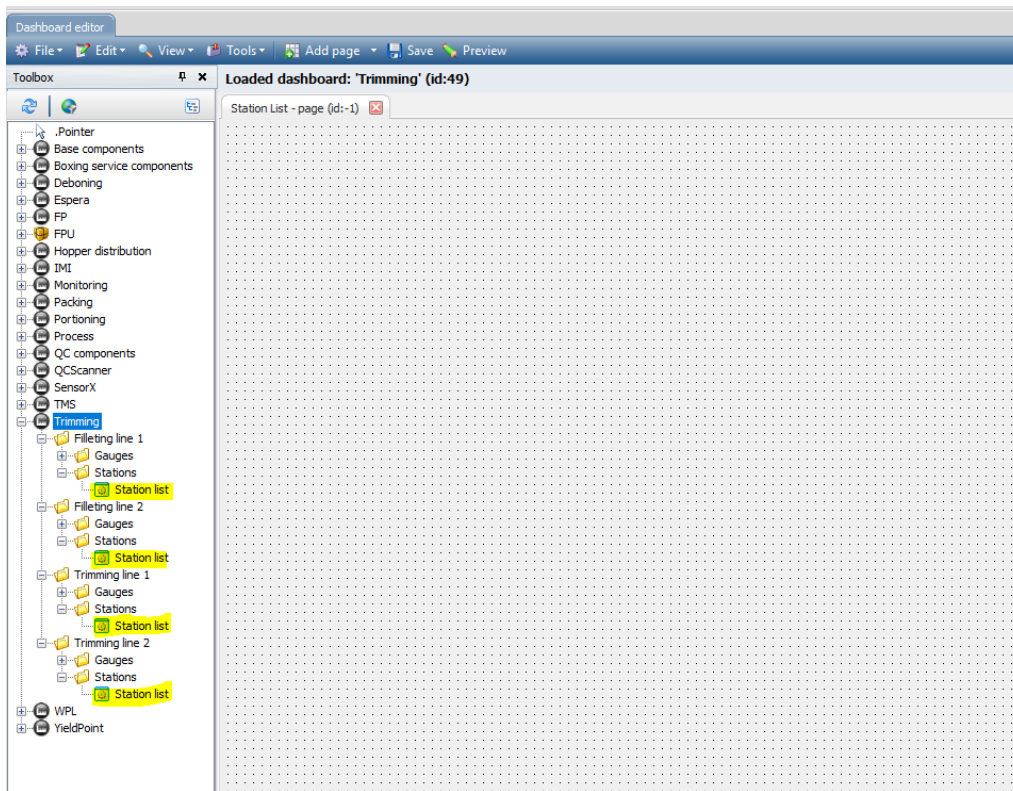
- When installing a Packing system more than once, both the `-s` and `-p` parameter were missing. Only the `-p` parameter should be omitted. As a consequence of the missing `-s` parameter, packing systems that were created on any run except from the initial execution of checkout did not work.
- The Checkout Quick Config UI was modified for improved usability.
- When doing an update to Checkout, the **Add Selected** button became active again and made it possible to press the button again, which installed the selected options again.
- On PDA, an error occurred when pressing Packs on the Pallet Task page.

Trimming

New dashboard component

A new dashboard component, **StationList**, was added for Trimming dashboards. It provides a visualization of each station on a trimming line. The component can be configured in multiple ways to display information graphically or in a more data-driven manner.

The StationList component can be found in the Dashboard Editor toolbox.



Configuration

The screenshot shows the Visual Studio Properties window for a control named 'StationList1'. The window is organized into several expandable sections:

- Appearance:**
 - CaptionFont: Microsoft Sans Serif; 40pt
 - ControlBackColor: Control
 - ControlBorderStyle: FixedSingle
 - SummaryFont: Microsoft Sans Serif; 40pt
- Behavior:**
 - RefreshInterval: 30
 - RefreshMode: Off
 - TabIndex: 0
 - ViewAccessLevel: Undefined
- Component State:**
 - ActiveState: Stop
- Design:**
 - ComponentName: StationList1
 - ComponentType: ControllerView
 - DatabaseId: 851
 - Locked: False
- Layout:**
 - Dock: None
 - Location: 8; 8
 - Size: 952; 584
- Settings:**
 - CaptionText: StationList example
 - DisplaySummaryLabel: True
 - InputWeightFactor: 1
 - StationInformation: Both
 - StationOrdering: StationNumberAscending
 - StationsShown: 10
 - SummaryText: {0}
 - TrimmingSystemTypes: PrimaryAndSecondary
 - UseEmployeeShortName: False
 - UseStringLengthScaling: False
 - ValueMethod: OutputPerformanceWeightByHour
 - ValuePostFix:
 - ValueStringFormat: F1
- zzzDev:**
 - GotController: LineController1

| Property | Description | Default |
|------------------------|---|------------------------|
| CaptionText | The caption text. | Null |
| DisplaySummaryLabel | If True , displays the summary label. | True |
| InputWeightFactor | The multiplication factor for the input weight. | 1 |
| StationInformation | The station information to show. Information available: <ul style="list-style-type: none"> • Station • Employee • Both | Both |
| StationOrdering | The ordering of stations in the list. | StationNumberAscending |
| StationsShown | The number of stations to show. | 10 |
| SummaryText | The text for the line summary label. Use {0} to display the line summary value. | {0} |
| TrimmingSystemTypes | The trimming system types to use. Specifies the material types to include for output performance and yield value methods. Types available: <ul style="list-style-type: none"> • Primary • PrimaryAndSecondary • PrimarySecondaryAndTertiary | PrimaryAndSecondary |
| UseEmployeeShortName | If True , use the employee short name instead of full name. | False |
| UseStringLengthScaling | If True , use the station info's string length to scale the text in the container. | False |
| ValueMethod | The method to use for value gathering. Methods available: <ul style="list-style-type: none"> • OutputPerformanceWeightByHour • OutputPerformanceByProcessPeriodOutputPerformancePiecesPerMinute | |

| | | |
|-------------------|---|------|
| | <ul style="list-style-type: none"> • OuputPerformancePiecesByProcessPeriod Yield • QcDefectsPerInspectionWeightUnit • QcdefectsPerTotalWeight • InputPerformanceWeightByHour • InputPerformanceWeightByProcessPeriod • InputPerformancePiecesPerMinute • InputPerformancePiecesByProcessPeriod | |
| ValuePostFix | The postfix to be displayed with values. | Null |
| ValueStringFormat | The string formatting of the values shown. | F1 |

Examples

Example 1:

The screenshot shows the Visual Studio Properties window for a control named [StationList] StationList1. The window is organized into several expandable sections:

- Appearance:**
 - CaptionFont: **Microsoft Sans Serif; 40pt**
 - ControlBackColor: Control
 - ControlBorderStyle: FixedSingle
 - SummaryFont: **Microsoft Sans Serif; 40pt**
- Behavior:**
 - RefreshInterval: 30
 - RefreshMode: Off
 - TabIndex: 0
 - ViewAccessLevel: Undefined
- Component State:**
 - ActiveState: Stop
- Design:**
 - ComponentName: **StationList1**
 - ComponentType: ControllerView
 - DatabaseId: 851
 - Locked: False
- Layout:**
 - Dock: **Fill**
 - Location: **0; 0**
 - Size: **289; 1033**
- Settings:**
 - CaptionText: **Output performance**
 - DisplaySummaryLabel: True
 - InputWeightFactor: 1
 - StationInformation: Both
 - StationOrdering: **ValueDescending**
 - StationsShown: **20**
 - SummaryText: {0}
 - TrimmingSystemTypes: PrimaryAndSecondary
 - UseEmployeeShortName: True** (highlighted)
 - UseStringLengthScaling: False
 - ValueMethod: OutputPerformanceWeightByHour
 - ValuePostFix: **kg/h**
 - ValueStringFormat: F1
- zzzDev:**
 - GotController: LineController 1

Dashboard editor Dashboard Preview ✕

Boards: Trimming Pages: Station List 🔄 Reload

Output performance

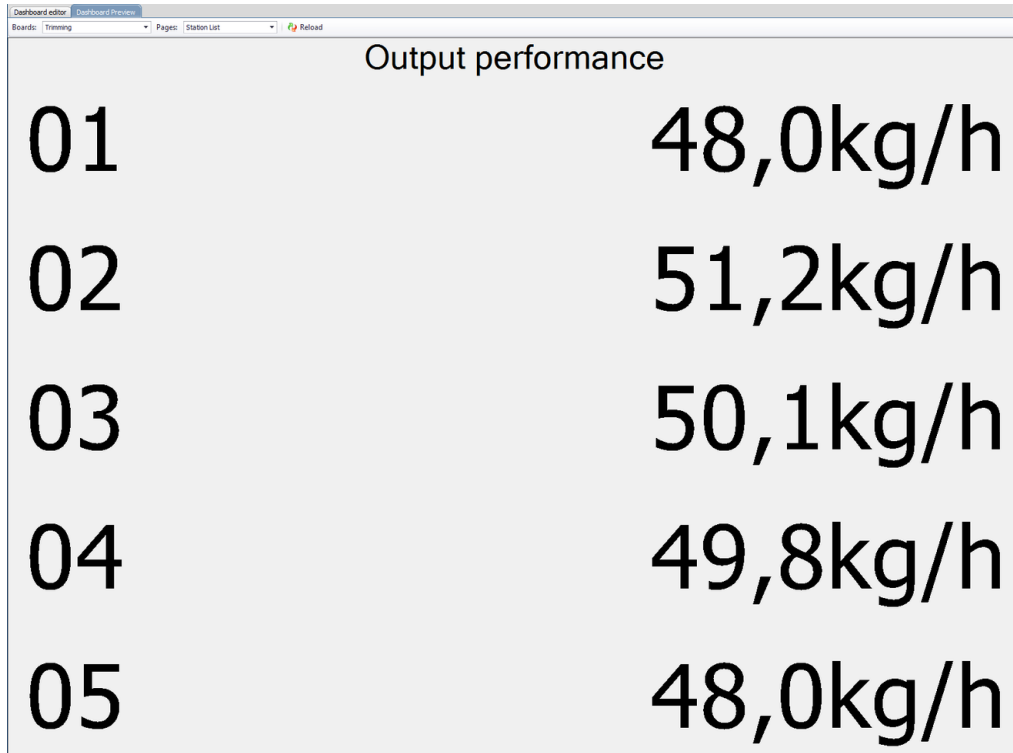
| | | |
|----|-----------|----------|
| 02 | FERNANDO | 50,9kg/h |
| 19 | MARCELO | 50,6kg/h |
| 15 | MATEUS | 50,4kg/h |
| 06 | JESSICA | 50,4kg/h |
| 17 | HELEN | 50,2kg/h |
| 14 | JOSE | 50,0kg/h |
| 04 | GUILHERME | 49,9kg/h |
| 03 | THAMIRYS | 49,9kg/h |
| 11 | EDSON | 49,9kg/h |
| 07 | GILMAR | 49,5kg/h |
| 10 | JULIA | 49,4kg/h |
| 16 | DANIELE | 49,0kg/h |
| 18 | MOISES | 48,8kg/h |
| 20 | RENAN | 48,3kg/h |
| 01 | KAROLAINY | 48,3kg/h |
| 08 | RAIZA | 47,9kg/h |
| 05 | THAYNA | 47,8kg/h |
| 09 | RODRIGO | 47,5kg/h |

49,4kg/h

Example 2:

Properties window for [StationList] StationList1. The window displays the following properties and values:

| Section | Property | Value |
|-------------------|------------------------|-------------------------------|
| Appearance | CaptionFont | Microsoft Sans Serif, 40pt |
| | ControlBackColor | Control |
| | ControlBorderStyle | FixedSingle |
| Behavior | RefreshInterval | 30 |
| | RefreshMode | Off |
| | TabIndex | 0 |
| | ViewAccessLevel | Undefined |
| Component State | ActiveState | Stop |
| Design | ComponentName | StationList1 |
| | ComponentType | ControllerView |
| | DatabaseId | 851 |
| | Locked | False |
| Layout | Dock | Fill |
| | Location | 0; 0 |
| | Size | 813; 1033 |
| Settings | CaptionText | Output performance |
| | DisplaySummaryLabel | False |
| | InputWeightFactor | 1 |
| | StationInformation | Station |
| | StationOrdering | StationNumberAscending |
| | StationsShown | 5 |
| | SummaryText | |
| | TrimmingSystemTypes | PrimaryAndSecondary |
| | UseEmployeeShortName | False |
| | UseStringLengthScaling | False |
| | ValueMethod | OutputPerformanceWeightByHour |
| | ValuePostFix | kg/h |
| ValueStringFormat | F1 | |
| zzzDev | GotController | LineController 1 |



The screenshot shows a web browser window with a dashboard titled "Output performance". The dashboard displays a list of five stations, each with a station number and its corresponding output rate in kg/h. The browser's address bar shows "Dashboard editor" and "Dashboard Preview". The browser's page title is "Boards: Trimming" and the page content is "Pages: Station List". There is a "Reload" button in the top right corner of the browser window.

| Station | Output performance |
|---------|--------------------|
| 01 | 48,0kg/h |
| 02 | 51,2kg/h |
| 03 | 50,1kg/h |
| 04 | 49,8kg/h |
| 05 | 48,0kg/h |

Inactive stations now removed from statistics

The **IsActive** state on trimming line stations is now monitored so that stations are removed from statistics when they become inactive.

Fixed employee heatmap index

An issue was fixed where the employee heatmap coordinates index could be out of bounds.

Unit operation station

Railhandler now executes unit operations on AppQueue

To prevent thread deadlocks, RailHandler now executes unit operations on the App.Queue.

Rail Unit Op stations and Rail Handler can now ignore repeated TRGM messages

RailUnitOpCE and railhandler can now ignore repeated TRGM messages if so configured:

<!--If rail event is repeat of current or last (within time window) then ignore.-->

<IgnoreRepeatedRailEvent>False</IgnoreRepeatedRailEvent>

<!--Time window in milliseconds to ignore last rail event if repeated-->

<RepeatedLastRailEventTimeWindow>500</RepeatedLastRailEventTimeWindow>

For RailUnitOpCE, the parameters are in the configuration for that station.

For railhandler, the parameters are in the XML configuration of the rail location.

Fixed issue with Context Info Label in UnitOperation station

An issue was fixed in the UnitOperation station where using a Context Info Label on the station and trying to execute a stored procedure for a CurrentUnit resulted in an empty label.

Web

Innova Web bugfixes

Issue with report criteria filtering

A issue with report criteria filtering was fixed.

Innova Web UI stops loading

A memory/cache issue related to a previous fix in Web reports caused the Innova Web UI to stop loading/crash. This was fixed by reverting the previous changes to Web reports and was applied to Innova versions 5.9.0 and higher (nightly and stable).

WeighBridge

Improved lookup filter in Single Shipment View

The lookup filter in Weighbridge's Single Shipment View now uses "contains" instead of "starts with".

Shipments_Orders LRT-32

Refresh Confirm Cancel

Shipment

Shipment type: Both

License plate: LRT-32

Transporter name: LRT-32
Mi543

Truck type: No number yet13
No number yet23

Country: No number yet30

Truck side text: No number yet30
No number yet31

Trailer 1: <Optional>

Trailer 2: <Optional>

Driver name: <Optional>

Input bay: <Optional>

Output bay: <Optional>

Fixed code: 1109-LRT-32

Seal code: <Optional>

Dispatch time:

Notes:

Weight

Scale device:

Weight:

Record weight as:

In weight

Empty truck

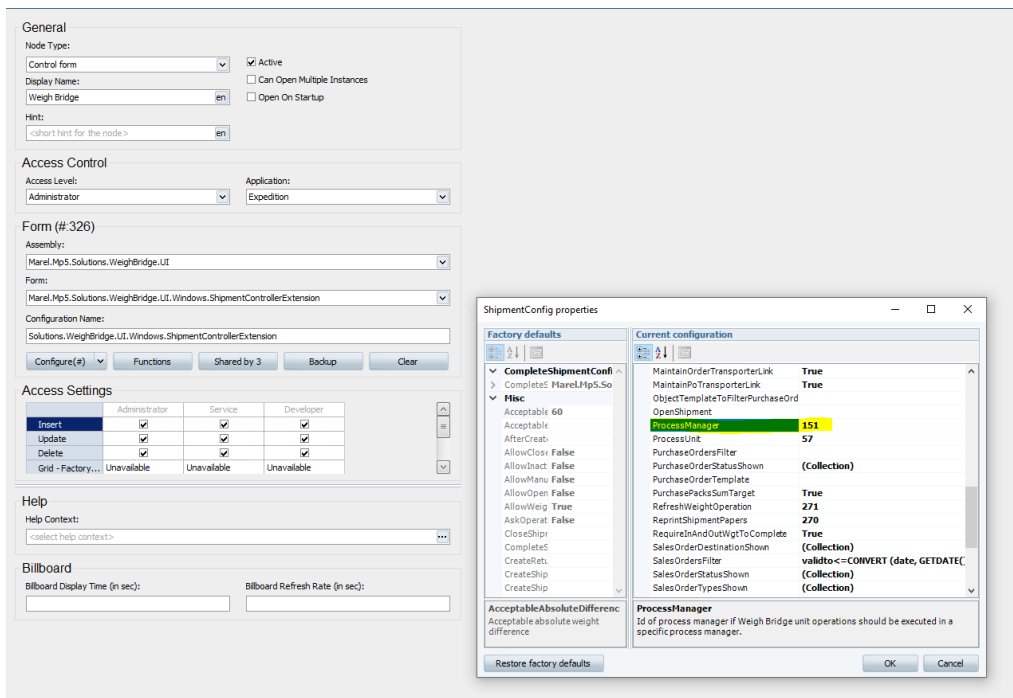
Out weight

Can now run unit operations on a specific process manager

An option to run WeighBridge unit operations in a specific process manager was added to versions 5.9.0 and up (release only).

A new nullable configuration property, **ProcessManager**, was added for WeighBridge controller extensions, which supplies the desired process manager for the execution of the unit operation.

The value provided represents a process manager system program ID. If the value is not set, unit operations are executed using the default unit op service.



If the supplied ID does not represent a process manager system program or is somehow unable to retrieve the unit op service for the given ID, it will log an error and use the default unit op service instead.

```

230797 | 8/3/2021 16:09:21 | 1 | Error | 098PCW63 | gell.gu... | PO-HST-HINLE0 5.9.2.0 | Marel.Mp5.Solutions.WeighBridge.UI.Windows.SingleShipmentControllerExtension | Failed fetching unit operation service for process manager: 48
Exception type: Marel.Mp5.Process.LinqOperations.LinqException
Error stack:
1) Can't establish the program id of the unit operation service
Stack trace:
1) at Marel.Mp5.Process.LinqOperations.LinqOperatorClient.GetServiceInfoByBabel_1 programId, SystemShipWeightScaleBoardInterface, SystemProgramControlInterface, SystemProgramControlInterface in C:\Dev\Innova\Release\5.9.2\965\Process\Current\Marel.Mp5.Process.LinqOperations.LinqOperatorClient.cs:line 671
2) at Marel.Mp5.Process.LinqOperations.LinqOperatorClient.GetServiceInfoByBabel(programId) in C:\Dev\Innova\Release\5.9.2\965\Process\Current\Marel.Mp5.Process.LinqOperations.LinqOperatorClient.cs:line 621
3) at Marel.Mp5.Solutions.WeighBridge.UI.Windows.SingleShipmentControllerExtension.PerformAction(Q in C:\Dev\Innova\Release\5.9.2\965\Solutions\WeighBridge\Current\Marel.Mp5.Solutions.WeighBridge.UI\Windows\SingleShipmentControllerExtension.cs:line 99
    
```

WPL

Added alarm configuration setting for WPL systems

A new configuration setting was added for WPL systems, `<AlarmConfigName>WPL-Alarm</AlarmConfigName>`, to control which alarm configuration should be used with the WPLs in the system. The new setting fixes a crashing bug that occurred when importing alarm setups from a CSV file.

The value is set to **WPL-Alarm** by default but must match the name of the imported alarm configuration for the WPL.

Can now use fixed weight as pack weight

It is now possible to use the fixed weight from the pack content specification as the pack weight, instead of the weight from the totaliser.

Because this is a breaking change, the following switch in the WPL System XML must be set to **True** to enable the functionality: **UseFixedWeightFromContentSpecification**.

The functionality is available in 5.8.1 Release and 5.9.3.

WPL900 and M6000 ManagePrunitControlExtension now aligned

The WPL9000 ManagePrunitControlExtension is now aligned with the M6000 ManagePrunitControlExtension and includes the following features from the M6000:

- Can create production lots.
- FilterLotsOnActivePo only displays lots that are linked to the PO currently active on the process unit.
- Extra criteria only works for ManagePrunit to not break the ReceivingCE.
- Search/filter function for activity selection in ManagePrunit.
- ConfirmBeforeChangingActivity configuration property. If True, a confirmation dialog opens when the operator changes an activity in the ManagePrunitControllerExtension.
- Keyboard panel is only shown if the batch or prday is displayed and enabled.
- Can use ManagePrunit in another controller extension. Grader.ControlScreen has been also been extended.
- Can order lots in the ManagePrunit IPC view.
- Support for additional criteria for lot selection in ManagePrunitControllerExtension.
- Can configure ManagePrunitControllerExtension context.
- Can configure number of rows and columns.

Fixed print rotation issues on WPL9000 and WPL9000+

New configuration properties

To fix print rotation issues on the WPL9000 and WPL9000+, two new configuration properties were added:

- UsePrintHeadInfoFromMachine
- ReverseLabel

UsePrintHeadInfoFromMachine

UsePrintHeadInfoFromMachine is found in the WPL Station XML or in the OCM configuration. If **True**, the rotation of the layout and bitmaps is controlled by information from the machine. This fixes an issue where the WPL9000 and WPL9000+ were printing the same layout differently.

ReverseLabel

When printing a label it is sometimes necessary to rotate the content 180 degrees before printing. This might be the case if there are both left-to-right and right-to-left machines using the same layout, or if a pre-printed label is rotated on the label roll.

In some installations this could be solved for all layouts by rotating them as part of printing. This option is available on WPL9000 print heads but not WPL9000+ print heads. It was removed from the WPL9000+ to improve print performance (print performance can also be improved on the WPL9000 by avoiding rotation).

To solve this issue, print layouts can now be rotated in Innova when they are downloaded by setting the configuration property **ReverseLabel** in the WPL Station configuration XML. This way, layouts are rotated by manipulating coordinates and directions instead of bitmaps.

If set to **False**, which is default, the WPL will behave as before. If set to **True**, is the label rotated during download.

Bugfix on WPL9000+

A bug was fixed that caused layouts be rotated incorrectly on a WPL9000+ if the layout was part of a group or multi-Comformat.

This was corrected in 591.2020.1210.1 and later.

Fixed bitmap names on WPL9000+

On the WPL9000+, bitmap short names that contained spaces would generate bitmap names with spaces on the WPL, which caused Conformats to fail. This issue has been fixed.

Fixed issue with product changes not saved on WPL9500+

An issue was fixed where if an operator selected a product in Setup mode (operator override) and changed a parameter, the change was not saved if the product wasn't activated (Run).

Fixed issue with pack label printing after upgrade

An issue was fixed where pack labels did not print on the printer after updating Innova. The problem occurred only when running with TL-8.

Fixed issue with incorrect box count

If the WPL manager was set to not reset the totalizer during lot change, then old items could cause the box count to be wrong. This has been fixed.

Fixed issue with corrupted XML when upgrading Innova

An issue was fixed where the Marel.Mp5.Process.Ul.Wpl9000.ProcessUnit.ManagePrunitControllerExtension XML was corrupted after an upgrade.

The issue existed in Innova versions 5.8.2 - 5.9.2 from 2020-12-15 to 2021-03-25, and only in Release versions. It was introduced when the WPL ManagePrunitControlExtension was aligned with the M6000 ManagePrunitControlExtension.

The number of buttons was set to "0" for buttons with a default value. This has been fixed.

Fixed WPL status view

An issue was fixed where the WPL Status form failed to get the status if the Innova system contained an inactive WPL system.

Yield Control

New Yield Control device configuration

A new configuration setting, **MessageTypeFieldAndValueToIgnore**, was added to Yield Control devices to enable the lot Intake process to ignore certain types of messages that may confuse the traceability process. The setting is part of `Marel.Mp5.Solutions.Stork.Services.TransferNetData.Configuration`.

The new configuration allows the **message type, field** and **value** to be defined so that when a message of the defined type and value is received, it will be ignored.

The configuration format should be `MessageType:MessageFieldNumber:MessageValue`

Example:

Message of type 1280, value in field 8 must be equal to 100 in order for the message to be ignored: The config value should be `1280:8:100`

```
<MessageTypeFieldAndValueToIgnore>1280:8:100</MessageTypeFieldAndValueToIgnore>
```

If the ignore value is specified as an asterisk (i.e `1280:8:*`), all messages of the specified type will be ignored. If the configuration is updated in a running system, the program processing the incoming messages must be restarted.

Tracing can be used to get more details if the process does not return the desired results.

Added support for yield points in yield reports

To support generating a yield report for selected yield points, an application for a report controller extension was included in `ReportExporter`.

Improved division in `SetMachineData` method

The **SetMachineData** method now divides by floating point numbers instead of integers, for example, `60.0` instead of `60`.