

## Highlights

The Innova 5.9.1 Release Notes are now split into three sections: improvements to existing functionality and added new functionality, upcoming enhancements, and the bugs list. The reason for introducing upcoming enhancements is to give Innova Service information about various things they may see added to version 5.9.1 at a customer but for which no documentation yet exists (because it isn't released/finished).

Highlights in this release include the following:

- [Support for Espera weigh price labelers has been introduced](#)
- [Innova for SensorX Magna is introduced](#)
- [Innova Meat Performance Line is introduced](#)
- [Full primal utilization introduced for I-Cut 130](#)
- [PlutoPackingController added](#)
- [Support Asymmetric CL deviation in Grading](#)
- [Non-Conformity & Corrective Action enhanced in QC](#)
- [Support for default product in Trimming](#)
- [Easier poultry KPIs introduced](#)
- [Device viewer and mp5router support for Greek, Russian character sets](#)
- [Report designer enhanced](#)
- [QC Scanner improved](#)
- [Changes to changeover supply lots for traceability](#)

## Improvements and Newly released functionality

### Base

#### **New baseop operation added to Migrations in Toolbox**

A new baseop operation is executed after running the migrations. This operation reformats the ValueProviderAssemblies in the LabelDesignerConfig. If they are fully qualified, this new baseop operation will strip all fully qualified assembly names (if any) to name only, and ignore the versioning, hence no more versioning errors when updating Innova. This is included in versions 5.7.2 and up.

Note that some manuals show examples where fully qualified assembly names are added to the config. But name only is sufficient.

#### **Mps.config inherits permissions**

A function has been added to set permissions on the mps.config file to inherit permissions from the parent folders.

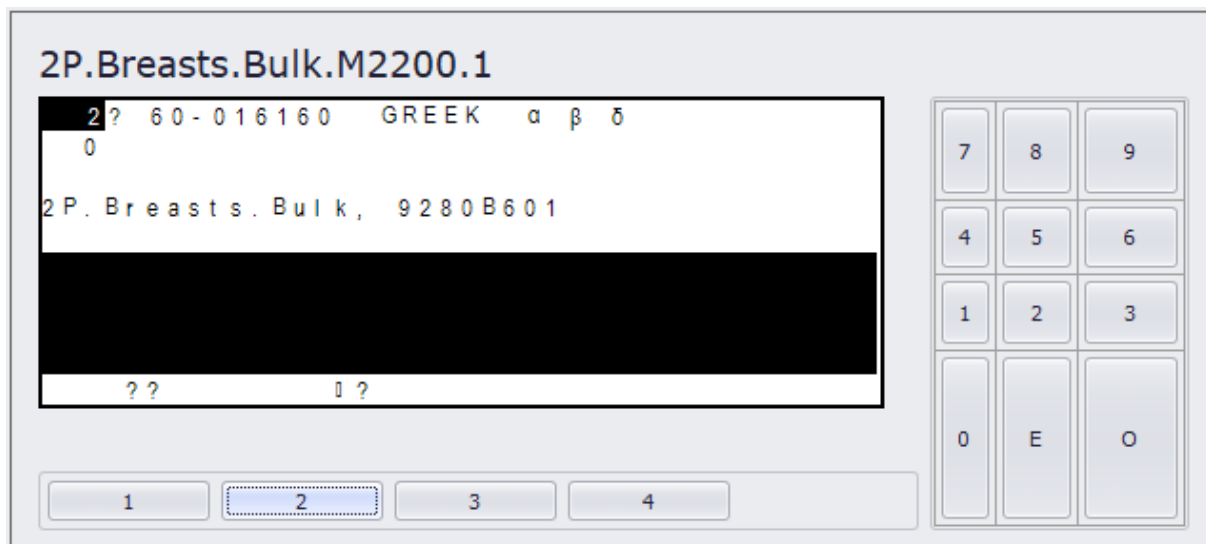
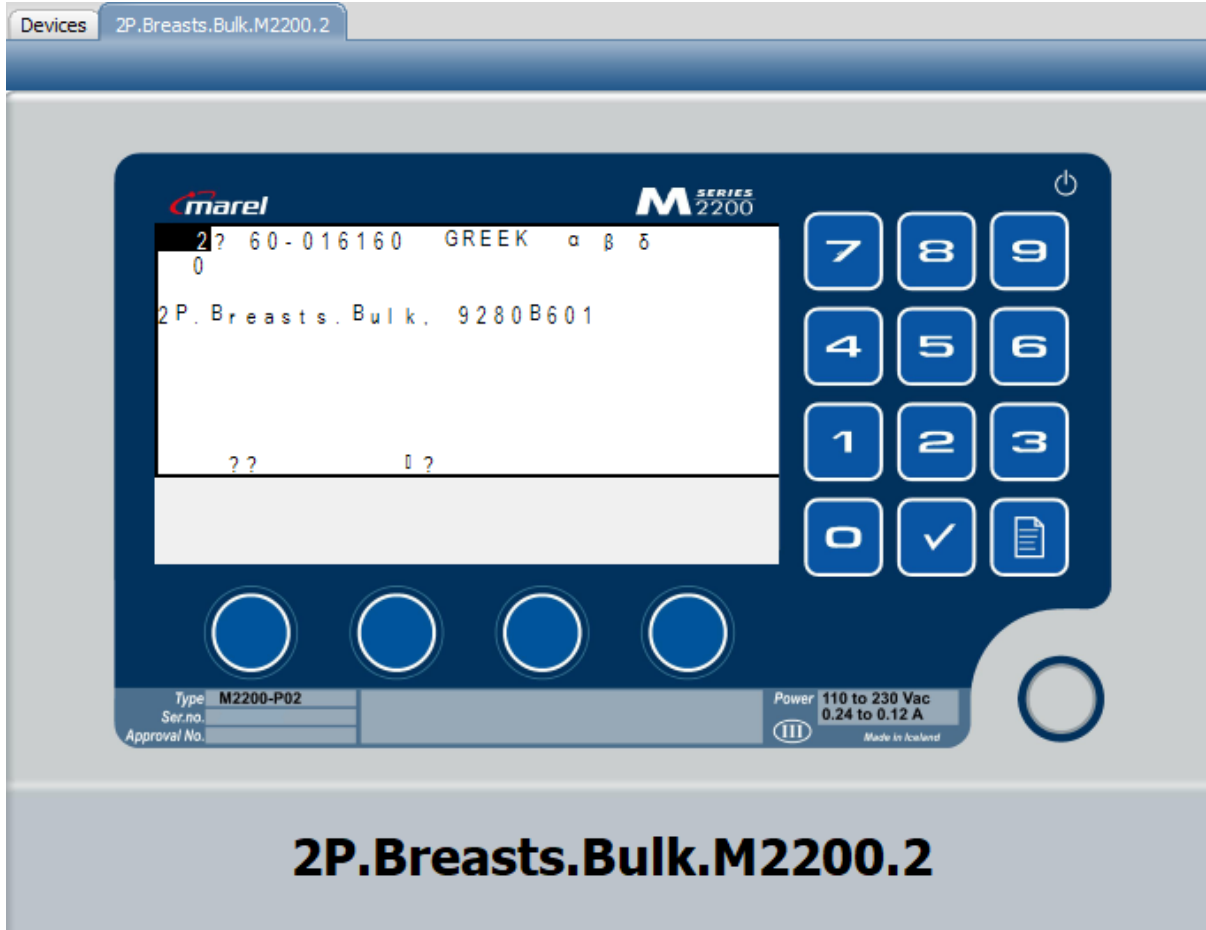
#### **Client setup improved**

Client Setup has been updated to store a list of downloaded files so files that are up-to-date can be filtered out. Also the ClientSetup UI had a makeover. The InstallFileInfo was updated to include more datetime settings for the file. This meant changes to the InstallService interface.

#### **Device viewer and mp5router support for Greek, Russian character sets**

The Device viewer from the Devices form and Mp5 virtual router can display any character sets that are supported with code page encoding in Windows®. Greek uses 1253 and Russian 1251, for example. To set the code page use the **Codepage** column in the Devices form. That will set the correct encoding and display supported characters. Below are images of using codepage 1253 and displaying Greek characters.

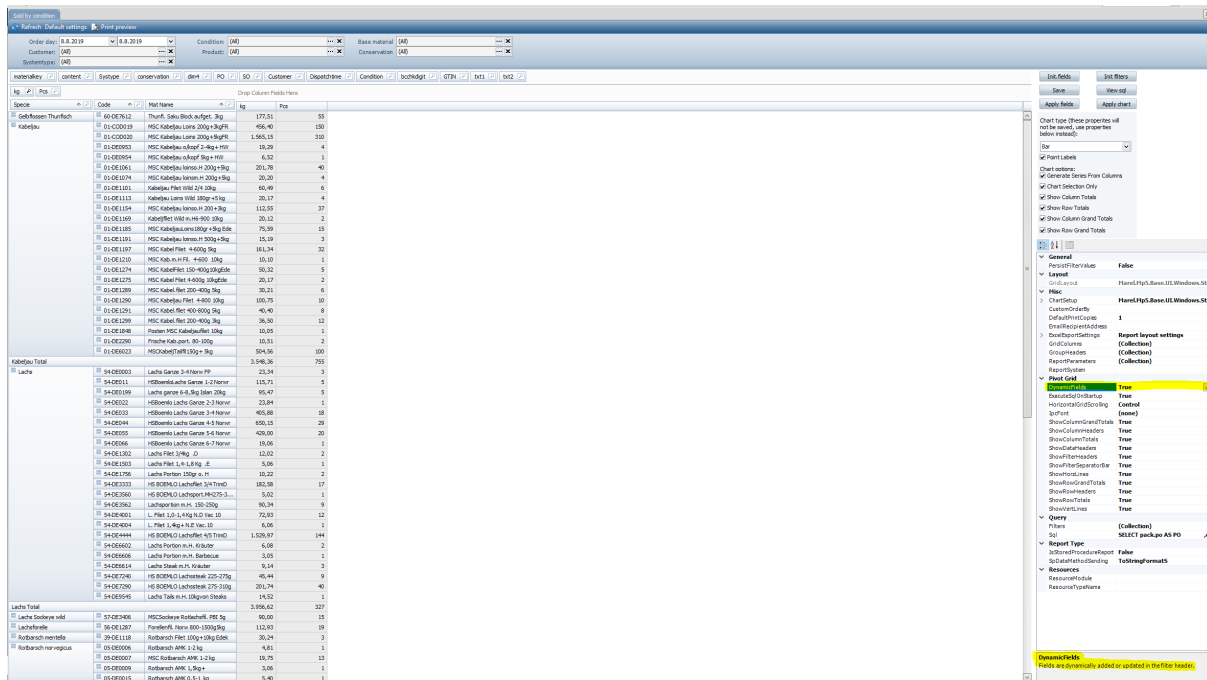
# Innova 5.9.1 Release Notes



# Innova 5.9.1 Release Notes

## Pivot grid support improved

A new Pivot grid configuration property, **DynamicFields**, has been added to versions 5.8.2 and greater. If enabled, new or updated fields in the query will be dynamically added to the filter header.



## ImageCache is now configurable

The ImageCache component can use a lot of memory in some circumstances. This change makes the ImageCache configurable under Data management > XML data store. This can be used to limit the amount of memory the ImageCache component uses.

## Support for third-party RFID readers added

RFID reader device support for the third-party Turck® RFID readers has been added. For information about how to install and configure this, see the latest version of the *Innova RFID Solutions Reference Manual*.

## SqlLookupColumn view extension added

A new view extension has been added, `Marel.Mp5.Base.UI.UserForms.Windows.StandardGrid.Extensions.SqlLookupColumn`. It adds a new column to a form and fetches a value from the database. Key columns in the form need to be provided in the configuration for the lookup. The values of these columns are cached with the query results so if other records contain the same values, the number of database calls is minimized. The

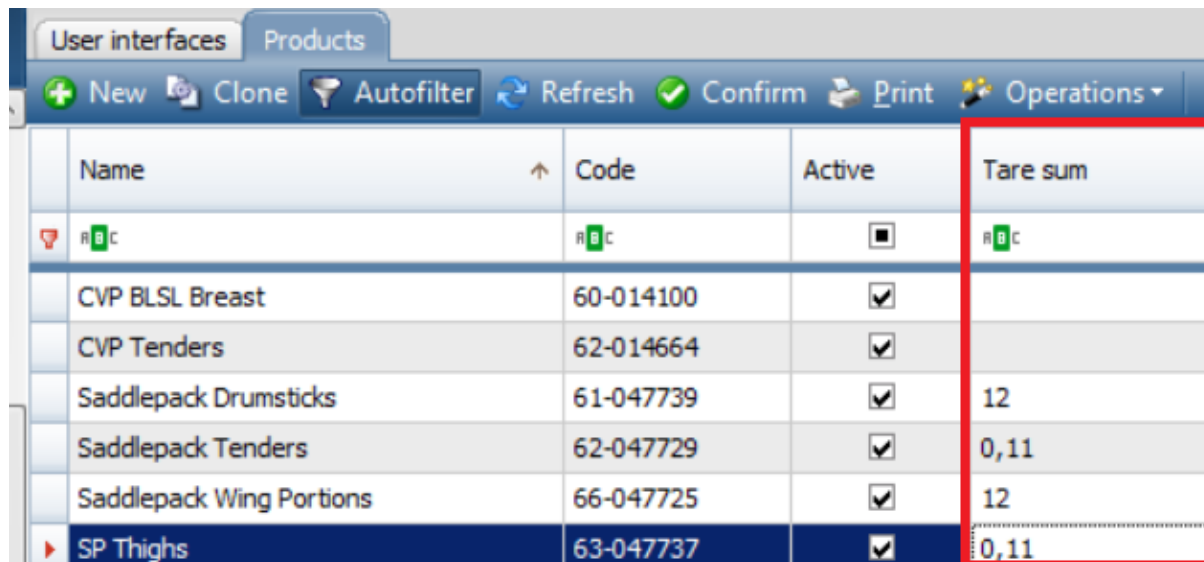
configured query needs to contain '{0}', '{1}',... for each key column values so they can be added to the query. When using multiple key columns each column name should be separated with a ',' for example:

```
<KeyColumns>column1,column2,..</KeyColumns>.
```

It's possible to set the NullableValue property to have a specific value to be set if a column value returns a null, but the SQL query then needs to handle the nullable value. If the NullableValue is not set, then the SQL query is not executed for the row. An example of the XML required to configure the view extension is shown below; this can be used in the ProductMaintenance form to display the total sum of the selected item packaging:

```
<DataRoot>
  <Marel.Mp5.Base.UI.ControllerFunctionFactorySettings>
    <Marel.Mp5.Base.UI.User-
Form-
s.Win-
dows.StandardGrid.Extensions.SqlLookupColumnConfiguration>
      <Caption>Tare sum</Caption>
      <KeyColumns>itpackaging</KeyColumns>
      <NullableValue>-1</NullableValue>
      <SqlQuery>
SELECT round(sum(it.pkweight),4)
FROM proc_materials it
LEFT JOIN proc_packaging1 pkl ON pkl.packaging = it.material
WHERE pkl.parent = {0}
</SqlQuery>
      </Marel.Mp5.Base.UI.User-
Form-
s.Win-
dows.StandardGrid.Extensions.SqlLookupColumnConfiguration>
    </Marel.Mp5.Base.UI.ControllerFunctionFactorySettings>
</DataRoot>
```

The result is shown below:



The screenshot shows the 'Products' tab in the software interface. A table lists various products with columns for Name, Code, Active, and Tare sum. The 'Tare sum' column is highlighted with a red border. The table data is as follows:

Name	Code	Active	Tare sum
REC	REC	<input type="checkbox"/>	REC
CVP BLSL Breast	60-014100	<input checked="" type="checkbox"/>	
CVP Tenders	62-014664	<input checked="" type="checkbox"/>	
Saddlepack Drumsticks	61-047739	<input checked="" type="checkbox"/>	12
Saddlepack Tenders	62-047729	<input checked="" type="checkbox"/>	0,11
Saddlepack Wing Portions	66-047725	<input checked="" type="checkbox"/>	12
SP Thighs	63-047737	<input checked="" type="checkbox"/>	0,11

## Report designer enhanced

Two bugs were solved in the import and export of a custom created report.

If an export of a report was done with a custom made criteria and it was imported somewhere else where that criteria was already present, it could fail with an exception when the parameter names were not exactly the same (upper/lower case). This issue was solved by doing a case insensitive check instead in the code.

Custom-made criteria added to a sub report and removed afterwards still had a parameter/field mapping in the export of that report, but the criteria definition was not present in the export. After import somewhere else you could not open the report anymore because the custom criteria was not found. This was solved by removing the mapping upon export and import if there is no criteria for it.

## Filleting device

### **MS2730 Quick Config warning added**

In the Quick Config for the MS2730 filleting machine the "Belly trim" and "Back trim" options are unchecked by default. If one is checked, a dialog shows a warning that this should only be checked if the MS2730 supports Belly/Back trim **AND** the software version of MS2730 is 114 or newer.

## FleXicut improvements

A new configuration switch, **FlexicutProgramEditorConfiguration**, was added to monitor actions performed in the Flexicut program editor.

Also, a configuration switch, **SkipUpgrade**, was added to prevent settings from being overridden in cases where programs are set both from the office and by the operator on the floor.

Another new configuration switch, **LogActions**, was added to the FlexicutProgramEditorConfiguration and can be used to monitor all actions performed in the Flexicut program editor.

Logging has been improved generally for FleXicut program editor upgrading.

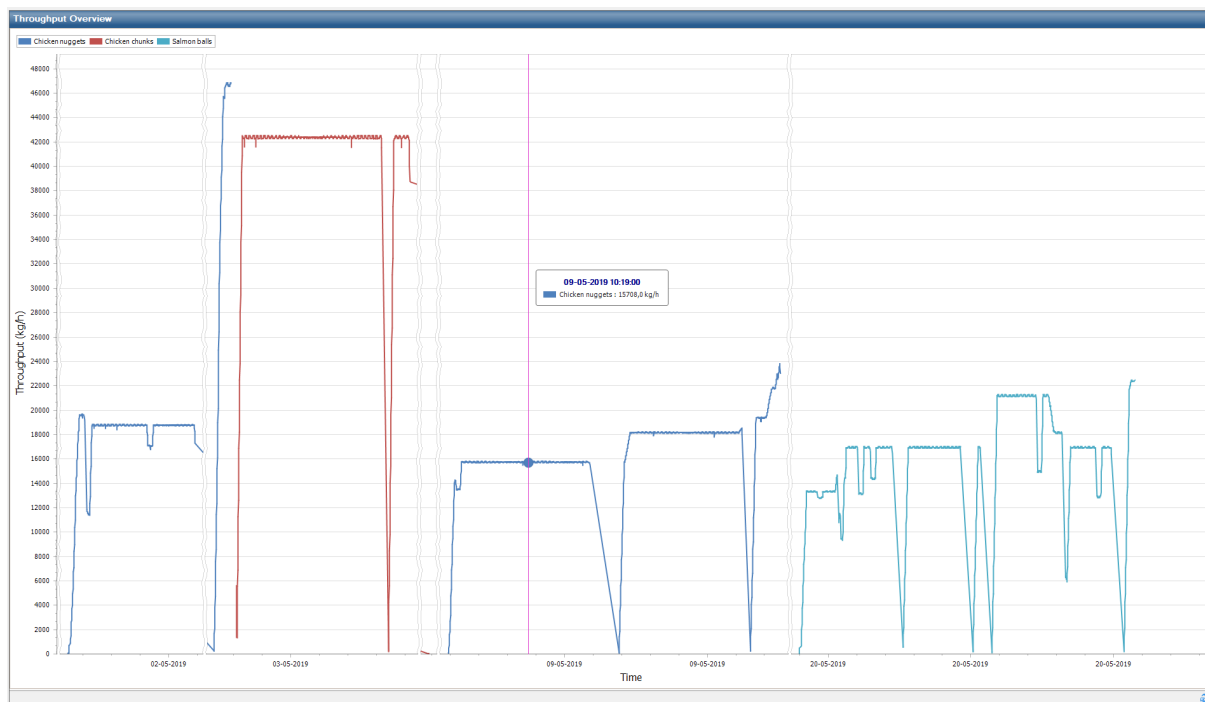
Finally, a new configuration flag was introduced to allow the FleXicut program editor to be displayed on the Logiflex PreTrim Controller. You need to create a new node for each FleXicut machine that should be visible on the station and set the **LogiflexPretrim** configuration property to True. More details can be found in the *Innova for FleXicut Installation and Configuration Manual*.



## Further Processing

### New throughput overview dashboard component

The Throughput overview chart component shows throughput for all RevoPortioners on the line in a line chart.

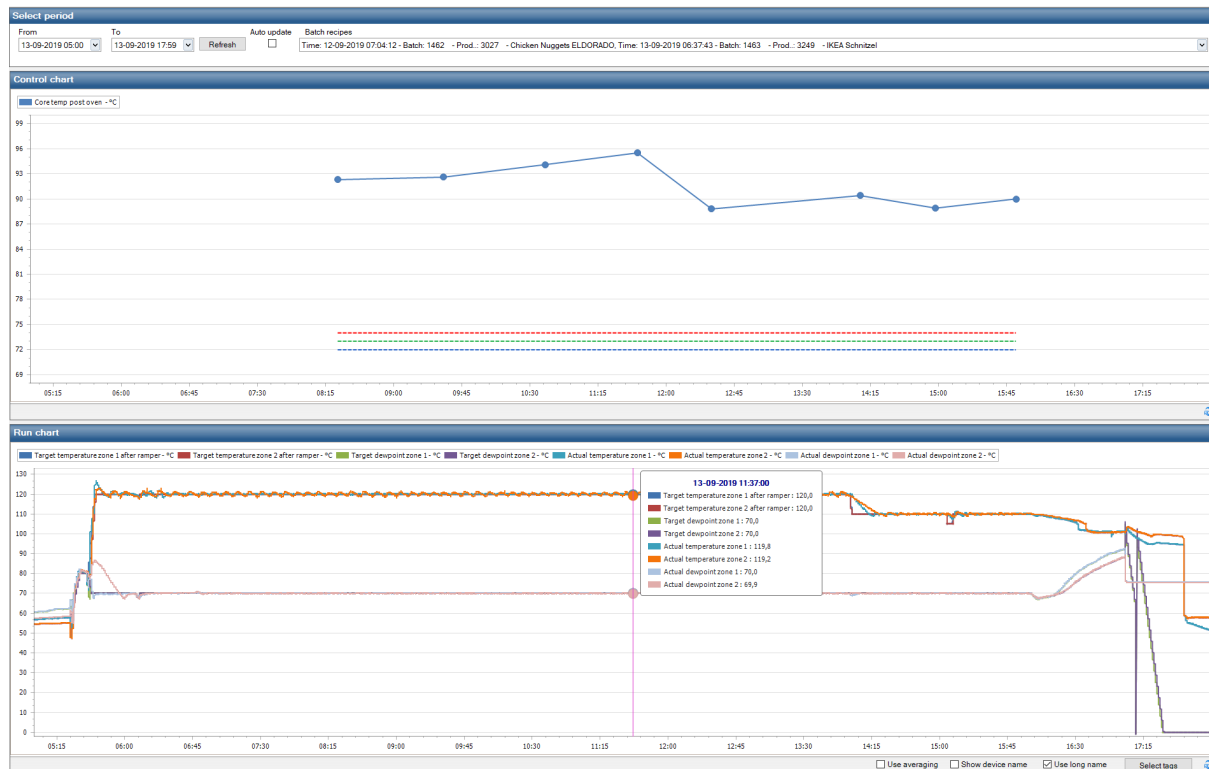


The throughput is shown for a period and for a set of batches within that period (set by the Select period component on the same dashboard page). Throughput calculation is based on the order progress (as configured for the RevoPortioner's order progress method and interval).

The chart can be configured to calculate the throughput as weight/hour or pieces/hour.

### Control chart component added

A new dashboard component, Control chart, has been added. The Control chart component shows QC data for one or more QC inspection items for a QC procedure in a line chart. The chart will also show any QC sub-items' individual measurements in a "scatter" way.



The Control chart can be used together with the Run chart dashboard component and the Select time dashboard component to create a Process Analyzer.

For more information about configuration of these components, see the *Innova for Further Processing 700 Convenience Line User Manual*.

## Improvements made to FP

Various improvements were made to Innova for Further Processing as it moves toward release, including:

- The unit of measurement for the RevoPortioner was clarified in the user interface. Previously, it showed as strokes/m which could be interpreted as strokes per meter. However, the actual measurement should be strokes per minute. This has been changed in the user interface.
- There was a problem with the Bluetooth probe used to provide quality control measurements for FP and SPC. Because of the error, the log was quite full. So now, the exception will be logged the first time it occurs, and then once every hour. The state will be reset after restart of the Mp5Router and when a successful connection has been made.

- Operators were often forgetting to close a batch before trying to start a new batch. The operator would get an error but the error did not fully describe to the operator how to solve the problem. So the error message has been improved to tell the operator that the new batch cannot be started and to check if another batch is not closed.
- Programs are no longer sent automatically to FP devices. The operator can send programs to the machine manually. To control this, a configuration switch, `ConfigureProgramOnPrdayChange`, was added to the station configuration. By default this is `False` and programs are not sent on production day change.
- A change was made so only data changes are saved to `proc_datalogvalue` to save on disk size.
- The messages in the dashboards have been improved so that if something is incorrect with the configuration it is more obvious what the problem is.
- Some minor improvements were made to the Lot Yield and Lot Temperature reports, including labels, fit to one page, and more.
- Two minor improvements were made to the Run chart dashboard component. Use averaging is off by default now so that the data shown is as accurate as possible, and Show device name is on by default now so it is easier to identify the devices in the component.
- The Alarm monitor dashboard component now only shows alarms related to device alarms. Event number from the device is also shown.
- In FP there are 'events' and 'alarms.' An 'event' is something that happens which is NOT an alarm, for example a belt speed or set point was changed, program steps were acknowledged, and so on. Those events have event numbers which are defined in the device. Now these event numbers are also shown in the Events overview form.

## **SPC improvements made**

The number of charts that can be used has been limited to the following:

- Mean-range-chart
- Mean-sigma-chart
- Individual range chart
- EWMA-chart

Some bugs related to selection of charts and filtering of data were fixed.

In the SPC Viewer, it is now possible to see live data for the QC measurement. The selection of live data is based on the current line profile instead of a recipe. Also, the name of the operator who performed a measurement has been added to the details. And control limits

# Innova 5.9.1 Release Notes



are automatically updated in the SPC Viewer so that when process changes are made that affect the measurements, the limits are updated to reflect this.

## Grading

### **Support added for M2400 compact grader**

Changes have been made in Innova for the M2400 compact grader (Marel.Mp5.Grading.Services.Devices.M2400Grader).

The deboning program is now sent to the correct registers.

Also a new property was added to the M2400Grader configuration, **PrunitScreen**. If set to true it will display the manage process unit screen on the terminal screen.

The BestFit algorithm has been added to Innova to support the compact grader.

### **New configuration switch added to PqCheck**

A new configuration switch, **UseTareFromPack**, has been added to PqCheck.exe. If set to true, then the tare from pack is used instead of pack content specification when sending tare to scale.

### **Assymetric CL fields added to IPC and web**

On the IPC Product Settings form the CL Deviation field has been replaced with Upper and Lower CL Dev. fields.

# Innova 5.9.1 Release Notes

IPC

Product Settings

Operations

Product Settings

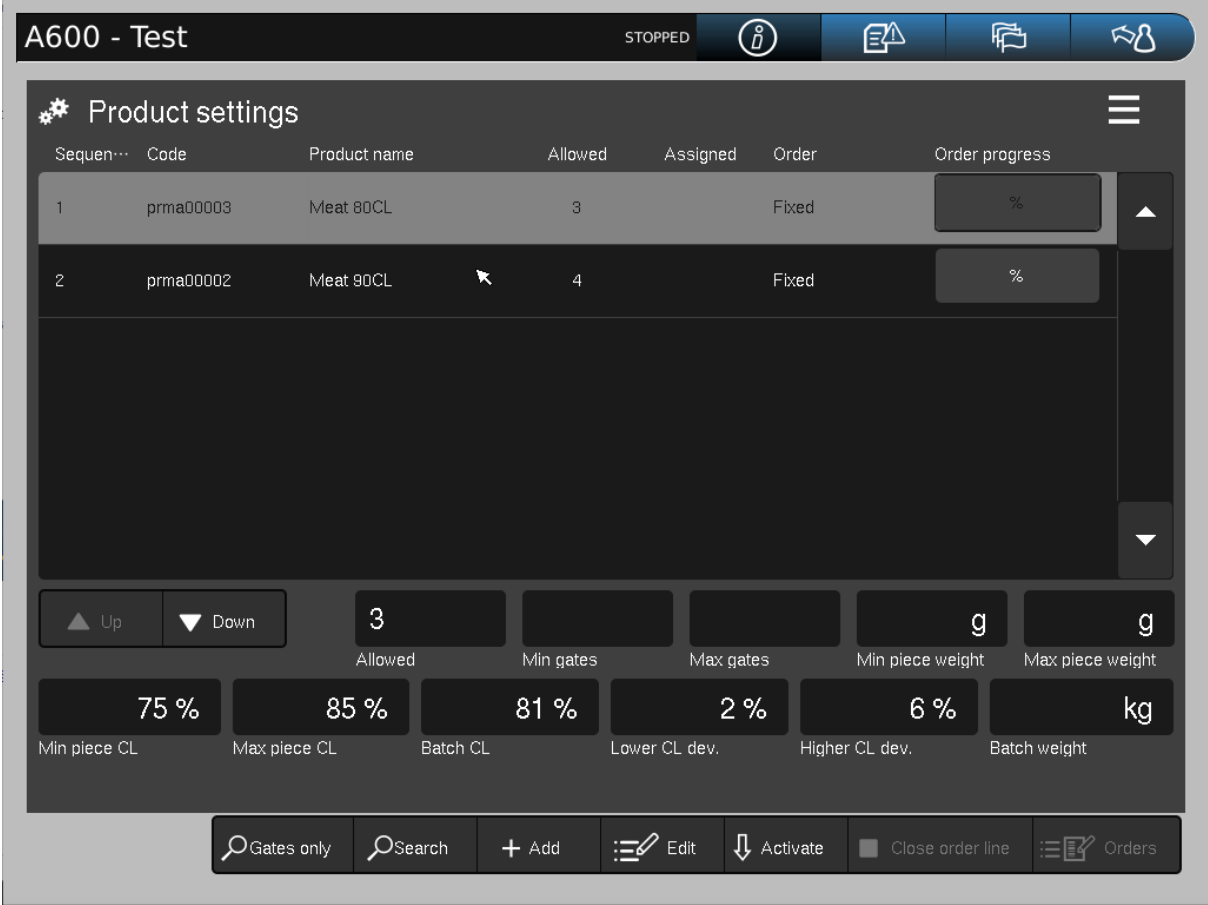
Code	Product name	Allowed gates	Assigned gates	Order	Order progress
prma00003	Meat 80CL	3		Fixed	
prma00002	Meat 90CL	4		Fixed	

Allowed gates:  Min gates:  Max gates:

Min piece CL:  Max piece CL:  Batch CL:  Lower CL dev.:  Upper CL dev.:  Batch weight:  Min age:  Max age:

Refresh Update products Close order line Orders Finish production

The Upper and Lower CL deviation fields have also been added to the Web version of the product settings form.



Related to this, the CLBatchStatus plug-in has been updated for Assymetric CL Deviation.

### CL deviation fields added for TMS Simulator and the Simulation report

The CL deviation fields for upper and lower CL deviation have also been added for the TMS simulator and the Simulation report.

## IMPAQT

The changes included here are specific to IMPAQT (OEE for Poultry Lines). For other general changes to OEE, see [OEE](#).

### **Incorrect state shown when line not running**

Previously the production data for poultry was stored in the database when it received shackle data. If it doesn't receive shackle data, for example on Sundays when there is no production, no production data records were created. Based on the end time of these records, the OEE profile was generated. So in this example, on Sunday no profile was generated until we received the first shackles again on Monday. Sometimes even the wrong availability state was registered to the wrong day.

This has changed and now if Innova does not receive any shackle data for at least 15 minutes, it still starts creating production data records up until 15 minutes before the current time. So now on Sundays you also get an OEE profile just like on other days, only with a 15 minute delay.

### **Production day transition improved**

The way production data was stored has been refactored. It is now more clear how the production day change is stored with the production data and the rules have changed a bit.

Context changes from the process units are received at the beginning of the line. So for each shackle that enters the line Innova knows the context at that time (context BOL). Then, as the shackle comes out of the line, Innova also knows the context at that time, which is the current process unit context (context EOL). If empty production data is registered at a registration time, the context EOL is also the current context of the process unit. The context BOL is then calculated by checking the context of the process unit x minutes in the past, where x is the line length in minutes at capacity speed. One of those contexts should be used depending on different scenarios.

Scenarios:

- If no shackle is found within a production data time range, the context at BOL is used by default.
- If a shackle is found in a production data time range, and the production day of the context EOL is the same as the production day of the context BOL for that shackle, then the context BOL is used for that production data time range
- If a shackle is found in a production data time range, and the production day of the context EOL is **NOT** the same as the production day of the context BOL for that



shackle, then:

- If there are filled or cleared shackles in production data time range, use the context BOL on the production data time range
- If there are not filled shackles, then use the context EOL on the production data time range

What we achieve by this is that products are registered on the production day they enter the line and line restraint is registered on the production day it comes out of the line.

## **Fixes to the Poultry primary dashboard**

A couple of things have been fixed in the OEE Poultry primary dashboard, including:

- The primary dashboard plug-in configuration has been changed so that the PAM device is removed and the PDA device list is created. The primary dashboard has been changed so you can use a PDA for the weights. The general info data collector was also modified so it does not listen to PAM messages. Instead it queries the PDSNT database for the selected PDA device.
- A lost connection to the plug-in or device was not visible in the OEE Poultry primary dashboard. Now a notification is shown if the plug-in or device is not connected or configured in the dashboard.

## **Poultry primary line fail safes improved**

In the primary line fail safes were added to prevent a toggle of the output signal when the line is not running according to TAP and there are still products coming out of the line. This is a situation that should not occur, but we see it happen on TAP (due to e.g. sensor failures). The result of these toggles is that the OEE manager cannot keep up with all the changes and will become unresponsive.

To fix this, the fail safe added in the method FindOutputChangeIn, the line plug-in signal processor for the primary process, has been implemented in the OeeLineDistributionSignalProcessor.

## **Various IMPAQT improvements**

- For OEE for Poultry lines, the data analyzer form was added to the Quick Config. The data analyzer form is set to the developer access level. This was added to the last step of the Quick Config so that it is installed with the OEE plug-ins.
- Changed the width of the title placeholder on the rehang dashboards. It was only set to 25% of the available space. Now it is set to 95% which will enable support for longer dashboard titles.

# Innova 5.9.1 Release Notes



- The OEE for Poultry lines simulator has been improved to show a realistic day simulation with events.

## Integration Services

### Integration services improvements added

Improvements to isman2.exe trace have been made, including updating the import handler's trace switch name + sub-trace for non-xlst transform handlers for tracing xml input + populate raw data in import log on session begin and end + create and use read-only xml editor for raw data column in ImportLog.

Improved tracing for xslt handling has been added.

Support was added for material translations for both transfer engine and transfer hub. See the *Innova Integration Services Installation and Configuration Manual* for more information.

## IRIS

### **Improvements made to data collection categories**

An improvement was made in the IRIS module, adding the option to configure data collection categories for the front and backside separately.

Data collection categories count products with certain defects on certain anatomic parts on both sides of the product by default. But if one of the camera systems was not working correctly, and for example the back side was not inspected, then it did not count that product in that category at all even if the front side matched the category description. This is logical because Innova does not know what defects the backside has, and if known, it could be that there is no category match.

Now the user can configure if he only wants to use the front side inspection, backside inspection, or still use both sides in the inspection. Depending on the sides present in a category, the front and/or back side still have to have a valid inspection report but maybe not both. Below is a simple category example that collects all de-skinning defects on birds with no shape defects where both the front side and back side must have been graded.

# Innova 5.9.1 Release Notes

IRIS Stations | IRIS Station Pairs | Backups | Data Collection Categories

Create category | Delete category | Save category content | Add matrix

**Categories**

Name	Description
▶ Deskinning no shape defects	

**Content configuration**

**Matrix 1** Name: Matrix 1 Description: Description Side: Combined Relation type: [v]

	Non Shape defects										Shape defects				Whole defects								
	Litter spot	Deskinning	Gallbladder	Red bruise large	Blue bruise large	Red bruise small	Blue bruise small	Many feathers	Feathers	Scratch	Red tail	Broken tip	Broken with remaining bone	Broken without remaining bone	Missing	Remaining bone	Has tip	Size	Intensity	Red	Green	Blue	
Drums	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drum left	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drum right	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thighs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thigh left	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thigh right	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Breast	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Back	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Left wing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Right wing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Left wing parts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
▶ Right wing parts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Whole	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Matrix 2** Name: Matrix 2 Description: Description Side: Combined Relation type: Not [v]

	Non Shape defects										Shape defects				Whole defects								
	Litter spot	Deskinning	Gallbladder	Red bruise large	Blue bruise large	Red bruise small	Blue bruise small	Many feathers	Feathers	Scratch	Red tail	Broken tip	Broken with remaining bone	Broken without remaining bone	Missing	Remaining bone	Has tip	Size	Intensity	Red	Green	Blue	
Drums	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drum left	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drum right	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thighs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thigh left	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thigh right	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Breast	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Back	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Left wing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
▶ Right wing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Left wing parts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Right wing parts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Whole	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Content description**

Products that do have  
Deskinning on both sides on Drums, Drum left, Drum right,  
Thighs, Thigh left, Thigh right, Breast, Back, Left wing,  
Right wing or Left wing parts  
but these products may not have  
Broken tip on both sides on Left wing, Right wing, Left wing  
parts or Right wing parts  
or  
Broken with remaining bone on both sides on Left wing,  
Right wing, Left wing parts or Right wing parts  
or  
Broken without remaining bone on both sides on Left wing,  
Right wing, Left wing parts or Right wing parts  
or  
Missing on both sides on Left wing, Right wing, Left wing  
parts or Right wing parts  
or  
Remaining bone on both sides on Left wing, Right wing,  
Left wing parts or Right wing parts  
or  
Has tip on both sides on Left wing, Right wing, Left wing  
parts or Right wing parts

Below another category example is shown that collects all red bruises on wings that are not broken, only for the front side inspection. In this case the back side does not have a valid inspection report.

# Innova 5.9.1 Release Notes

IRIS Stations | IRIS Station Pairs | Backups | Data Collection Categories

**Categories**

Name	Description
▶ Red Bruises on wings	Red Bruises on wings not...

**Content configuration**

	Non Shape defects										Shape defects					Whole defects							
	Litter spot	Darkening	Gallbladder	Red bruise large	Blue bruise large	Red bruise small	Blue bruise small	Many feathers	Feathers	Scratch	Red tail	Broken tip	Broken without remaining bone	Broken with remaining bone	Missing	Remaining bone	Has tip	Size	Intensity	Red	Green	Blue	
Drums	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drum left	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drum right	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thighs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thigh left	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thigh right	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Breast	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Back	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Left wing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
▶ Right wing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Left wing parts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Right wing parts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Whole	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Matrix 2** Name: Matrix 2 Description: Relation type: Frontside Not

	Non Shape defects										Shape defects					Whole defects							
	Litter spot	Darkening	Gallbladder	Red bruise large	Blue bruise large	Red bruise small	Blue bruise small	Many feathers	Feathers	Scratch	Red tail	Broken tip	Broken without remaining bone	Broken with remaining bone	Missing	Remaining bone	Has tip	Size	Intensity	Red	Green	Blue	
Drums	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drum left	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drum right	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thighs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thigh left	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thigh right	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Breast	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Back	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Left wing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
▶ Right wing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Left wing parts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Right wing parts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Whole	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Content description**

Products that do have Red bruise large on the front side on Left wing or Right wing or Red bruise small on the front side on Left wing or Right wing but these products may not have Broken tip on the front side on Left wing or Right wing or Broken with remaining bone on the front side on Left wing or Right wing or Broken without remaining bone on the front side on Left wing or Right wing

## Labeling

### **ImageEngineCache optimized**

Usage of the ImageEngineCache class has been optimized. Now all label printer drivers that use the labelPrinterDirect class share an instance of the ImageEngineCache.

PreviewControl now needs to be disposed as it uses ImageEngineCache which needs to be disposed after use. All users of PreviewControl have been updated to dispose of it after use, except for a web component which doesn't have the possibility to dispose. Controls which use PreviewControl and also had their own instance of ImageEngineCache now use ImageEngineCache created in the PreviewControl. The ImageEngineService class no longer uses the ImageEngineCache but maintains its own references to the image engines.

### **WplTrueTypeRenderEngine removed**

The WplTrueTypeRenderEngine has been removed as the DelfordRenderEngine contains the same functionality that this engine is solving.

### **Added ability to empty Zebra printer buffer**

The empty buffer command ("~JA") was added to the beginning of the prefix string. Also, a check box was added to enable sending an empty buffer command.

### **Images no longer cached**

Label designer no longer caches images. This solves problems where Innova could crash when the system had a large number images.

## Meat performance line introduced

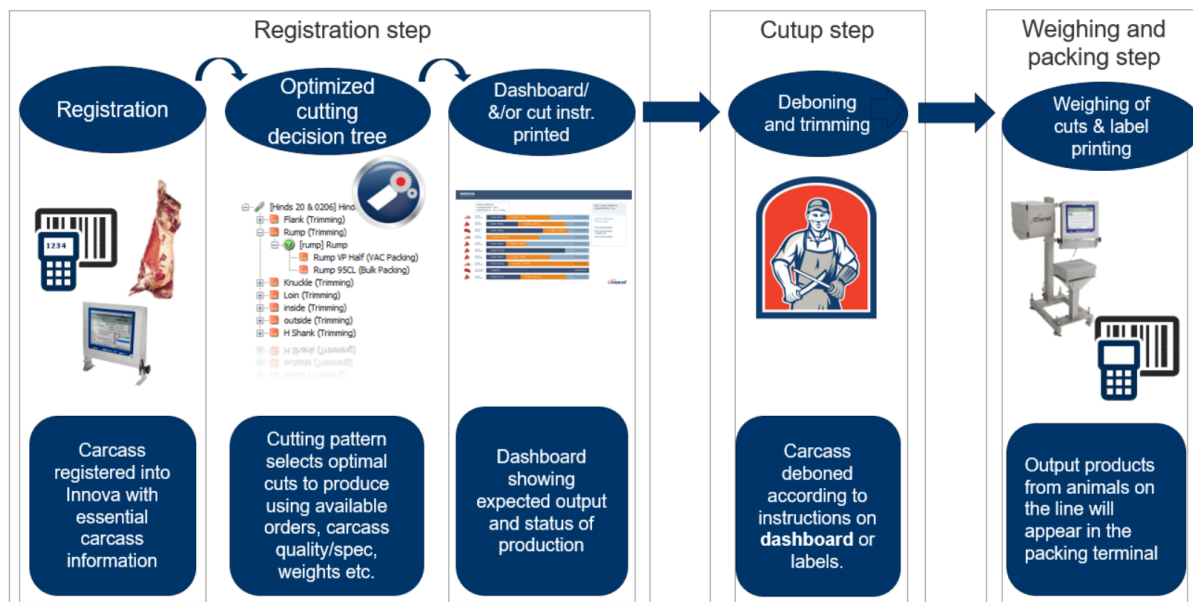
Innova Meat Performance Line is a software package for the deboning process.

Innova Meat Performance Line Provides key information and instructions for the deboning process including:

- Yield and traceability for every single batch
- Ability to measure input based on variability of carcasses
- Dashboard showing status of production and expected output in real time
- A simulator/prognosis tool

### Innova Meat Performance Line Process

The process for Innova Meat Performance Line is shown below.



### Innova Deboning Simulator/Prognosis tool

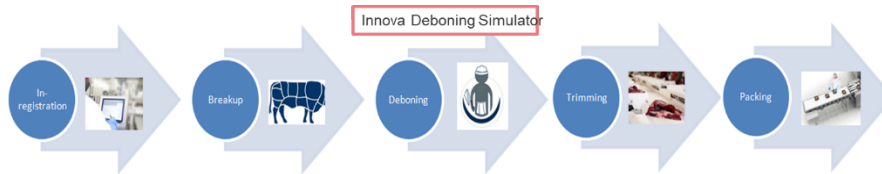
The Deboning simulator/prognosis tool is a valuable part of the solution. It:

- Allows setup and testing of different production plans.
- Predicts production volumes, value, and order fulfillments from current carcass stock based on standard yields.
- Calculates standard yield based on variability of input.



# Innova 5.9.1 Release Notes

- Enables comparison of actual packing output weights to the predicted values post production.
- Gives valuable information about the performance of the process.



## Meat Streamline

### Improvements to performance of InputStationCE

To improve issues with degraded performance on the InputStation, a new loading panel for M6000 was added to be used for heavy operations. The Deboning InputStationCE displays a loading panel when recording since it can take a long time to fetch the Cutting Patterns.

The reason the InputStationCE can be very slow is that the view starts checking the cache for the CuttingPattern assigned to the DeboningLot. If the cache misses it starts retrieving the cutting pattern. When this CuttingPattern is very large it can take a long time. After loading the Cutting Pattern into the cache subsequent clicks do not take long.

The handling of the PrunitLotButton click is now on a separate query thread which runs in the background. This frees up the UI so it doesn't freeze during the whole loading time.

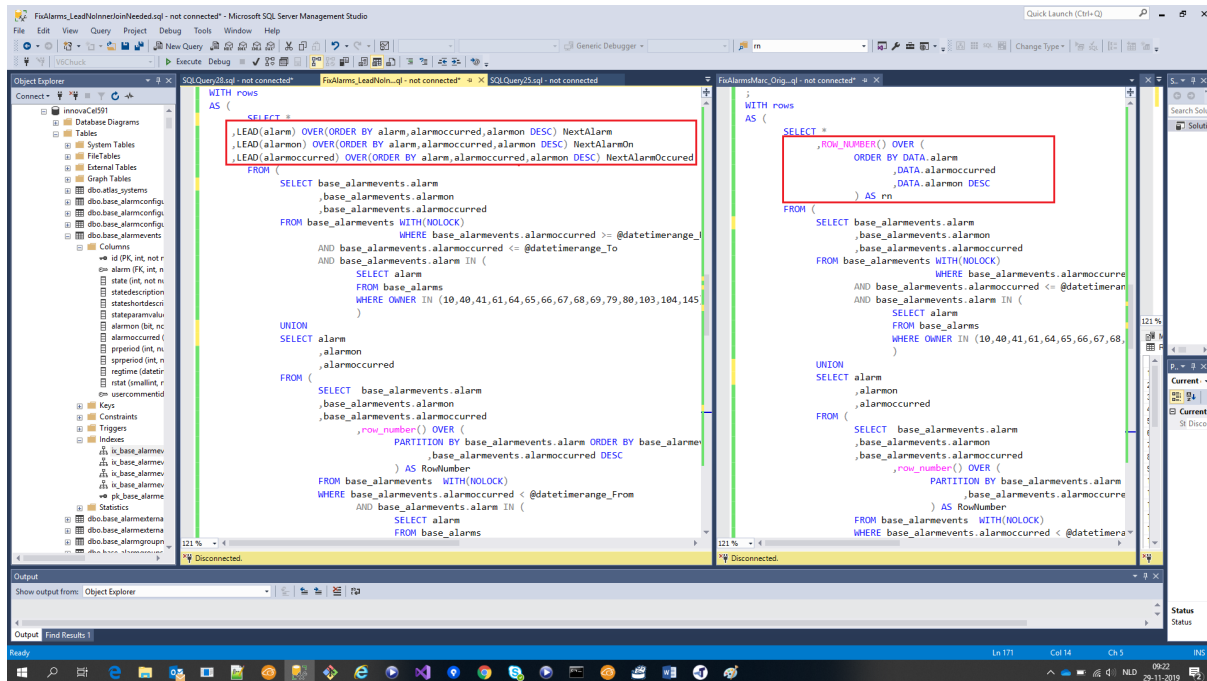
## Monitoring

### Query performance optimization introduced with the LEAD statement

There are analytic functions, e.g. LEAD and LAG, available from SQL Server 2012. With this function it is possible to easily add aggregates to a select. LEAD adds the value from the next row, LAG adds the value from the previous row as a column in a select. Order is important in the LEAD or LAG statement.

Queries that contained a row\_number and a self-join from the source table were changed. The performance of the Innova alarm reports (e.g. Top 10 report) have improved dramatically because of this.

An example of what was changed is shown in the image below.



### Device alarm report created

The Device alarm report was created for a line manager to have insight into which alarms from which device occurred most in a certain time so he can relate this to stoppage or other less productive periods. It can also be used as an indicator of where improvements are possible or needed, or for maintenance purposes.

# Innova 5.9.1 Release Notes

The report is located in the assembly Marel.Mp5.Monitoring.Reports and the form is called Marel.Mp5.Monitoring.Reports.AlarmEvents.DeviceAlarm.

The report shows the top 20 device alarms of all devices on the first page and the top 20 per device on the following page.

## **Device alarm duration report created**

A new report to show device alarms by duration has been added. The report is located in the assembly Marel.Mp5.Monitoring.Reports and the form is Marel.Mp5.Monitoring.Reports.AlarmEvents.DeviceAlarmDuration. It shows the time that the alarm occurred on the x-axis and the duration of the alarm on the y-axis. It uses only the alarm data from the devices, not Innova.

## **Alarm reports added to UI package**

The two standard alarm reports, Event occurrences and Top 10 owner events, have been added to the user interface package for the Checkweighing, MultiHead Weigher, and Portioning modules.

## OEE

### UI and installation improvements made

A couple of minor changes were made to improve the installation of OEE and to the user interface. These include the following:

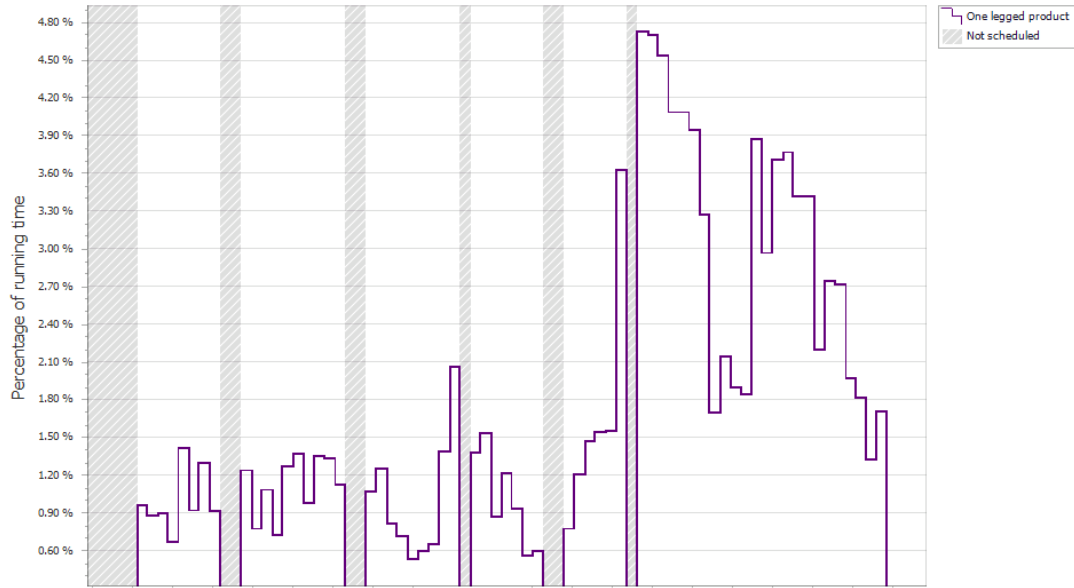
- An update to the user interface package for OEE for SensorX, Checkweighing, and Portioning to include the newest OEE reports.
- SensorX and Pluto I-Cuts run Pluto 2 and thus support the OEE web page. The SensorX Quick Config, Portioning Quick Config, and OEE Quick Config have been updated to setup the web screen.
- In some cases the x-axis labels were not displayed correctly in the OEE loss trend chart reports. This is now solved by taking into account all series points in the calculation of the y-axis display range. By doing so it prevents the x-axis range from becoming automatically smaller when the label algorithm used the whole selection range to determine how often to put in an axis label.

## TRDE loss / one leggers

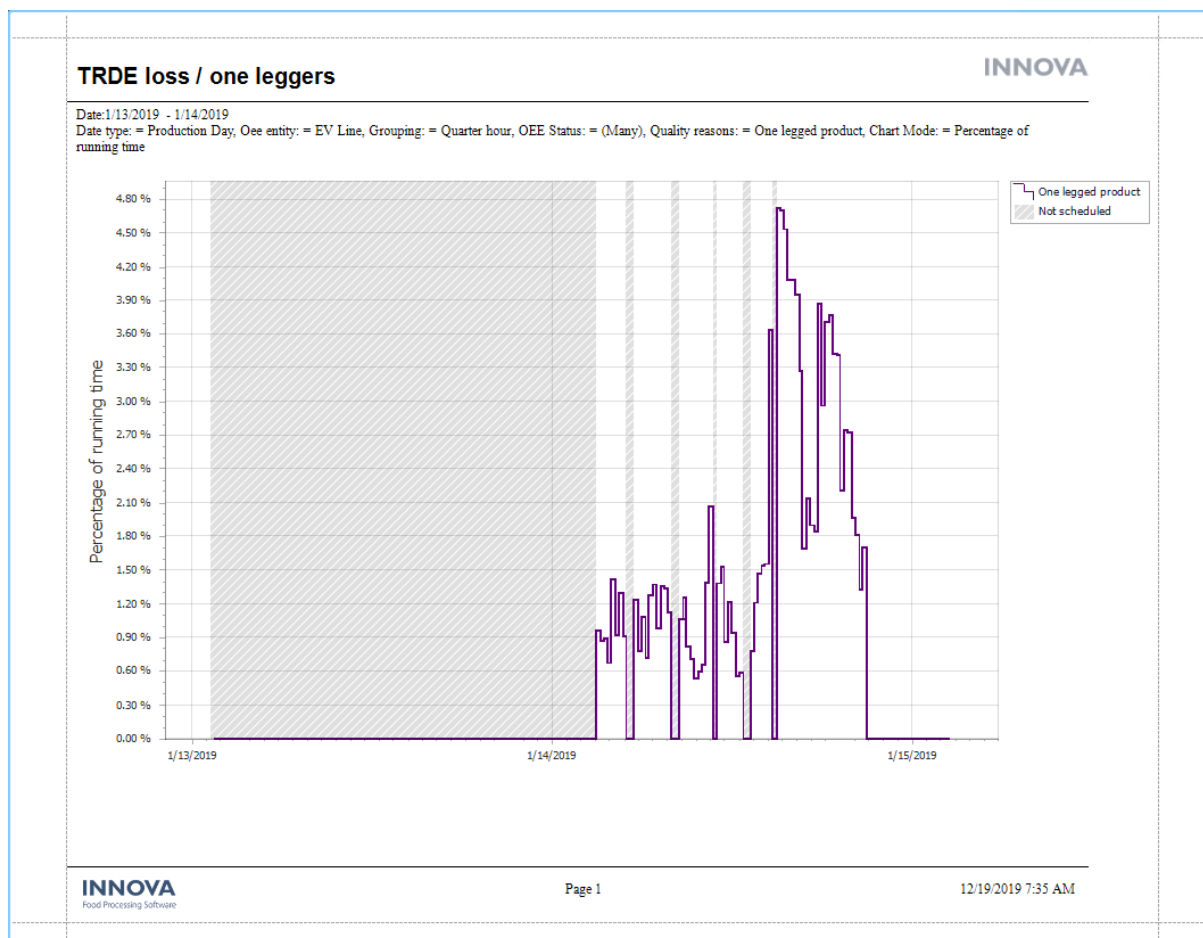
INNOVA

Date: 1/13/2019 - 1/14/2019

Date type: = Production Day, Oee entity: = EV Line, Grouping: = Quarter hour, OEE Status: = (Many), Quality reasons: = One legged product, Chart Mode: = Percentage of running time



Above you see the report before it is fixed, below the report after it is fixed.



## Use alarm name as stop reason

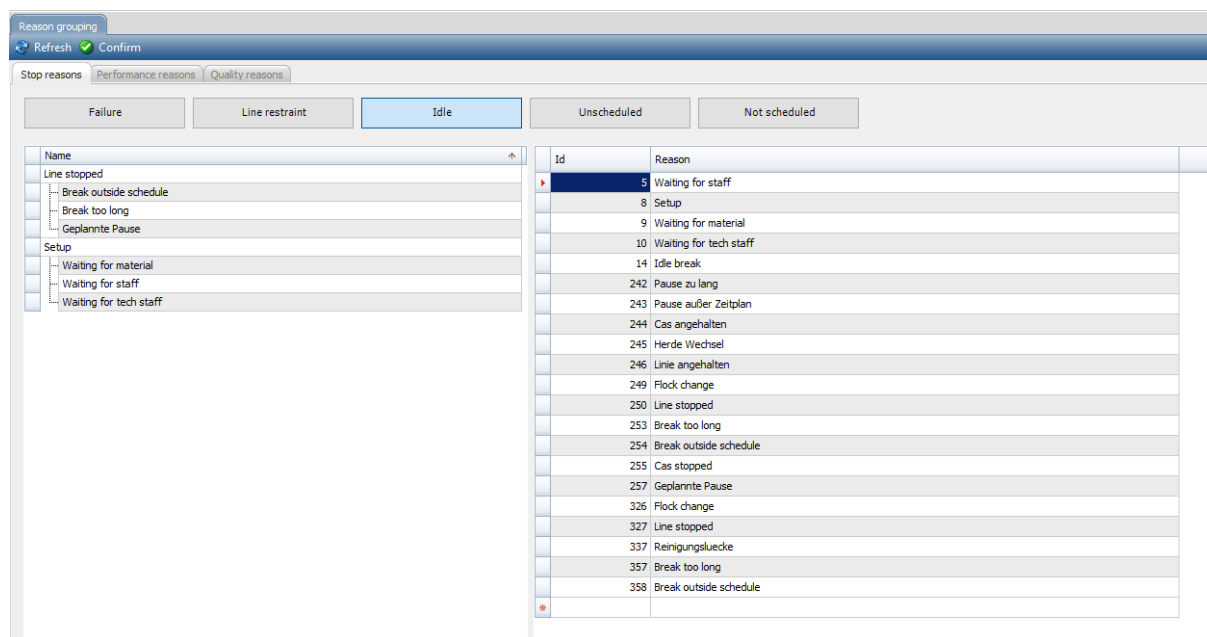
When importing alarms from a Pluto device, the alarm definition has a field StopReasonSystemName. If that field is defined, an OEE Alarm Stopreason is created automatically using that name. When a fatal alarm is active and the device is idle, then an OEE event with state Failure is created using the defined alarm stop reason. If an older Pluto machines doesn't support the StopReasonSystemName in the alarm definition, then Innova will automatically create an alarm stop reason using the name of the alarm to ensure all Failure events (caused by an alarm) will have a stop reason.

## Grouping of reasons created

Stop and loss reasons have always been a flat list of items. But this list can grow very big in some cases, making it hard for a user to select the correct stop or loss reason in OEE when needed. In order to overcome this it is now possible to group reasons, building a hierarchy

of reasons so the user can more easily drill down to the correct reason in, for example, the OEE operator screen. A setup screen has been created to provide the possibility to create this reason hierarchy. It is part of the OEE UI package.

By dragging and dropping reasons from the right to the left a hierarchy can be created.



Note that it is not possible for a reason to have more than one "parent".

The UI on the IPC for OEE has also been adapted. The selection of a stop or loss reason is now based on a tree of reasons.

To select the correct reason the operator doesn't have to choose from a long flat list but from a drilldown list. This makes it easier and faster to find the right stop/loss reason.

In the image below you see the reason **Waiting** has a 'navigate down' symbol on the button.



# Innova 5.9.1 Release Notes

The screenshot displays the 'OEE LBH' (Overall Equipment Effectiveness - Line Break History) interface. At the top, the title bar shows 'OEE LBH' on the left and 'Operations' on the right. Below the title bar, the breadcrumb 'OEE LBH - PU\_GP' is visible.

The main interface is divided into several sections:

- Select status:** A grid of buttons with colored indicators for different machine states: 'Not planned / Unscheduled' (orange), 'Line restraint' (yellow), 'Idle' (light blue), and 'Failure' (dark red).
- Stop reason:** A grid of buttons for reasons why the machine stopped: 'Scheduled break', 'Break too long', 'Break outside schedule', 'Line stopped', 'Start up', 'Flock change', and 'Waiting' (with a blue double-down arrow icon).
- Comment:** A text input field for user notes.
- Alarm:** A section for alarm-related information.
- Current event:** A section showing the most recent event: '19-8 15:07 Failure'.
- Recent events ( 1 / 3 ):** A scrollable list of recent events: '19-8 10:05 Running', '19-8 10:00 Idle' (highlighted in blue with the sub-text 'Waiting for material'), and '19-8 08:00 Running'.

At the bottom right, there are 'Update' and 'Cancel' buttons.





Selecting **Waiting** brings you one level down and it shows the reason(s) belonging to Waiting.

# Innova 5.9.1 Release Notes


OEE LBH Operations

OEE LBH - PU\_GP

### Select status

 Not planned / Unscheduled	 Line restraint
 Idle	 Failure


### Stop reason

Waiting	Back 
<b>Waiting for material</b>	Waiting for staff
Waiting for tech staff	


### Comment


### Alarm


### Current event


 19-8 15:07 Failure


### Recent events ( 1 / 3 )



 19-8 10:05 Running

 **19-8 10:00 Idle**  
Waiting for material

 19-8 08:00 Running



## Packing

### **Support for ESPERA® weigh price labelers added**

Support is now included in Innova for ESPERA weigh price labelers. Innova Packing must be installed. Complete instructions on installation and configuration in Innova can be found in the *Innova Packing Station Installation and Configuration Manual*.

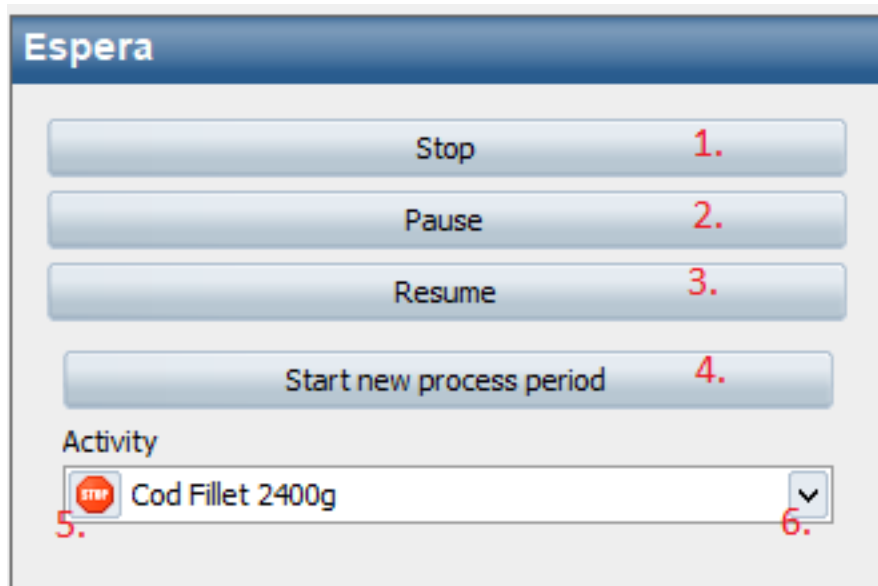
Supported machines are:

- ESPERA Moses 2
- ES2000
- ES3000
- ES5000
- ES6000
- ES7000
- ES8000
- ES9000
- ESPERA Nova
- ES-R
- ES-M

Innova uses the ESPERA ESPROM NG interface to communicate with the equipment. The ESPROM NG interface connects to each machine in the same way. The ESPROM NG interface needs to be in place at the customer who wants Innova to communicate with their ESPERA equipment.

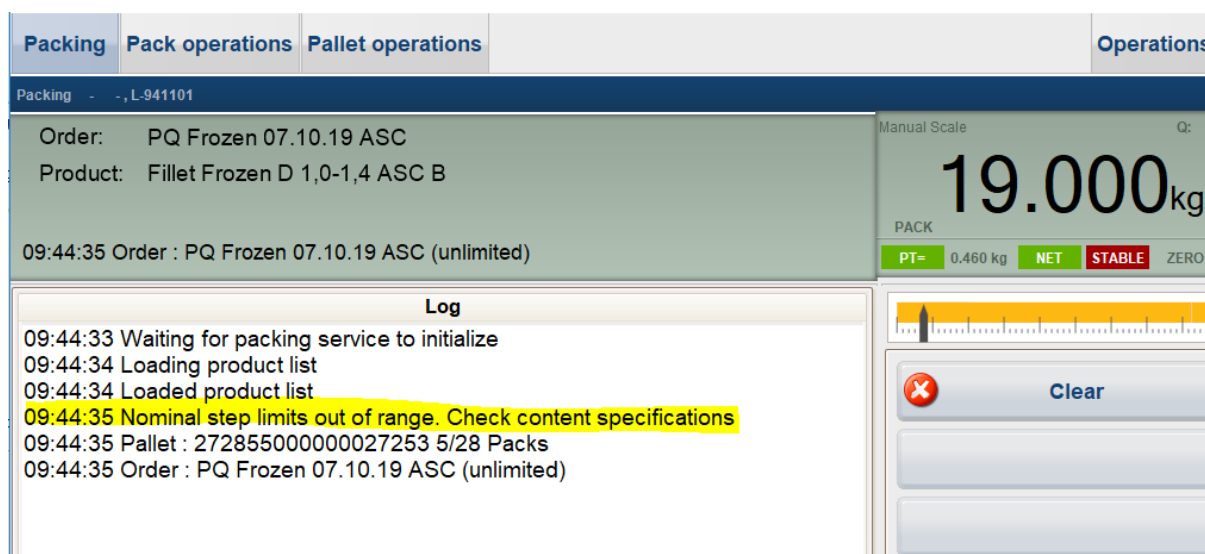
In general, ESPERA packing stations operate as normal packing stations. As items are processed by the ESPERA machine, Innova will receive item, pack and potentially pallet messages from the device and run unit operations to handle them.

A dashboard component was also developed to control ESPERA devices. It gives control over starting new process periods, changing activity on the process period, stopping a running PID and pausing/resuming a running PID.



## Packing station improvements made

- Now when a user presses **DisableWeightLimits** on the UltimateStation, the system does not remove the tare for the box.
- The PackingStation in OptiPack.Services now has a **BulkPrintOp** configuration flag. It references the ID of a unit operation for Bulk Printing. This is used to print a bulk of labels for a pack or item.
- The **ConfirmPalletViewConfig** and **DisplayClosePalletWithNewPackagingInfo** and **ClosePalletWithPackagingOp** configuration flags as they work in the UltimateStation have now been implemented in the ExpeditingStation as well.
- The thin configuration enhancement introduced in the 5.9.0 release for the UltimateStationCE and the UnitOpCE has been expanded to the UltimateExpeditingStation. This option allows Innova service consultants to configure multiple packing stations or unit operations stations quickly.  
When you click Configure in the user interface for the specific CE, the Context designer option will appear. The Context designer contains only those few configuration flags that need to be different between stations, such as ID or source process unit. For the UltimateExpeditingStationCE the properties configurable with the context configuration are: Printers, ProcessUnit, and Station.
- Some changes were made to the Nominal Steps nominal method in the WeightChecker in the 5.9.0 release. A small change was made in this release. If the step limits exceed 25, the scale range color turns yellow and the following message is added to the log: "Nominal step limits out of range. Check content specification."



- In the UltimateStationCEConfig extra pack layouts were added for bulk printing to the existing configuration flag, **BulkLabelLayoutId**. The layout to use for bulk labels:
  - If -1 pack layout is used.
  - If -2 item layout is used.
  - So then if this is -11, then pkLayout used, if it is -12 then pkLayout2 used, if -18 then pkLayout8 used, and so on.
- A new OptiPack controller, PlutoPackingController, has been created. The controller will connect to a generic Pluto device and subscribe to "msg.PL.createPackTrigger.<stationID>" where <stationID> is replaced with the pack\_sysstations.stanum. When the topic is received from the Pluto device a pack is created.

## **Added configurable supervisor access level control for changes to process units in the ManageTerminal prunit screen**

A new configuration property, **SupervisorAccessPromptConfiguration**, has been added to the ManagePrunit terminal screen, which is configurable through a Process unit XML data configuration. The new property was added as a way to better control the operators if they want to do some context changes on a process unit. Each process unit context property can now be controlled by setting a minimum access level for a supervisor to approve a change in the process unit. When an operator tries to do some changes on the process unit a login screen prompts for a supervisor to login to approve the changes.

## **Enhance packrwgtrm.exe so it behaves similar to M2200TCWithRequest packing controller**

New configuration switches were added to the PackRwgTrm.exe to make it follow a similar approach to the M2200TCWithRequest packing controller. The switches are described in the latest version of the *Innova M2200 Packing Station Installation and Configuration Manual*.

## **New configuration flag and data property for export unit operations**

All export unit operations have a new configuration flag, **FailIfExportProcessNotSet**. It indicates if the export unit operations fails or not if there is no export process set.

True: Fails if no export process is set

False: Does not fail if no export process is set

The affected unit operations are:

- ExportContainer
- ExportIndividual
- ExportItem
- ExportLot
- ExportMaterialTransaction
- ExportOperationData
- ExportOrder
- ExportOrderLine
- ExportPack
- ExportPackTransaction
- ExportPallet
- ExportPurchaseOrder
- ExportPurchaseOrderLine
- ExportShipment
- ExportStack

A new data property was also added in the OperationData class, **ExportProcessOverride**. If set, the ExportProcessOverride property overrides the ExportProcess property set in the Export unit operations above.

## **Box management solution improvements**

Some improvements to the box management solution have been made, including:

# Innova 5.9.1 Release Notes



- Support for custom departure locations in the LogiflexTakeaway plug-in
- Include box type for Logiflex BMS / Queueplc
- Allow rejecting unknown batches
- Send unrecognized packs to reject in Logiflex takeaway.

## PDA

### Ability to add menu button implemented

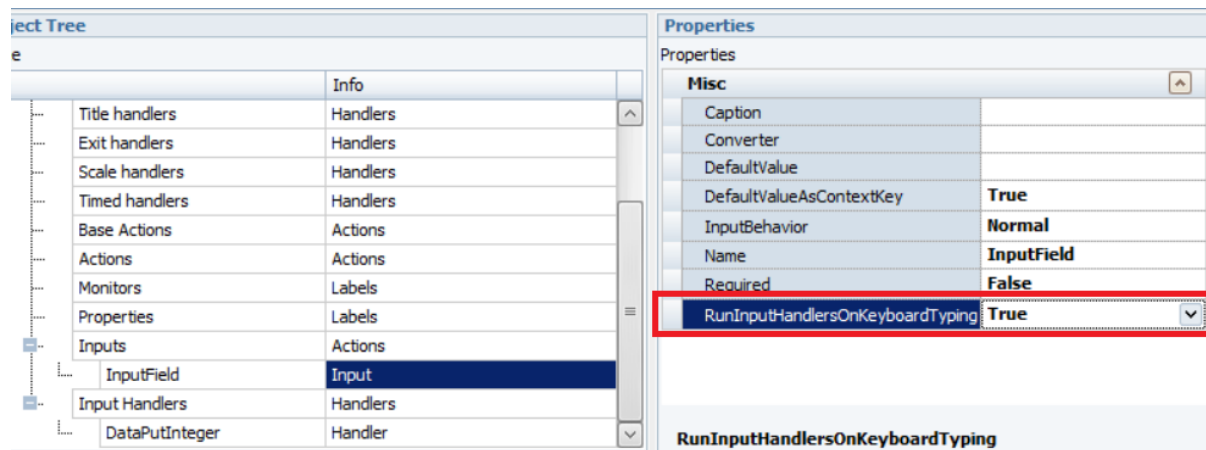
A new configuration property was added to the winui.exe for the PDA configuration.

**OpenMenuWithKey**, when set, allows the operator to click a key on the keyboard to open the menu. This can be useful when it's difficult to click the corner for specific scanners. It's recommended to use the F2-F10 keys for this.

```
<!--Indicates if the menu can be open by clicking specific button on the scanner, for example 'F5'.-->  
<OpenMenuWithKey>F5</OpenMenuWithKey>  
</MareImpoBase.Applications.Mob0000Application.Config>  
<ConfigSections>
```

### Execute InputHandlers on key input in the InputValues

A new configuration flag, **RunInputHandlersOnKeyboardTyping**, was added to the Inputs fields in the Action PDA page. If set to true the input handlers are executed and the operator doesn't need to click the Enter key to execute the input handlers. The default value is set to False.





## PDS

### Change to configuration of Quality histogram report

The Quality histogram report showed you all the flocks on one page. With a break on flock criteria you could separate this so you could create a page per flock, but if the user doesn't want that the report is displayed as you see below.



This does not appear to be a problem, but if the list of flocks on a day is very long, then you'll get a big table here and the report doesn't look that good anymore.

In order to solve this, a configuration option was added to the report (not a criteria) where you can specify that you want to merge the flocks. If configured to do so, then the indicated table will only have one row in it where all the columns are empty except the Grower column that has the value "Many".

## Planning

### Order planning improvements

Two new columns for product size and quality were added to the order line form. They allow grouping.

### Forecast planning improvements

An improvement was made to Mass balance to search all available POs when generating from sales orders (except for Returned and Cancelled), and search the whole day for sales orders.

A new server program, wsplanman.exe, has been added to the Planning solution. It is used to expose the web service and its methods for exporting. The WsPlanMan program supplies an endpoint to query certain Forecast and Inventory data using a Web API. The web API supplies two API controllers: one for querying Forecast data and one for Inventories. Each response supplies the queried data in JSON format.

## Portioning

### **Full primal utilization (FPU) to reduce giveaway and rejects**

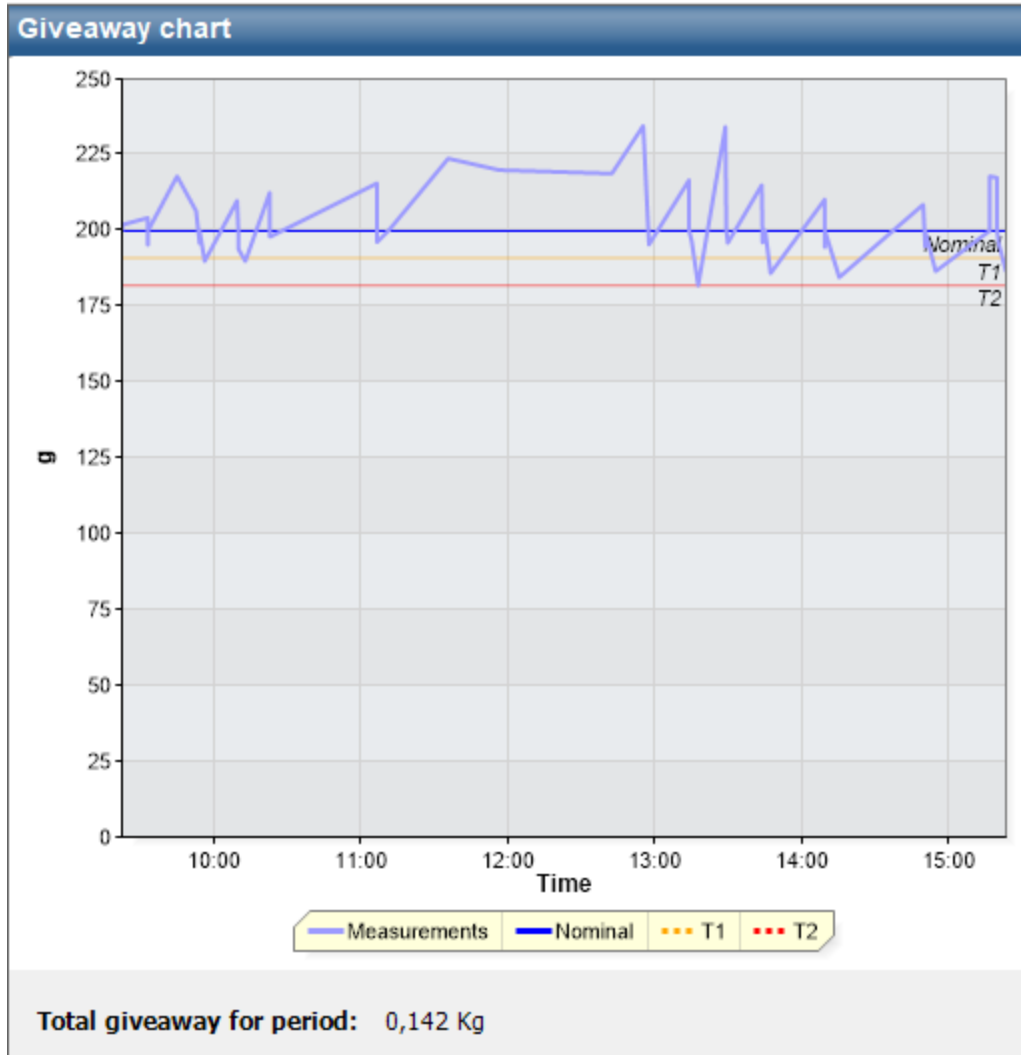
Full Primal Utilization (FPU) is an Innova integrated solution for real-time monitoring of giveaway and automatic feedback adjustments to the portioning process. It uses the [E-Weighing rules](#), along with checkweighing (for actual weight), to maximize the yield of the portion by sending adjustments to the portioning device.

Using these adjustments, calculated by the FPU solution, giveaway is minimized, rejects are avoided, and rework is reduced on the portioning line.

FPU requires an additional license. FPU is only available for the I-Cut 130 using the Singulator. The Full Primal Utilization depends upon two modules: portioning and checkweighing. Both of these must be installed as required for the device they support before configuration of FPU can be done.

Dashboards and reports are available to monitor progress and performance. The giveaway chart dashboard component and the E-weighing overview report are shown below.

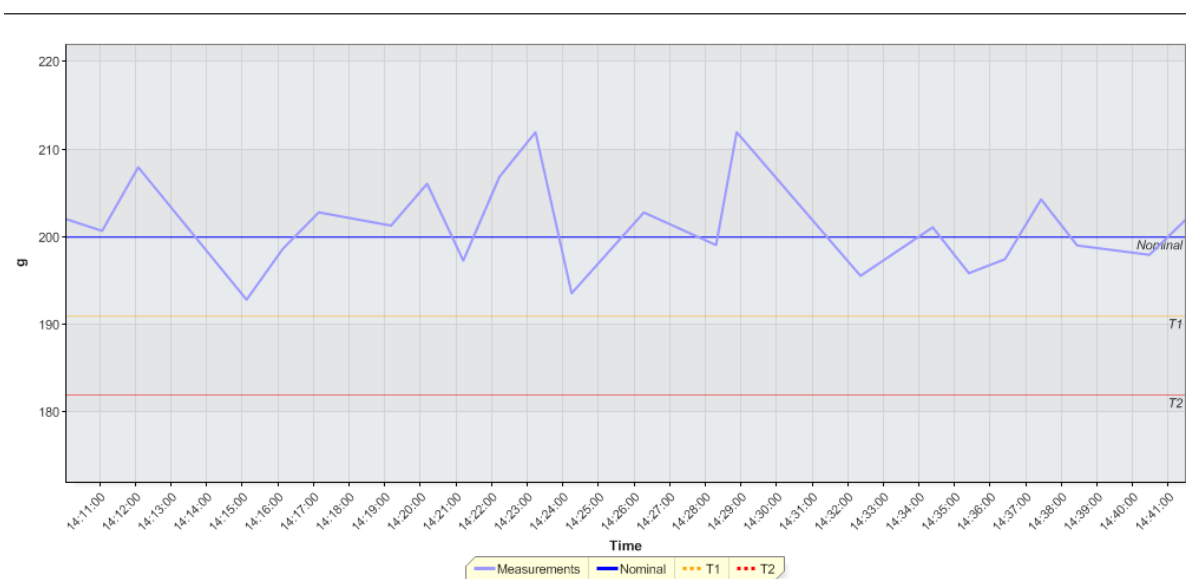
# Innova 5.9.1 Release Notes



## E-weighing overview

Date: 25-03-2019 - 25-03-2019  
Process period: = 55

process period: 55 - 25-03-2019 (13:59 - 14:48)



Total giveaway for period: 0,002 Kg

For more information about how to configure FPU, see the *Innova Portioning Installation and Configuration Manual*. For more information about the reports and dashboards, see the *Innova Portioning User Manual for I-Cut 11, 122, 130 and 610*.

### Innova changes activity to match I-Cut

The most common way of operating a Pluto I-Cut is to manage and start programs from the I-Cut. But in case connection from Innova to I-Cut was lost and the program was changed (or a new one created) on the I-Cut, then when connection is re-established Innova and the I-Cut no longer have the same interpretation of which program is active. The result would be either that Innova changed activity on the I-Cut to match Innova (which is no longer the correct program) or data is simply thrown away because the program on the I-Cut didn't match what Innova expected.

This has now been addressed by adding a new configuration switch to the I-Cut configuration, **ConfigureOnline**. This option replaces the configuration with the same name in the Lane Configuration. The new option has three possible values:

- NoAction: No program synchronization takes place when device comes online.
- SendInnovaProgram: Sends the program that is currently active on the process unit in Innova to the device (the old default setting)
- UseDeviceProgram: Innova changes program to match the active program in device, imports the program if needed (the new default setting)

This change is for Pluto based I-Cuts only. All other Pluto devices keep the old ConfigureOnline option that only has two possible values:

- True: Sends the program that is currently active on the process unit in Innova to the device (default setting)
- False: No program synchronization takes place when device comes online.

## **Support added to I-Cut 610M for SmartFork**

It is now possible to edit the SmartFork settings in program editor for programs for the I-Cut 610M (single screen).

It is important to note that the Fork retraction time setting is only available for the I-Cut 610M.

## **Raw materials import automatically when online again**

If an I-Cut program uses a Raw material, then that raw material needs to be in Innova. Raw-materials can't be created in Innova; that must be done on the I-Cut.

When a new raw material is created on the I-Cut, it will automatically be imported by Innova, but only if Innova is online (otherwise it wouldn't know that a new raw material was created). Adding a new I-Cut using Quick Config will automatically import all rawmaterials from the I-Cut. This all works well, but there are two situations that will cause Innova to be missing raw materials:

- Quick Config was executed when the I-Cut was offline
- A Raw material was created on the I-Cut when it was offline

In both cases it is possible to manually import raw materials from the Program Editor in Innova, but that was sometimes forgotten. Therefore Innova now checks each time the I-Cut comes online to see if any raw materials are missing. If they are, they will automatically be imported. Manual import of raw materials is no longer needed.

This fix is for all Pluto based I-Cuts (11/122/130/145/610).

## **Program import/export/editing prohibited for multi-lane I-Cuts**

Secondary and tertiary lanes are now hidden so that it isn't possible to edit/import/export programs for individual lanes of a portioning device.

When asking, for instance, an I-Cut 122 or 610 Single Screen, you get the same programs no matter if you ask for programs for lane 1 or 2. Therefore these process units are set as equivalent process units in Innova. For the I-Cut 145 all 3 lanes should be equivalent.

In the program editor the secondary (and tertiary) lanes (in the "lane" combobox on the toolbar) are hidden so that only one lane is shown "per device" for dual/triple lane machines.

This is dependent upon the device type. Below is a list of what has changed (no changes for devices not listed):

- I-Cut 122: Dual lane. Lane 2 is hidden.
- I-Cut 145: Triple lane. Both lanes for I-Cut145Back device are hidden. (The I-Cut145Front has the programs.)
- I-Cut 610 2xScreen (old device): This is dual lane but has 2 separate devices so both lanes are in the program editor.
- I-Cut 610 1xScreen (new device, aka I-Cut610M): Dual lane. Lane 2 is hidden.

## **Poultry Streamline**

### **MessageDispatcher error fixed**

A bug was fixed where the selected scale device in the PoultryStreamline Quick Config wasn't set correctly. This caused an issue where the MessageDispatcher wasn't set to True for Pluto scale device.



## Process

### New configuration flag and data property for export unit operations

All export unit operations have a new configuration flag, **FailIfExportProcessNotSet**. It indicates if the export unit operations fails or not if there is no export process set.

True: Fails if no export process is set

False: Does not fail if no export process is set

The affected unit operations are:

- ExportContainer
- ExportIndividual
- ExportItem
- ExportLot
- ExportMaterialTransaction
- ExportOperationData
- ExportOrder
- ExportOrderLine
- ExportPack
- ExportPackTransaction
- ExportPallet
- ExportPurchaseOrder
- ExportPurchaseOrderLine
- ExportShipment
- ExportStack

A new data property was also added in the OperationData class, **ExportProcessOverride**. If set, the ExportProcessOverride property overrides the ExportProcess property set in the Export unit operations above.

### Context configuration expanded

The thin configuration enhancement introduced in the 5.9.0 release for the UltimateStationCE and the UnitOpCE has been expanded to ProcessUnitSupplyLists and ManagePrunitControllerExtension. This option allows Innova service consultants to configure multiple packing stations or unit operations stations quickly.

When you click **Configure** in the user interface for the specific CE, the Context designer option will appear. The Context designer contains only those few configuration flags that need to be different between stations, such as ID or source process unit.

# Innova 5.9.1 Release Notes

For the ProcessUnitSupplyLists form the context configurable properties are:

- ProcessUnitId
- LotCreateRuleLineId

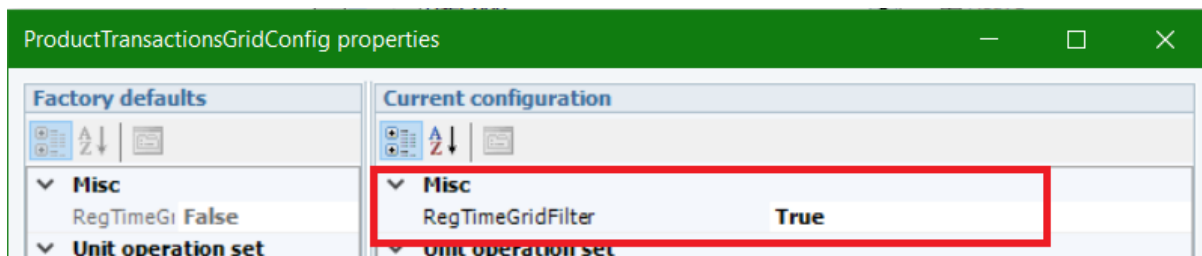
For the ManagePrunitControllerExtension the context configurable property is:

- ProcessUnitId

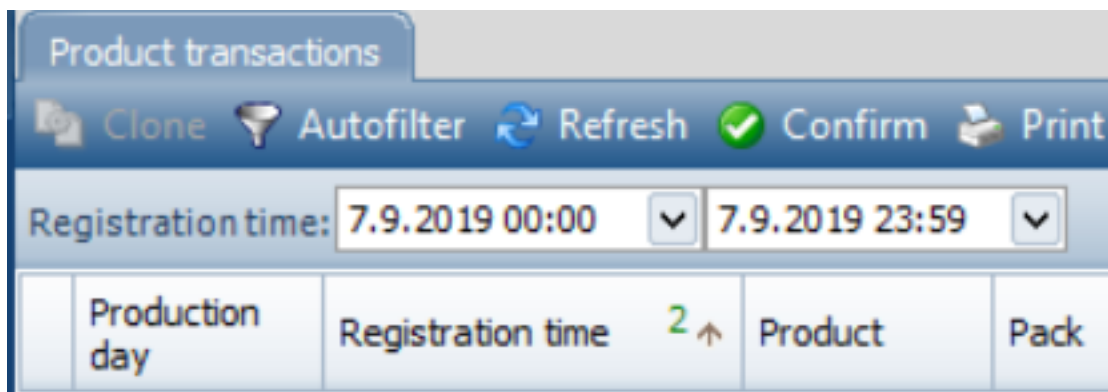
## Improvements in material transactions and other transaction forms

A configuration switch, DisableFlushOnCtxChanged, was added to disable flush on context change.

All unit transaction forms (Material transactions, Pack transactions, Item transactions,...) now have configurable forms and a new property was added to all of them, RegTimeGridFilter. This property indicates if the form filter is a regtime filter instead of prday.



Here is how the filter appears if RegTimeGridFilter is True.



## Unit operations improvements

A new standard unit operation, **ActivateUnitProduct**, was added to Innova versions 5.8.2 and later. The ActivateUnitProduct unit operation activates a product on a destination process unit. The only requirement is that the destination process unit must have a Material Configuration Table. It automatically checks which unit (Item, Pack or Pallet) is active in the context and activates the product on the destination process unit. Furthermore, it's intelligent enough so that it won't activate the same product twice in a row.

The **ItemFromContainer** unit operation was missing from the standard operation list in the UnitOp editor; it has now been added.

When executing **ReturnToInventory** and using TraceabilityGen2, the supply lot is removed even though the supply method is not tracking the amount.

Support has been added to **ClonePack** to use SQL sequence numbers for the pack.number.

## Ability to configure shipment column in Orders form added

A new configuration property was added to the Orders form(Marel.Mp5.Process.UI.Windows.Orders.OrdersAll), **ShipmentColumnValue**. When set it will display the selected value from the shipment record in the shipment column in the Orders form. By default it's not set and the default value displayed is shipment.sccc.

## Fix when form unable to open due to invalid data

When opening the ProductMaintenance form and the data contained invalid data (product.itcntspec was null) the form wouldn't open.

Now, if a record contains an error in the database (value is null when it shouldn't be null), an error is logged in the system log to indicate a data error in the record and the record is ignored (not visible in grids and forms).

## Improvement made to time registration (mp5timeman)

When an employee logs into the station Innova links the lot attached to the prunit and station to the Time registration for that employee. But Production Lot was not included in the Time registration even though it was linked to the station/prunit as well.

Now Production lot is linked to time registration if available.

## **Update slday on process lot when supply lots change**

A new configuration property, **SupplySIDayMethod**, has been added to the Marel.Mp5.Process.Process.ProductionConfig XML data store. It controls the way the process lot slaughter day is updated when a supply lot is added or a new process lot is created. The available values are:

- None: slday is not updated on the process lot (this is the default value).
- OldestSIDay: updates the slday based on the oldest slday on a supply lot.
- NewestSIDay: updates the slday based on the newest slday on a supply lot.

## **Product Criteria Framework supported in SetOperationData**

The ProductCriteriaFramework is now supported in the SetOperationData unit operation. The operation data must have a ProductCriteriaContext and a ProcessUnit.

## QC






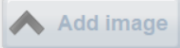



### **QC Non-conformities**

Previously, a Non-Conformity would be created and resolved by the same user, in the same screen. This is not always in compliance with quality control regulations which stipulate that one user creates a Non-Conformity, and a second takes the corrective action.

The Non-Conformity IPC interface has been modified to accommodate this requirement. The old behavior, where reporting and corrective action is handled by the same user, is still available and is enabled by default. To enable the new behavior, set the `SeparateResolution` option to `True` in the `Marel.Mp5.QC.UI.M6000.NonConformities.NonConformitiesCE` user Interface configuration screen.

With this setting enabled, the IPC Non-Conformities form looks mostly the same, but the user no longer selects what Corrective Action was taken; the user can instead suggest what action should be taken. The user must also select a Person Responsible, which is the user who will perform the corrective action.

# Innova 5.9.1 Release Notes

Node	Unresolved	Operations
Node		
Group (not set)		
Person Responsible (not set)		Rating (not set) 
Non-conformances (not set)		Suggested Corrective Action (not set) 
Non-conformance description		
<div style="border: 1px solid #ccc; height: 100px;"></div>		
		 Add image 
		 

When the responsible party opens the Unresolved Non Conformities form, they will see a list of the open Non Conformities that have been assigned to them.

# Innova 5.9.1 Release Notes

Node	Unresolved	Operations	
Unresolved			
mánudagur, 1. júlí 2019 ATP less than 300	Þriðjudagur, 9. júlí 2019 Receiving Temperature over 6 °C	fimmtudagur, 11. júlí 2019 Receiving Temperature over 4 °C	mánudagur, 15. júlí 2019 Receiving Temperature over 4 °C
<a href="#">Refresh</a>		<a href="#">Previous page</a>	<a href="#">Next page</a>

When they select a Non Conformity, they will only be able to set information related to the corrective action, including description and image. They can also choose the corrective action; the action suggested by the reporting user will be selected by default.

The screenshot shows a software interface for managing unresolved issues. The main window is titled 'Unresolved' and has a tabbed interface with 'Node' and 'Operations' tabs. The 'Node' tab is active. The form contains the following fields and controls:

- Group:** Receiving
- Deadline:** 15.7.2019
- Rating:** 5544
- Non-conformances:** Temperature over 4 °C
- Non-conformance description:** A large text area for describing the non-conformance.
- Corrective actions:** Evaluate with supervisor
- Corrective action description:** A large text area for describing the corrective action.
- Department:** Production
- Buttons:** 'Add image' (with an image icon), 'Cancel', and 'Save' (with a checkmark icon).

When the user opens the form, the resolution start date will automatically be set to the current time. Once the resolution has been selected and saved, the resolution end time will automatically be set to the current time when the user saves the form.

## Functionality added to resolvers in QC inspections

Two new functions have been added to resolvers in QC inspections.

- `IsNull(x)` is a Boolean function that returns true if the label representing the value `x` is empty and false otherwise. This function can be used in both the formula and condition resolver.
- `lif(x, y, z)` is a function that returns a value based on whether a condition is fulfilled. The first parameter, `x`, is therefore a Boolean expression. If the Boolean expression is evaluated to be true, then the second parameter is used as a return value. If the Boolean expression is evaluated to be false, then the third parameter is used as a return value. The `lif` function can only be used in formula resolvers.



A practical example of using `if` and `IsNull`:

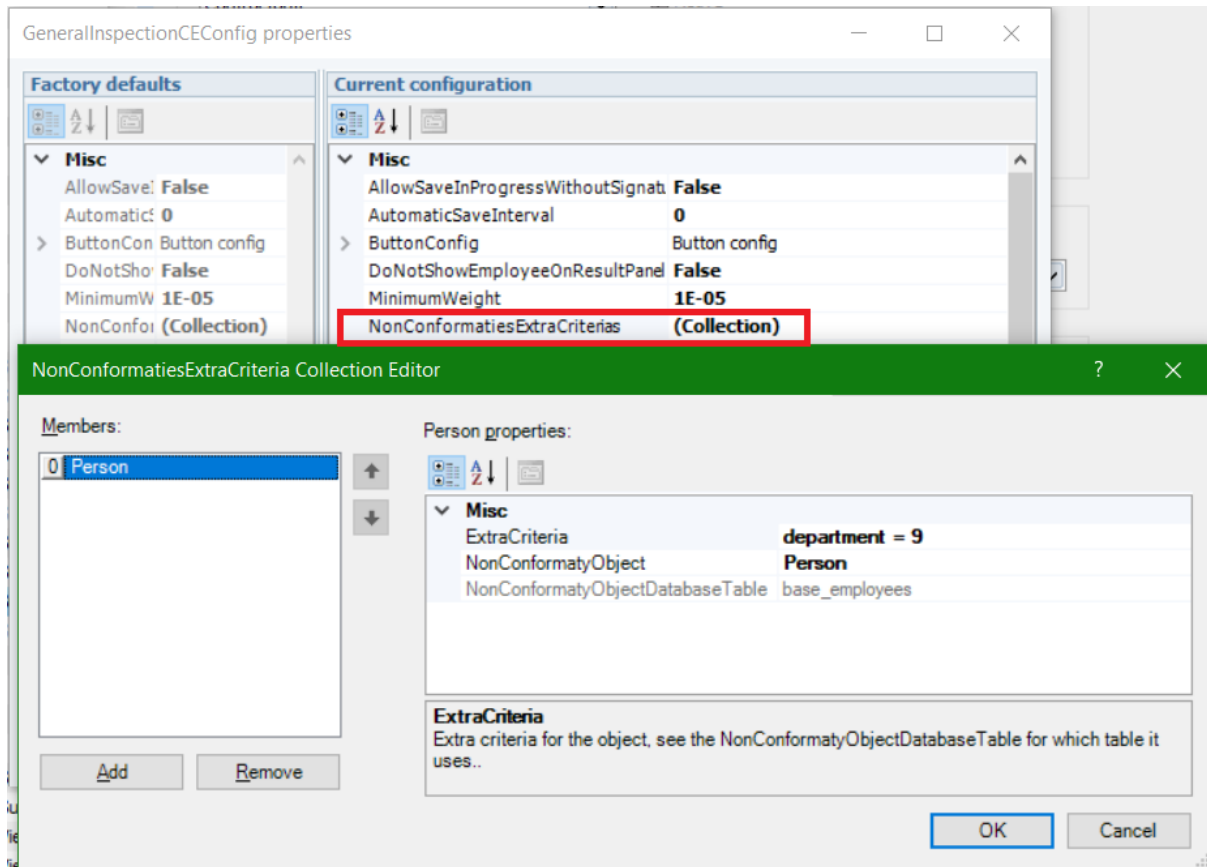
A temperature is taken from a product using a thermometer. The temperature inspection item is read-only, meaning that the value must come directly from the thermometer and cannot be manually input. However, if the thermometer fails to record a value, the value must be manually input. In this case two temperature items and one formula item can be used. If the read-only temperature item does not contain a value, then the formula item should display the value from the second temperature item where the operator manually inputs a temperature value. The read-only temperature field has the label "temperature1" and the temperature field that allows manual input has the label "temperature2". `if` and `IsNull` would then be used in conjunction in the formula item: `if(IsNull(temperature1), temperature2, temperature1)`

## **QC procedure import is now backwards/forwards compatible**

QC Procedure import is now backwards/forwards compatible. This means that the user can import from older versions of Innova to newer ones and back.

## **Support added for criteria for Non Conformities objects**

A new configuration property, **NonConformatiesExtraCriteria**, was added to all QC stations where the Non Conformity panel is used. It allows for extra criteria to be added to the Non Conformities objects. The criteria is just a simple SQL where the criteria that's added is an SQL query for the records that are fetched for the objects.



## QC inspection records improvements

Inspection records with the record type test are not included in QC inspection reports now and the CTRL+Delete function in the Inspection form has been disabled as it did not work.

## QC Scanner

### Database table added and data collection implemented

A new database table, qcs\_dataaggtypecount, has been added to improve the aggregated data collection for QC Scanner data. In this table, the number of pieces with one or more measurements over the report limit is counted for each type of program parameter, along with the total number of measurements of the report limit. The type of program parameter is specified by the program template.

This is intended for the Salmon QC Scanner so that fillets with one or more Trimming defect measurements over report limit can be distinguished from other non-trimming defect measurements.

### QC Scanner reports changed

The QC scanner reports for a salmon filleting line have been removed. Only the reports for the standalone QC scanner are available.

Some improvements have been made to the three existing reports and a new report, Supplier quality, has been added.

The Salmon QC Scanner Production Overview report has been updated to match the release of the new MS2920 QC Scanner. The report shows an higher overview of the production results with an option to break on process period, production days, lot, batch and more.

The report also provides an easy access to the Production quality and Shipment quality reports by clicking on the values in the report. Clicking on the Total fillets or Total weight values will bring up the Production quality report. Clicking on the values for Quality 1/2/3 will bring up the Shipment quality report for the respective quality selected.

### Production Overview Report

Date: 23-01-2020 - 24-01-2020  
Breakdown by: = Process period

Pr. period	Process period	First reg. time	Last reg. time	Salmon fillets (pcs)	Total weight (kg)	Quality 1	Quality 2	Quality 3	Fillets / min
6491	Test	23-01-2020 08:24	23-01-2020 08:24	4.060	5.209,10	1.514 (37%)	1.238 (30%)	1.308 (32%)	59,11
6502	Test	23-01-2020 09:45	23-01-2020 09:45	133	169,42	55 (41%)	42 (32%)	36 (27%)	62,34
6504	Test	23-01-2020 10:22	23-01-2020 11:26	4.978	6.277,75	502 (10%)	1.817 (37%)	2.659 (53%)	30,01

The Salmon QC Scanner Production Quality report shows a detailed explanation of the quality as measured by the QC Scanner. The report summarizes the quality defects found during

# Innova 5.9.1 Release Notes

production along with a distribution chart for both the color grade and the weight of the salmon fillets.

## Production Quality Report

Date: 21-01-2020 - 24-01-2020

Process period: = Test, Breakdown by: = Process period

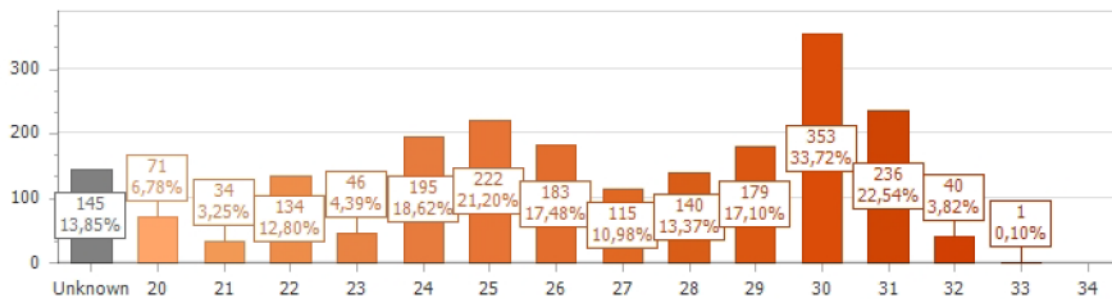
Pr. period	Process period	First regtime	Last regtime	Salmon fillets(pcs)	Total weight(kg)	Avg. weight(g)	Fillets/ min
6507	Test	23-01-2020 13:25	23-01-2020 13:26	1.047	1.333	1.273,54	30,04

Quality 1	Quality 2	Quality 3	Any report limit
290 (28%)	263 (25%)	494 (47%)	451 (43%)

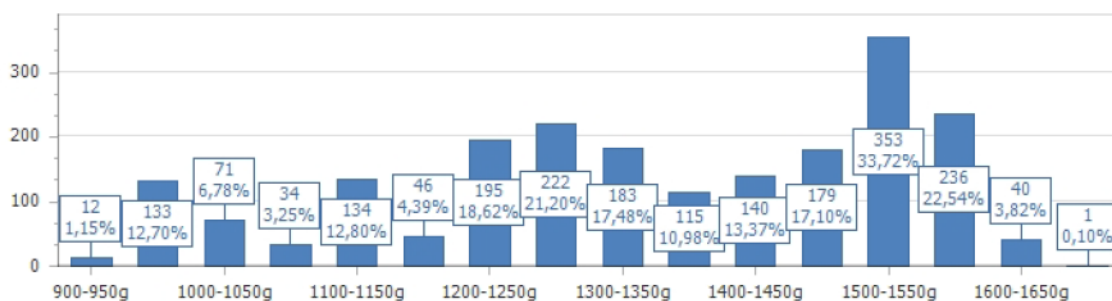
### Report limit results:

Parameter	Limit	Under	Over	% Over
Blood	7 mm <sup>2</sup>	1.008	39	4%
Melanin	7 mm <sup>2</sup>	635	412	39%

### Color distribution:



### Weight distribution:



# Innova 5.9.1 Release Notes

The Salmon QC Scanner Shipment Quality report shows a detailed explanation for a specific quality category which the QC Scanner has sorted the fillets into. The report summarizes the quality defects found during production along with a distribution chart for the color grade of the salmon fillets.

## Shipment Quality Report

Date: 22-01-2020 - 24-01-2020

Process period: = Test, Category: = Quality 1, Breakdown by: = Process period

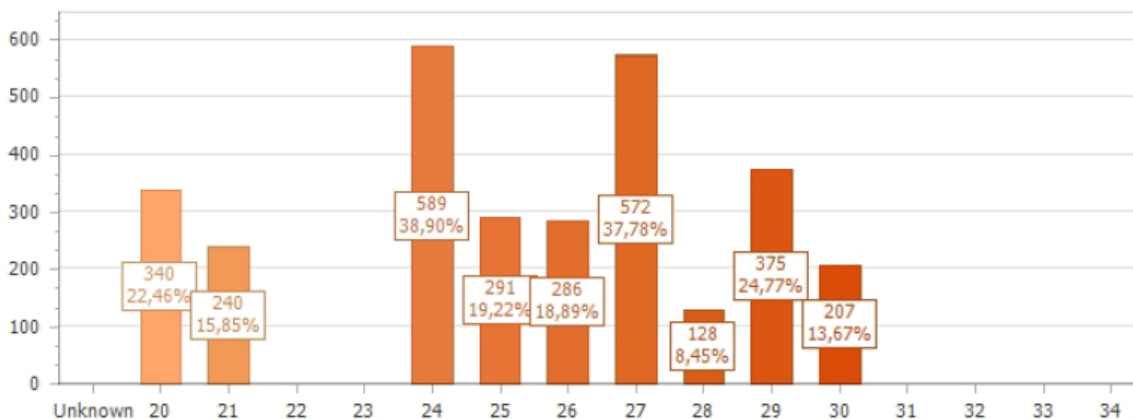
Process period	First reg. time	Last reg. time	Salmon fillets (pcs)	Total weight (kg)	Avg. weight (g)	# Any report limit	# Any trimming defect	Total trimming defects
6491	23-01-2020 08:24	23-01-2020 08:24	1.514	1.797	1.186,91	789 52 %	789 52 %	957

### Weight range distribution

	Weight range	pcs.	%
1.	1.000 - 1.100 g	580	38,3 %
2.	1.200 - 1.350 g	851	56,2 %
3.	1.400 - 1.450 g	83	5,5 %

Program: Test		Program information			Report limit results	
Parameter	Min	Max	Report limit	# over report limit	% over report limit	
Back zone 1	0,0 %	10,0 %	5,0 %	470	31,04 %	
Back zone 2	0,0 %	10,0 %	5,0 %	241	15,92 %	
Back zone 3	0,0 %	10,0 %	5,0 %	246	16,25 %	

### Color distribution



# Innova 5.9.1 Release Notes

The Salmon QC Scanner Supplier Quality Report is a new report that shows detailed quality information for a specific set of quality parameters intended to be used for supplier monitoring.

## Supplier Quality Report

Date: 24-01-2020 - 24-01-2020

Process period: = 6537, Category: = (All), Breakdown by: = Process period, Parameters: = (Many)

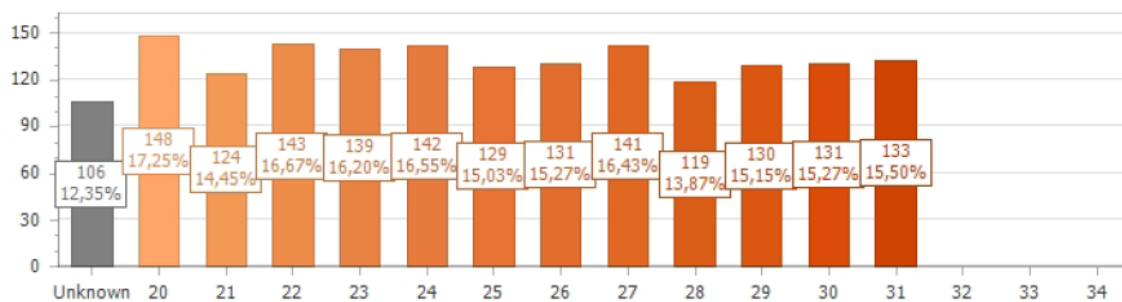
Pr. period	Process period	First regtime	Last regtime	Salmon fillets(pcs)	Total weight(kg)	Avg. weight(g)	Fillets/ min
6537	MS2920 Melamin	24-01-2020 11:57	24-01-2020 11:58	858	1.074	1.251,34	60,07

Quality 1	Quality 2	Quality 3	Any report limit
705 (82%)	112 (13%)	41 (5%)	724 (84%)

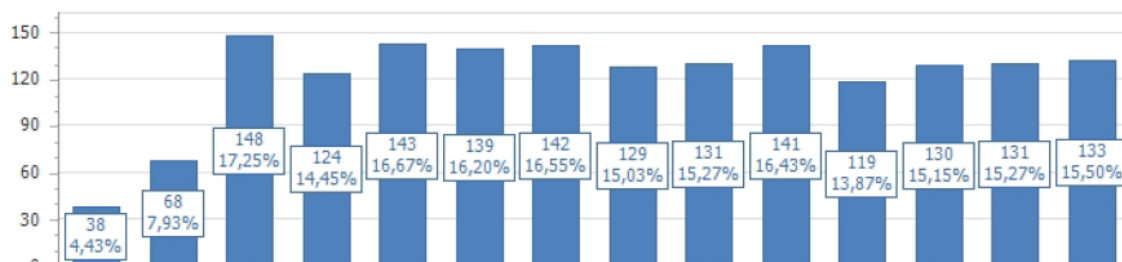
### Report limit results:

Parameter	Limit	Under	Over	% Over
Blood	7 mm <sup>2</sup>	476	382	45%
Center cartilage	9 %	671	187	22%
Color	28 °	587	271	32%
Melanin	5 mm <sup>2</sup>	424	434	51%

### Color distribution:



### Weight distribution:



## Recipe

### Create multiple batches per order

Now when batches are created in the Recipe system, the connection to the order is on the control recipe record (proc\_crecipes) instead of the order record (proc\_orders). This enables batches to share an order. This is only possible when creating batches from orders using the view extension on the Order form. Otherwise nothing has changed about how orders are created or handled in the Recipe system.

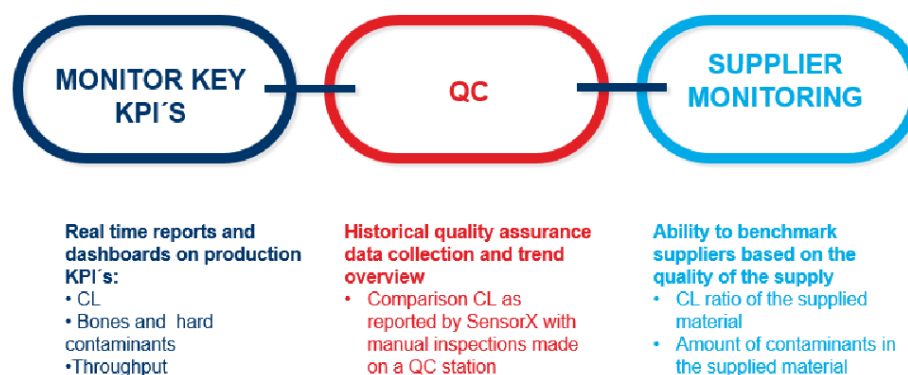
Production day	Master recipe	Final product	Batch size	Batch size unit	Lot	Order	Status	Priority
6.1.2020	DemoTest	Garlic & Lime Breast Fillets	111	kg	RB-20.01.06-19	Demo order	Not started	22
6.1.2020	DemoTest	Garlic & Lime Breast Fillets	200	kg	RB-20.01.06-18	Demo order	Not started	22
6.1.2020	DemoTest	Garlic & Lime Breast Fillets	200	kg	RB-20.01.06-17	Demo order	Not started	0
6.1.2020	DemoTest	Garlic & Lime Breast Fillets	200	kg	RB-20.01.06-16	Demo order	Not started	0
6.1.2020	DemoTest	Garlic & Lime Breast Fillets	200	kg	RB-20.01.06-15	Demo order	Not started	0
6.1.2020	DemoTest	Garlic & Lime Breast Fillets	200	kg	RB-20.01.06-14	Demo order	Not started	0
6.1.2020	DemoTest	Garlic & Lime Breast Fillets	200	kg	RB-20.01.06-13	Demo order	Not started	0
6.1.2020	DemoTest	Garlic & Lime Breast Fillets	100	kg	RB-20.01.06-12	Demo order 2	Cancelled	0
6.1.2020	DemoTest	Garlic & Lime Breast Fillets	100	kg	RB-20.01.06-11	Demo order 2	Cancelled	0
6.1.2020	DemoTest	Garlic & Lime Breast Fillets	100	kg	RB-20.01.06-10	Demo order 2	Cancelled	0
6.1.2020	DemoTest	Garlic & Lime Breast Fillets	100	kg	RB-20.01.06-9	Demo order 2	Cancelled	0

## SensorX

### Innova for SensorX Magna introduced

The [SensorX Magna](#) is a high-capacity, inline trim inspection system that scans meat trim and muscles for bones and other hard contaminants as well as measuring the precise fat to lean ratio (CL). The system is capable of scanning both fresh and frozen pork and meat trimmings and muscles to manage trim and reach a batch target fat percentage.

Innova SensorX Magna is sold as an integrated part of the SensorX Magna equipment. The main benefits of Innova for SensorX Magna are:



#### Monitoring of key KPIs

- Real time and historical reports on production KPI's:
  - CL
  - Bones and hard contaminants
  - Throughput

#### QC

- Historical quality assurance data collection and trend overview
- Comparison CL as reported by SensorX with manual inspections made on a QC station

#### Supplier Monitoring

- Ability to benchmark suppliers based on the quality of the supply
- CL ratio of the supplied material
- Amount of contaminants in the supplied material



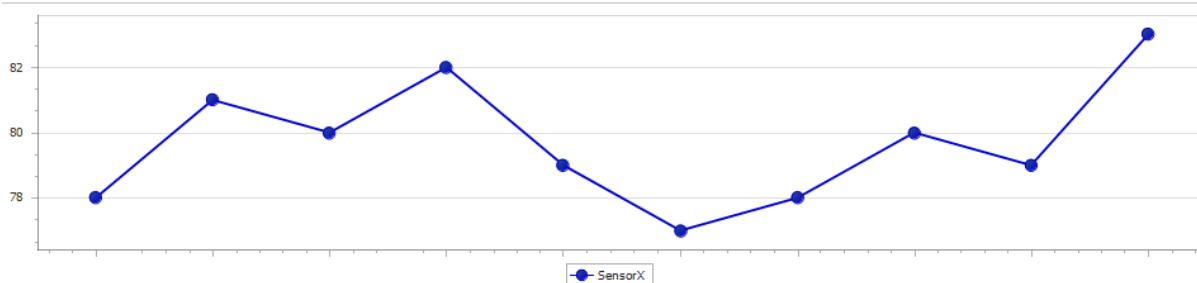
The **Magna CL basic report** shows the CL/fat measurements by the SensorX Magna for the given criteria.

## Magna CL Basic



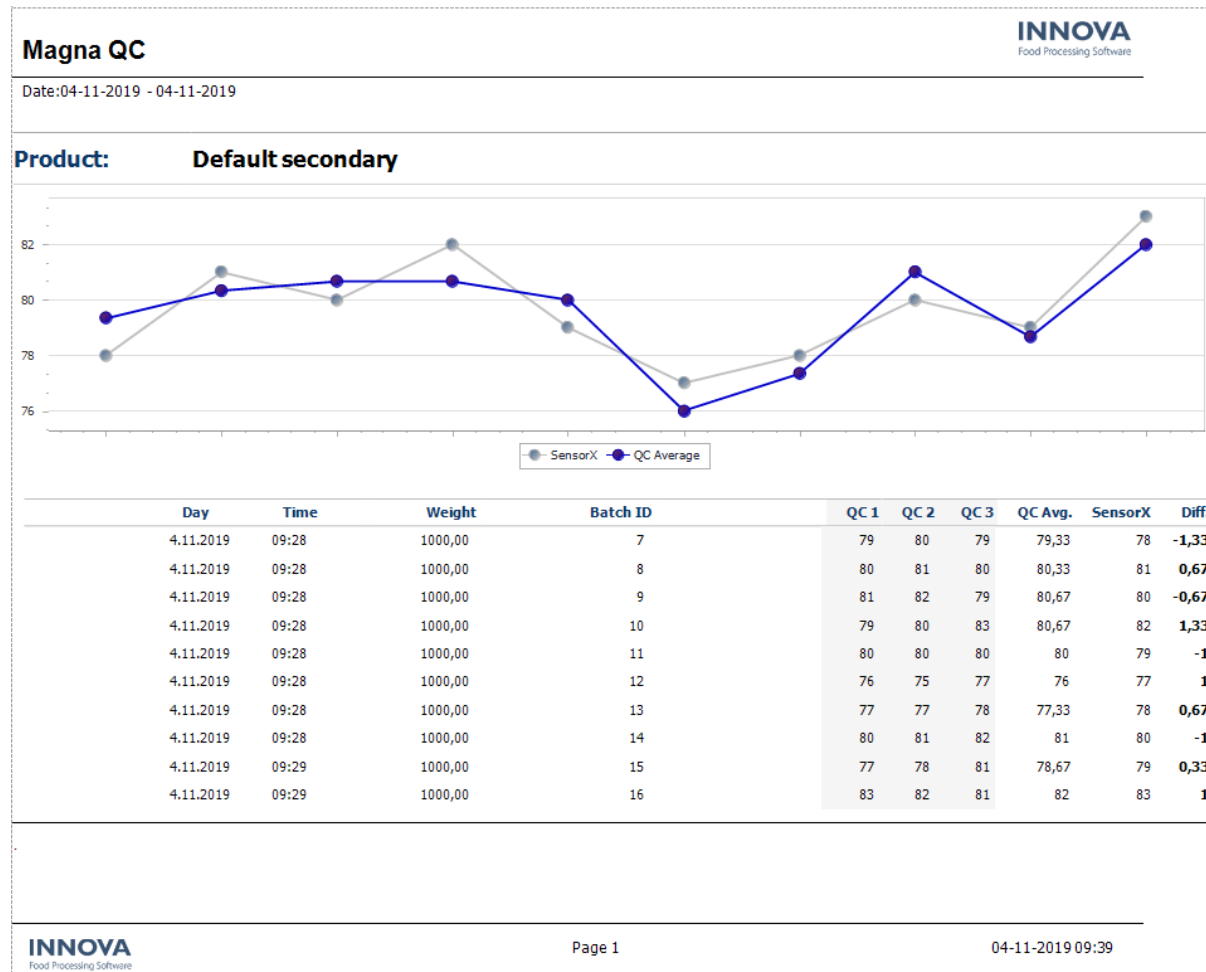
Date:04-11-2019 - 04-11-2019

**Product:** Default secondary



Day	Time	Weight	Batch Number	SensorX
4.11.2019	09:28	1000,00	7	78
4.11.2019	09:28	1000,00	8	81
4.11.2019	09:28	1000,00	9	80
4.11.2019	09:28	1000,00	10	82
4.11.2019	09:28	1000,00	11	79
4.11.2019	09:28	1000,00	12	77
4.11.2019	09:28	1000,00	13	78
4.11.2019	09:28	1000,00	14	80
4.11.2019	09:29	1000,00	15	79
4.11.2019	09:29	1000,00	16	83

The SensorX Magna system comes equipped with a pre-configured QC Inspection Procedure able to compare the actual fat percentage values reported by the SensorX machine with manual measurements made on a QC station. Marel SensorX encourages its customers to make 1-6 fat measurements on a batch manually. These values can be combined into an average fat measurement for the batch. By comparing the Sensor X percentage against the QC measurements values using the **Magna QC report** shown below, an indicator of the machine performance can be given.



## Supplier monitoring

Supplier monitoring involves registering input batches with the following information:

- Supplier from the Purchase Order and other Innova process context information
- CL/Fat value from supplier - this is the product target CL
- Measured CL/Fat value - this is based on the measurements from the SensorX
- Bone/Metal count (contaminants)

Advanced versions of the system can have multiple inputs that can be combined to achieve a specific target CL/Fat value for the output batch. For Innova to be able to perform supplier monitoring with multiple inputs, the correct origin of the product stream is required to be included in the data messages from the SensorX machine.

# Innova 5.9.1 Release Notes

To see the data for supplier monitoring, you can use the **Supplier performance report** shown below.

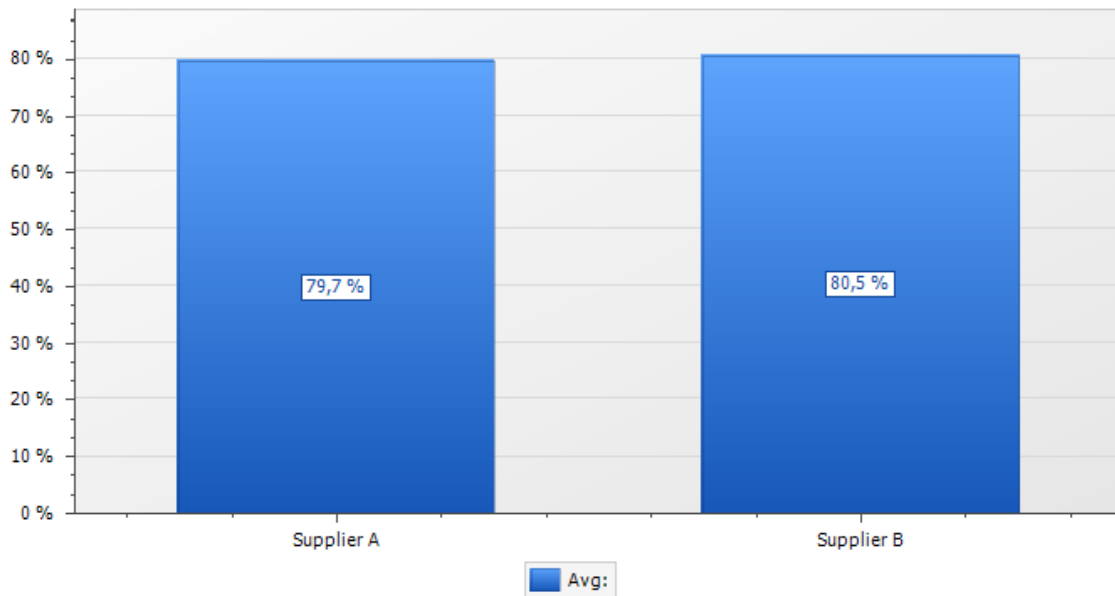
Supplier performance										
<p>Date:06-11-2019 - 06-11-2019 Breakdown: = No grouping</p>										
<b>Product</b>	Ground poultry 75%		<b>Target</b>	Target interval						
<b>Supplier</b>	Supplier A		<b>Supplier code</b>	prcy0002						
<b>Pack</b>	<b>PO</b>	<b>Prday</b>	<b>Start</b>	<b>End</b>	<b>Weight (kg)</b>	<b>Bones (/1000kg)</b>	<b>Hard Cont. (/1000kg)</b>	<b>CL</b>	<b>Deviation</b>	
	33	Poultry 75	06-11-2019	11:42	13:18	1.000,00	540 (540,0)	173 (173,0)	80,58 %	
<b>Count:</b>	<b>1</b>			<b>11:42</b>	<b>13:18</b>	<b>1.000,00</b>	<b>540 (540,0)</b>	<b>173 (173,0)</b>	<b>80,58 %</b>	
<b>Product</b>	Ground poultry 85%		<b>Target</b>	Target interval						
<b>Supplier</b>	Supplier B		<b>Supplier code</b>	prcy0003						
<b>Pack</b>	<b>PO</b>	<b>Prday</b>	<b>Start</b>	<b>End</b>	<b>Weight (kg)</b>	<b>Bones (/1000kg)</b>	<b>Hard Cont. (/1000kg)</b>	<b>CL</b>	<b>Deviation</b>	
	25	Premium supermarket chain	06-11-2019	09:58	10:20	1.000,00	159 (159,0)	47 (47,0)	80,49 %	
	29	Poultry 83	06-11-2019	10:20	10:35	1.200,00	108 (90,0)	25 (20,8)	80,14 %	
<b>Count:</b>	<b>2</b>			<b>09:58</b>	<b>10:35</b>	<b>2.200,00</b>	<b>267 (121,4)</b>	<b>72 (32,7)</b>	<b>80,36 %</b>	
<b>Product</b>	Ground poultry 85%		<b>Target</b>	Target interval						
<b>Supplier</b>	Supplier C		<b>Supplier code</b>	prcy0004						
<b>Pack</b>	<b>PO</b>	<b>Prday</b>	<b>Start</b>	<b>End</b>	<b>Weight (kg)</b>	<b>Bones (/1000kg)</b>	<b>Hard Cont. (/1000kg)</b>	<b>CL</b>	<b>Deviation</b>	
	38	Poultry 85	06-11-2019	14:39	14:39	1.500,00	1 (0,7)	0 (0,0)	83,00 %	
<b>Count:</b>	<b>1</b>			<b>14:39</b>	<b>14:39</b>	<b>1.500,00</b>	<b>1 (0,7)</b>	<b>0 (0,0)</b>	<b>78,92 %</b>	

The **Supplier comparison report** shows the measured CL/Fat percentage broken down by product for each supplier of the product in a bar chart.

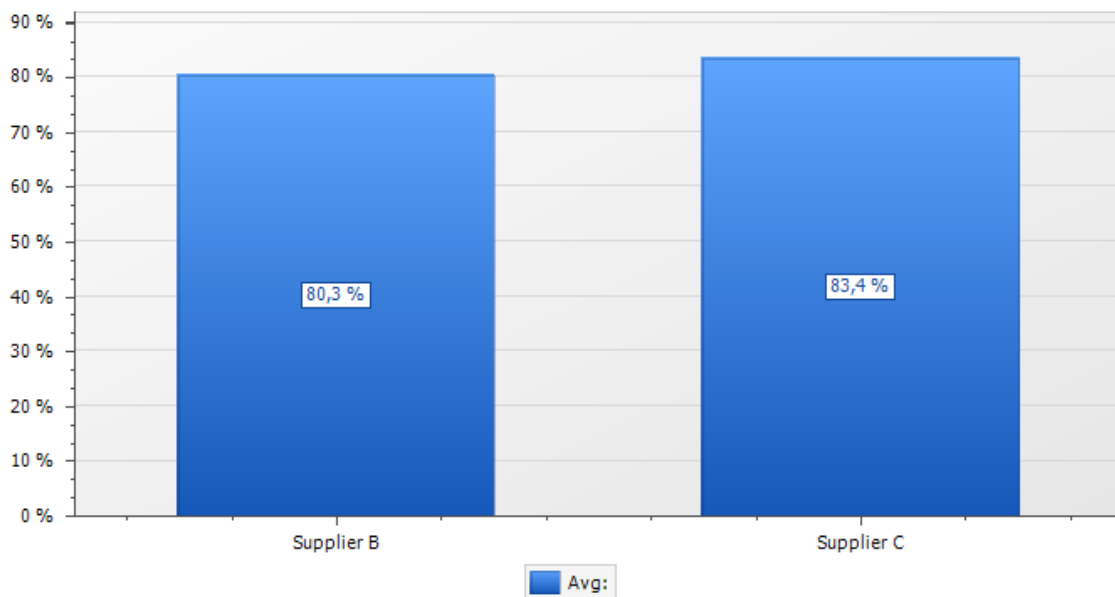
## Supplier comparison

Date:04-11-2019 - 07-11-2019

**Product:** Ground poultry 75%



**Product:** Ground poultry 85%



## **Improvements to SensorX**

A new configuration switch, **ActivateProgramOnly**, has been added to the SensorX station XML configuration. When this switch is turned on, Innova will only activate the program on the SensorX without sending the contents of the program in Innova.

Running performance and quality monitoring in OEE is now available for the SensorX as well. For information about this, see the *Innova OEE User Manual* and *Innova OEE Installation and Configuration Manual*.

And the Visual production report has been changed. The Process unit criterion was removed and instead SensorX machine and Site were added as possible criteria. Data is now filtered on SensorX machine rather than on Process Unit. A site can also be selected; this will simply be presented on the report's header as a "Supplier."

## Slaughter Control

### **Inspection header records available for KillFloorOperationResult**

InspectionHeaderRecords can now be added to the KillFloorOperationResult

### **Support added to VInspectionCE to receive and handle iRailLocation messages**

Support was added to the VInspectionCE station to receive an iRailLocation message and handle it instead of going through the Slaughter control rail location configuration. This change makes it possible to connect the station to the process rail system.

The following configuration properties were added to the station:

- **ProcessRailLocation:** selects the rail location the station should listen to for trigger action; will automatically lookup animal. By default the lookup value is inserted into the animal lookup field control.
- **ProcessRailLocationLookupFromIdContainer:** indicates if the animal lookup should be from the IdContainer, the HookId, or UniqueId; is used as a lookup in the proc\_rcids table and from it the animal record is found from the IdContainer.UnitId.
- **ProcessRailLocationCreateNewAnimalIfNotFoundUO:** if set then an animal is automatically created if not found on trigger action.
- **ProcessRailLocationFindAnimalFromHookId:** indicates if the animal lookup should be from the incoming HookId.

Additionally, a button was added to create a new animal on the station. The kill number will increase incrementally but can be overridden by the operator.

### **Prevent old, sequenced animals from being re-added to queue**

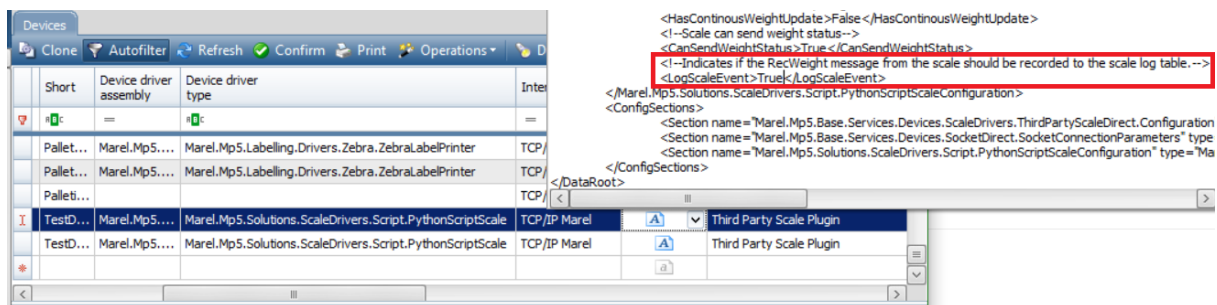
A configuration was added to prevent old, sequenced animals to be sequenced again when clicking the history grid control.

## Solutions

### Third-party scale improvements added

The Python script for the scale driver is now cached.

A new configuration property, **LogScaleEvent**, was added to the Marel.Mp5.Solutions.ScaleDrivers.General.GeneralScale (also the PythonScriptScale, InterpreterScale and others). If set to true, when a RecWeight message is received from the scale, it is recorded in the ScaleLog table.



Additionally, a global variable, **deviceRecord**, was added to the PythonScriptScale. It can be accessed in all the methods in the PythonScale driver. The variable contains the device record of the scale.

### Improvements added to IndividualGradingStationCE

- Added a new configuration, a nullable property CharacterLimit, to the TextInputFieldSettings to control the number of characters allowed in they keyboard input fields.
- Added a new configuration property, ShowNextAnimalButton, to the IndividualGradingStationCE to display the Next Animal button. When the button is pressed, a lookup is made for the top animal with the IndividualTopLookupCriteria.
- Added a KillNumber field to the IndividualSearch view in the IndividualGradingStationCE. Also added a DisplayAutoButton configuration property that indicates if the Auto button should be visible or not.
- Added a new configuration property, ShowLogPanel, under DisplayPanel in the IndividualGradingStationCE, which indicates if the LogPanel should be displayed as well when displaying the DisplayPanel.
- Added DefaultValue configuration property to the IndividualGradinStationCE, to control the default values for the matrixes in the station.

- Added CondemnAnimalUO configuration property to IndividualGradingCE. This adds a button for running a unit operation to condemn an animal.
- Added UseSpeciesSelectionScreenAndUseMaterialFromYieldGroup configuration property to IndividualGradingCE. Yield group material has highest priority, then species and finally fixed material.
- Added RequireTareForRecording to the configuration of IndividualGradingCE. When true the Record button will not be enabled if a tare is not selected/set.
- Support for updating date values in the input fields with the current PrDay has been added to IndividualGradingCE.
- Custom labels were fixed in the IndividualSearchView in IndividualGradingCE.

## **TransferTapGate standard yield extension implemented**

The TransferTapGate creates a material transaction based on the weight in the message it receives, and uses the product which is active on its Process Unit. The TransferTapGate class now has an optional configuration which uses standard yield trees to modify the weight received. In certain scenarios the weight in the message is not the correct weight of the dropped product, but rather it is the weight from the last weighing point, which may have weighed the product at an earlier stage of processing, and which will have modified the actual weight. To use this feature, the active product on the process unit must have a Bill of materials (BOM) attached to it. The BOM must have one ingredients product. The ingredients product is uniquely only once in the Yield Trees.

In the TransferTapGate XML configuration, set UseYieldTreesToCalculateWeight to True. NumberOfLevelsInYieldTreeToTraverse indicates how many levels up will be traversed to calculate yield. At each level the yield in the node will be multiplied to the current yield. The parent node's yield is not multiplied.

### Example

The input message indicates a weight of 10kg. The process unit's material is Boneless Thighs. NumberOfLevelsInYieldTreeToTraverse is 3.

The nodes that are traversed are Boneless Thighs (50%), Thigh Boneless (50%), Thigh Bone in / Bone Less and With Bone (n/a). The resulting yield is  $50\% * 50\% = 25\%$ .

The input weight of 10kg is modified to 2.5kg before creating the material transaction.



6.25 LB	Product	Live Bird 6.25	100,00%	<input type="checkbox"/>
Neck	Product	Neck	3,02%	<input checked="" type="checkbox"/>
Whole Bird Selection	Selection			
Cut Up Bird	Product	Whole Bird	79,68%	<input type="checkbox"/>
Leg Qtr	Product	Leg Qtr	58,03%	<input type="checkbox"/>
Whole Legs	Product	Whole Legs	71,13%	<input type="checkbox"/>
Whole leg selection	Selection			
Without bone	Product	Drums Boneless	100,00%	<input type="checkbox"/>
Drum Skin	Product	Drum Skin	15,49%	<input type="checkbox"/>
Drum bones	Product	Drum Bones	23,70%	<input type="checkbox"/>
Drums bonless	Product	Drums Boneless	55,00%	<input type="checkbox"/>
With bone	Product	Drumsticks	50,00%	<input type="checkbox"/>
Drumsticks	Product	Drumsticks	43,61%	<input checked="" type="checkbox"/>
Thigh Bone in / bone less	Selection			
Thighs boneless	Product	Thighs Boneless	50,00%	<input type="checkbox"/>
Thigh Skin	Product	Thigh Skin	6,60%	<input type="checkbox"/>
Thigh Bones	Product	Thigh Bones	11,57%	<input type="checkbox"/>
Boneless Thighs	Product	Thighs Boneless	50,00%	<input type="checkbox"/>
Thighs	Product	Thighs Bone-In	56,39%	<input type="checkbox"/>
Backs	Product	Backs	28,87%	<input type="checkbox"/>

**Note:** A minor problem with the solution described above was discovered and fixed. For Drums/Thighs, Innova got a message for EACH Drum and Thigh, not each Drop, meaning that the weights were doubled.

To fix this, an additional configuration switch, **DivideWeightByX**, was added. This will, for example, divide the weight by 2 if the value is set to 2 as the Yield Tree is for TwoDrums, not a single one.

### Other improvements to TransferTapGate

- A new configuration property, RecordAveragePathWeightOnWeight, has been added to both Marel.Mp5.Solutions.Stork.Services.TransferTapGate and Marel.Mp5.Solutions.Stork.Services.TransferNetData. If set, any weight higher than the configured weight is ignored and the average weight from the path is recorded. First, it tries to record the weight from the current lot (based on the lot context configurations), then if not the lot, for the whole production day.
- A new configuration was added to Marel.Mp5.Solutions.Stork.Services.TransferSerialData, RecordOnLessThanMinWeight. If set to False, an incoming weight less than the configured MinWeight is not recorded. By default it is set to True.

- So that transactions are not recorded when a weight is under MinWeight, a configuration switch, IgnoreZeroWeightShackles, was added to TransferTapGate.
- Support for lot code was added in TransferTapGate. Also added the AllowOnlyLotWithSIdayCurrentDay switch to TransferTapGate. And a check is performed to see if a lot is found for a given lot code.
- A configuration property to ignore specific products was added. And another configuration property to Record the lot/path average weight when incoming weight is less than x was added.

## **Weighbridge improvements added**

The following improvements to Weighbridge have been added:

- A WeighBridge operator can now ship a single order in multiple shipments.
- A WeighBridge operator can now specify different contents of the shipment so that the system will take appropriate closure action based on the contents of the shipment.
- It is now possible to specify a shipment report to print when the user wants to reprint a shipment so that the correct shipment report is printed.

## **Improvements made to Order fulfillment station**

The improvements include:

- Better error messages were added to the Order fulfillment station.
- A new configuration flag, **CloseOrderRequiresFinishedOrder**, was added to Order-FulfillmentCE. If set, it requires that all packs have been delivered before closing the order.
- A change to make the output processor query also check reserved order on packs.

## **New RailHandler controller implemented**

A new RailHandler controller that is better at multi-threading has been implemented. It requires an Innova system with a functioning PLC/WMS configuration. The new RailHandler consists of a server program and the RailhandlerUnitOpCe IPC station.

Rail locations are created for the locations being used; only two driver classes are being used since they support the new (V2) message protocol.

- Marel.Mp5.Solutions.ThirdParty.Mps.RailLocation.WmsRailLocation
- Marel.Mp5.Solutions.ThirdParty.Mps.RailLocation.WmsConveyorLocation

Create and configure railhandler.exe. RailLocationId is found in the Rail locations form.

# Innova 5.9.1 Release Notes

The new solution can run with or without RailHandler service. If Railhandler service is enabled, instead of running a "backup" unit operation when something doesn't follow a prescribed path, it instead communicates with the IPC station to allow a user to handle the situation.

The RailHandlerUnitOpCE IPC station is the same as UnitOpCE station except with some additional configuration flags.

Once an event is received from the railhandler a unit setup is activated and the following values are added the context:

- railhandlerevent.EventReason
- railhandlerevent.RailEvent - contains the following values
  - railhandlerevent.RailEvent.HookId
  - railhandlerevent.RailEvent.Uniqueld
  - railhandlerevent.RailEvent.LocationPosition
  - railhandlerevent.RailEvent.FinalDestination
  - railhandlerevent.RailEvent.Tag
  - railhandlerevent.RailEvent.RailType
  - railhandlerevent.RailEvent.EventTime
- railhandlerevent.Weight
- railhandlerevent.Destination
- railhandlerevent.Exception

An optional script ID can be configured in the RailHandler configuration. This causes RailHandler to execute a script on a rail event, scale event, no weight event, or no unit found event.

## Traceability

### **Changes to changeover supply lots**

Changes were made to the changeover supply lots. If a supply lot is a changeover lot and should be removed after x seconds and the lot is added again to the supply list, instead of creating a new process lot for the forwarded lot, the remove time of the lot is updated so a new process lot is not created for the lot. This can be useful on a PDS line when using multiple kill-lines that then are combined into fewer cut-up lines and the lots are constantly changing.



## Unit operation station

### Unit operations station improvements added

A configuration switch, **UseInvariantCultureForDateTime**, has been added in the XmlDataStore global configuration. If it is set to true, the invariant culture is always used in view context data. An example of an invariant culture for 1st of May 2009, at 09:00 o'clock is 05/01/2009 09:00:00.

Another new property, **FilterWhenTyping**, filters data in the lookup parameter when the operator is typing.

### Context configuration functionality added to RailUnitOpsCE

The thin configuration enhancement introduced in the 5.9.0 release for the UltimateStationCE and the UnitOpCE has been expanded to RailUnitOpsCE. This option allows Innova service consultants to configure multiple packing stations or unit operations stations quickly. When you click **Configure** in the user interface for the specific CE, the Context designer option will appear. The Context designer contains only those few configuration flags that need to be different between stations, such as ID or source process unit.

For the RailUnitOpsCE form the context configurable properties are:

- RailLocation
- Printers
- Destination process unit
- Source process unit
- Process unit override
- Station override

One other minor change was made to the RailUnitOpCE. If the configuration switch DoNotLoadRailBarcodeUnit is set then labels are reloaded on rail received.

## WPL

### Various improvements made

The following improvements were made to WPL:

- A new configuration flag, **UseCombinedTare**, was added to Marel.Mp5.OptiPack-.Services.Stations.WplPackController. If set, the combined tare is calculated from the Material and sent down to the WPL.
- WPL/OCM: Added support for rotation, also on right to left machines. The machine hand is currently taken from the device XML as it is not yet provided by the machine.
- Added a switch, **HandleActivityChanges**, to prevent anything happening on the WPL when the activity changes. By default this is set to True.
- Added a switch, **Simulate2DRotation**, to fix an issue with 2D barcodes not rotated by the WPL9000. That causes the coordinate transformation to be wrong. By default this is set to True.
- Updated the WPL backend to be able to support both TL-9 and A600 grader.
- Added a switch, **FilterOrderByUnitOp**, to the WPL-OCM packing screen (WplPackingStationCE) to filter order lines by Line type status. In order to enable the filtering set the switch in the WPL station XML to true.
- If the WPL outfeed conveyer is very short, and there is a TL-9 mounted back-to-back with the WPL, then the TL-9 can send its "good pack" message to Innova before Innova receives the pack message from the WPL. If Innova receives a "good pack" from the TL-9 and hasn't received a pack message from the WPL with the same sequence number, it was dismissed as unknown. To fix this, a switch, **AcceptEarlyPacksFromTL9**, was added. If true, then Innova can accept early "good pack" messages from the TL-9 (good pack messages received by Innova), before the pack message from the WPL. By default this is set to False.
- To fix an error with importing a comformat from the database, the layout type is set to WplOcm when importing a Delford comformat from the database.
- Added switch, **IgnorePrescanPacks**, to ignore Infeed Scan failed packs. (These packs are often generated because the optics are broken without a real pack.) By default this is set to False.
- To fix an issue where Last Items on the WinUI screen were doubling up and it was not possible to select the correct Last Item with Item's External code, the screens LastItem and LastPack now use the **PackItemViewConfig** when specifying the text shown on the buttons. The default button format is "{0}\n{1} - {2}\n{3} - {4} {5}".  
[0]: Order name, [1]: Item Id, [2]: Reg.Time, [3]: Mat.Name, [4]: Nominal weight, [5]: Unit,

# Innova 5.9.1 Release Notes



[6];Price.

To have the look and feel for the last item/last pack screen as before this change was made, the format should be:

"{3}\n\{1}\n\{2}"



## Yield Control

### **Improvements added to handle weights from two types of scales**

Two new yield scales for Logiflex devices were added to the Yield Control module. Logiflex\_YieldScale and Logiflex\_YieldScale\_ProductList are now both supported. For information about how to install and configure these, see the latest version of the *Innova Yield Control Installation and Configuration Manual*.

### **Change to pack operation of yield device**

Changes were made when executing the pack operation of the Yield device. Now the incoming pieces are added to the OperationData.UnitPieces.

## Upcoming enhancements

### I-Cut 145 support added

In preparation for the release of the I-Cut 145 portioning machine, basic support has been added in Innova. The I-Cut 145 is a dual lane portioning device that will cut the product first into strips, then turn the product 90 degrees and cut the product into strips again, thus producing a "cube" cut.

You will, for example, see the option to install the I-Cut 145 Front and I-Cut 145 Back in the Portioning Quick Config. Program editor support for the I-Cut 145 is also in place so that field tests can be performed. Dashboards and reports do not yet exist for this particular machine.

Some other "behind the scenes" changes to support the I-Cut 145 have been made, such as how raw materials are handled and handling for the two co-dependent lanes.

A release date for the I-Cut 145 is unknown.

### Salmon palletizing and labeling solution

The development of the salmon palletizing and labeling solution continues. This solution delivers empty boxes to graders where whole salmon are graded and packed into the boxes. At various points the boxes are weighed, ice is added, and the boxes are labeled before being placed on pallets. A manual rework station and a manual packing station are also part of the solution.

It is unknown when this solution will be finalized and released.

### IMPAQT for ATLAS

NOTE: This is customer-specific development, not to be installed at other customers.

Atlas isn't released yet but you'll see a number of changes in the system related to this project. Projects that are part of this include [easier poultry KPIs](#), IMPAQT, changes to TapTransferGate and TapTransferNet in Packing, and more.

# Innova 5.9.1 Release Notes

The ATLAS control system has been created for live bird handling in crates. The ATLAS system is built up by setting multiple modules together. In Innova, this includes the following:

- CAS Interface or CAS for ATLAS
- Destacker
- Hang-in
- Pallet-lift
- Stacker
- Take-off
- T-junction
- Tray-transfer
- Washer interface
- Stack transfer
- VDL interface (interface to system for automatically unloading trucks)

Innova for ATLAS is built upon the existing Inventory and Traceability modules. OEE can also be used.

Innova for ATLAS is scheduled to be released in version 5.9.2.

## Easier poultry KPIs introduced

NOTE: This is customer-specific development, not to be installed at other customers.

New calculators have been introduced for poultry KPIs. The system consists of a Setup form, system program, and a view extension to the Lots form.

KPI data is calculated by the `kpicalc.exe` system program at a configured interval. The data is grouped by production day and material type (if configured in the Setup form). For example, if dark and white meat are weighed on same process unit/path, you might want to use the material type to distinguish between correct products.

If the calculated data is unchanged for three intervals, it is closed and not calculated in the next intervals. Example: If the interval is set at 20 minutes, the KPI data for a production lot needs to be unchanged for 3x20 minute (60min) intervals to be closed. Manually recalculating from the Lots form can re-open calculations if they have changed.

When a new production day event starts everything is recalculated for the day before (that just ended) and then calculations get the status *Final*.

## Innova 5.9.1 Release Notes

The KPI types supported and available in the Setup form are:

Received	Information about received birds; usually comes from WeighBridge.
Live bird	Information about Live birds weight/count; usually comes from SmartWeigher. If SmartWeigher is not installed, then this number might be calculated as (Received - DOA).
Without giblets	Information about WOG weights/count.
Dead on arrival	Information about DOAs.
Reject	Information about Rejected birds weights/count.
Whole bird without giblets	Whole bird count/weight to whole bird area drop.
Cutup	Whole bird count/weight to Cutup area drop.
Wip whole bird	Head count/weight to Wip area.
Whole bird processed	Whole bird actually processed in whole bird area.
Caps	Caps dropped to cutup area. Weight is always estimated.
Wip caps	Caps count/weight to WIP area.
Caps processed	Caps count/weight actually processed as Caps.
Wip whole bird reintroduced	Head count/weight from WIP.
Wip caps reintroduced	Caps count/weight from WIP.
White meat	White meat weight
Dark meat	Dark meat weight
Frames	Frames weight
Backs	Backs weight
Giblets	Giblets weight

# Innova 5.9.1 Release Notes

Packed	Packed weight
Whole bird packed	Whole bird packed weight/count
Live bird weight to cutup	Live bird weights/count to cutup area - always calculated figure.

The system comes with 11 standard calculators which can be chosen from the Setup form. They all calculate the weight and count by summarizing data from process lot material transactions and divide equally between the protein supply lots. When either weight or count data is missing from transactions they are estimated from other figures.

The calculators supported are:

Not Set (default calculator)	Calculates weight and count by summarizing data from process lot material transactions and divide equally between supply lots. Use when birds are counted and weighed.
DOA weight	Calculates estimated DOA weight from live bird figures and the DOA count. $\text{Weight} = \text{average live bird weight} * \text{DOA count}$ . The weight column is marked as estimated. Use when DOAs are only counted and not weighed and live bird data has already been calculated.
DOA count	Calculates estimated DOA count from live bird figures and the DOA weight. $\text{Count} = \text{DOA weight} / \text{average live bird weight}$ . The count column is marked as estimated. Use when DOAs are only weighed and not counted and live bird data has already been calculated.
Reject weight	Calculates estimated rejected birds weight from live bird figures and the rejected birds count. $\text{Weight} = \text{average live bird weight} * \text{rejected birds count}$ . The weight column is marked as estimated. Use when rejected birds are only counted and not weighed and live bird data has already been calculated.
Reject count	Calculates estimated rejected birds count from live bird figures and the rejected birds weight. $\text{Count} = \text{rejected birds weight} / \text{average live bird weight}$ . The count column is marked as estimated. Use when rejected birds are only weighed and not counted and live bird data has already been calculated.
Wip whole bird count	Calculates estimated WIP whole bird count from whole bird data and WIP whole bird weight. $\text{Count} = \text{WIP whole bird weight} / \text{average whole bird weight}$ . The count column is marked as estimate. Use when whole birds to WIP

# Innova 5.9.1 Release Notes

	are only weighed and not counted and whole bird data has already been calculated.
Whole bird processed	Calculates both weight and count of whole bird processed. Count = whole bird count - WIP whole bird count. Weight = whole bird weight - WIP whole bird weight. The weight and count column are marked as estimated. Use when whole bird data and WIP whole bird data has already been calculated.
Caps count	Calculates estimated caps going to WIP count from WIP caps weight and caps weight. Count = WIP caps weight / average caps piece weight. The count column is marked as estimated. Use when WIP caps are weighed and not counted and caps data has already been calculated. Can be used for WipCaps and WipReintroduced.
Caps processed	Calculates both weight and count of caps actually processed as caps. Count = Cutup count - Wip caps count. Weight = Cutup weight - Wip caps weight. The weight and count column are marked as estimated. Use when cutup data and wip caps data has already been calculated.
Live weight bird to cutup	Calculates both the weight and count of live bird which were used in the cutup area. It uses the actual avg. live bird weight and actual avg. whole bird average weight in conjunction with the Cutup (whole birds to cutup) to create an estimation of the weight of the live birds which went to the cutup area. This number is used to get the AMF yield against live bird per AMF line. Weight = Live bird to cutup weight * (avg live bird weight / avg whole bird weight). Count = calculated weight / avg live bird weight. The weight and count column are marked as estimated. Use when live bird and whole bird data has already been calculated.
Pieces count	Calculates weight and count by summarizing data from process lot material transactions and divide equally between supply lots. Difference from default calculator is that it uses count value in transactions and not negs. Use when birds are counted and weighed.

## Bugs list

The following bugs were addressed in this release:

QC import export window is empty

FP - SPC viewer - thinner lines, reduce tool tip, sigma limits bug, unhandled exceptions, button not visible

Bug ultimate station and MU1 scale with special tare and accepted weight calculation. Operation step bug fix

FP - dashboards - Value not visible in "alarm and list" component

Checkweighing issue after upgrade

QC - Valuelist does not order by sequence

FP - template import - Description of a configuration is not precise

FP - template import - Filter does not work properly

Duplication of Folders when employiye logs out of PDA

Throtteling time for Zebra printers is too small for long prints (+100 labels)

OEE signal dashboard time scale not visible

THD - Stopping and starting THD plugin leaves trace resources open and not disposed

QC Import/Export: Import file deserializer fails to load types through GAC

Data for the TMS - CL Histogram report is giving seriously wrong results.

OEE - Fix issue with null EventList in ViewModel.

Subrecipe bugfix

Recipe - Alternative Ingredient Tolerance

FP - FPMan - Device (TRP) offline to FPman but in real it is online

OEE - Rehang unit dashboard indicators on wrong position

OEE signal map

FP - line setup and history gird - Fixing general issues to make it easier to use

OEE - Can't set stopreason on OEE web screen

Error in QC valuetype after upgrading Innova to 590

FP- Line profiler/Device control - False positive on program download

OEE - After using quickinstall the configured PDS line is not taken over in the plugin

Badly formatted email address causes report exporter to crash

Process - UnitOperationStation - Random error in the lookup editor

FP - Spelling mistakes - Correct two spelling mistakes

OEE - Alarm selection in plugin config crappy when no alarms are installed.

WPL fails to download comformat after lot change

FP - OEE - no data in "stop reason history" even though other reports contain data

OEE production overview report figures

# Innova 5.9.1 Release Notes

[GPS quadrant does not update in Marine Pack](#)  
[Recipe - 'Undo' Button on UI to Reverse Transaction Not Working](#)  
[590 Release test - Outbound Shipment when clicking on Stop designing](#)  
[A wrong registration in a QC inspections occurs when pressing "Done" when finishing inspection](#)  
[Packing station IPC displaying the wrong packed quantities](#)  
[FP - recipe editor - capabilities should unavailable when 'sequential group' is selected](#)  
[UnitOpMasterCE using the Parameter for the Tare Set now showS the ID rather than the Name](#)  
[Flexicut - V-Cut settings, Walking stick](#)  
[Bug in Flexicut program editor in Innova](#)  
[OEE LBH - line restraint before or after failure](#)  
[OEE - Data from EV line being registered in the Chill line](#)  
[Base - Pda - UnitFinder trace switches are not correctly closed](#)  
[QC Import/Export Errors](#)  
[EM - Dashboarding - Fix User level check in State Tile dashboard](#)  
[FP - Weight not registered to the inspection item](#)  
[Add missing Atlas module types](#)  
[WPL: Fix Field Type constants as there are duplicates.](#)  
[Don't send product list when prday changes](#)  
[Recipe - CreateBatchOrderExtension Master Recipe Batch Size](#)  
[Recipe - Unable to Record Water as Existing Supply](#)  
[IDS-1479 - Custom Report Export does export criteria but without criteria's XML data](#)  
[IDS-1457 - Error when logging out of Innova through the file menu](#)  
[IPP-753](#)  
[IDS-1341 - Error in report: "Inventory ageing](#)  
[IDS-1347 - Error in report: "Inventory expiry"](#)  
[IDS-1433 - Differences in QC results made on QC station and RT-220 station](#)  
[FP - Line Profiler - Access control for program download not initialized correctly](#)  
[FP - Alarms - alarm owner drop down not available at some entries](#)  
[Recipe system slowing down](#)  
[IDS-532 - Invalid configuration-dialog](#)  
[Error in QCscanman collecting data](#)  
[IDS-1268 - Unit operation station freezing](#)  
[FP - SPC viewer- Y-axis scales not correctly](#)  
[FP - SPC viewer - no automatic update after changing recipe selection](#)  
[FP - SPC viewer - values on X-axis of viewer is not understandable](#)  
[FP - SPC viewer- chart typs should have the same way to shown selected data](#)  
[FP - runchart - scaling of y-asix does not work](#)



# Innova 5.9.1 Release Notes

## Bugs for customer

IDS-1462 - 590 Release test - Error when opening the Unit Operation log

FP - OEE - Fix issue with production monitoring not getting the correct combined capacity of entities in line

Quick Config - Second lane gets no name, can't create programs for that lane

Fix PLC alarms plugin for B&R (5..8.2. stable)

PrintLot can't print stream layout from a pluginhost module

GRun V-Cut settings disappearing

Marel.Mp5.QC.UI.Common.SelectStationUnitInspectionCE is not working

QC man crashing in 590

590 Release test - Error popup after "Confirm" button was clicked.

Bad shackle report move away from oeeentitysingle

Program editor crash when opened.

Group by prday in proc\_packs bug

GridBottomColumnSum error message bug

OEE Quickinstall issues

WPL: The weight on the comformat printed on the WPL and one printed on an Intermec printer may be 0.01 off

OEE - Fix default signal map for generic lines to not require the running signal for running state

Websocket - Dist folders in source control prevent the postbuild step of the web socket projects on a developer PC

Wcf import handler does not populate Raw data in Import log

WPL - DelfordTL9 - General fixes

Process - CreateItem - Fix deadlock when creating UnitPackaging

Solution - GeneralScale - Scale connection is still alive after Activating Device Configuration

Fix increasing delay in processing data

Boxsorter does not execute plugins on gate decision when using plugins

AssignIdContainer unit operation does not handle empty strings as invalid

Exception when running SensorX PiecesBonesThroughputReport

Recipe - Scanning material bug fix

IDS-401 - First tab using "open on startup" is corrupted, no menu, no toolbar, subsequent tabs are ok

IDS-691 - SensorX & Missing data on Lane 2

Issues with 5.9.0 installation and upgrade

[IDS-1402] Inspection results - Items not showing correct when grouping by PO

IDS-1251 - SensorX - fix reports

IDS-836 - Dashboard from Slicing quick config doesn't work properly

IDS-1095 - QC Scanner: Can't clone program to another prunit

# Innova 5.9.1 Release Notes

[IDS-1294 - Missing translation for objecttemplate column in grading programs form](#)  
[IDS-758 - MS2730Lite support: Problems with Alarms and reports](#)  
[IDS-1370 - Planning Application Crashes on open.](#)  
[Run result lane issue](#)  
[IDS-1227 - Grading Run Result Lane Issue](#)  
[IDS-1325 - Standard run result report for Robobatcher](#)  
[IDS-994 - Robot program deleted from database instead of being set inactive](#)  
[IDS-1177 - Grading RunResult report german translation contains wrong characters](#)  
[Fix bugs in cutting operator dashboard](#)  
[SensorX QuickConfig crashes when trying to open](#)  
[OEE figures trend report percentage figure](#)  
[IDS-1318 - Fix exception in Filleting Overview report for MS2730](#)  
[Issues with UnitOperationCE after upgrading to 590 connected to DC Scale with Automatic Recording](#)  
[Portioning - BxxMessenger no longer works](#)  
[OEE LBH - line restraint before or after failure](#)  
[OEE - LBH break outside schedule detection](#)  
[CustomFlock Report - SQL Query won't run anymore](#)  
[Receiving error when trying to clear out the qc\\_nonconformities table](#)  
[QC Scanner - Product and Id columns are missing from the Program Editor](#)  
[Salmon Slicer - It should not be possible to use the Slicing Line Quick Config to setup a standalone slicer](#)  
[Use GetDBDateTime](#)  
[Portioning - Quick Config - Process unit equivalence is not set for the two prunits belonging to the I-Cut 610M, can't run programs on second lane](#)  
[FP - IPC OEE tab - Button has not function and should be grayed out](#)  
[OEE - OeeMan freezes when heavy load](#)  
[ProductionValue report throws error upon launch](#)  
[Fix Select report view extension in the Report Exporter form.](#)  
[Investigate traceability and inventory data](#)  
[Labeling - Adding GS1Databar barcode to label crashes WinUI in V5](#)  
[QC - Error in IPC when choosing an item](#)  
[Checkweighing - Product Info components sometimes shows "No Product" when it shouldn't](#)  
[When importing grading programs, batch mode Average Optimal is not available](#)  
[CreateItem/CreatePack - Not working if CreateCombinedPackaging Details checked](#)  
[PDA QC - Issue when launching a QC inspection from a process PDA](#)  
[Incorrect Data in columns / Columns missing](#)  
[Packing Station & Unit Count laggin 1 behind](#)

# Innova 5.9.1 Release Notes

Productname cannot be shown fully on Marinepack Collection Central "Super Samler"  
YieldControl - Logiflex yield scales testing  
PDA QC - Error message on PDA Qc procedure when using Express or double express on Fast lane field for the responses  
QC item with valuetype objectId : Impossible to select a value when filtering by Code  
OEE deadlocks  
WPL9500/plus "save" or "save/run", It won't update  
WPL - Innova not sending product programs to TG9 device after Innova upgrade to 5.9.0  
OCM Exception, when using three applicators  
QC - AllowSaveInProgressWithoutSignature does not work according to manual  
Labeling - getting WPL fonts throws and error in V5  
OEE - OEE Production Overview Reports shows double data  
Labelling - revert namespace changes for barcode components  
WPL - Product List Unit Operation Overrides  
Portioning - ICut130 - Fork settings exception  
FP run chart - Out of memory exception when getting large amount of data  
FP - IPC - Batch stauts is not updated on the IPC  
OEE - remove PAM add PDA in primary dashboard plugin.  
Can not run more than one ClientInstall at a time  
FP - device program template - changes in the template even though no person made a change  
Recipe - Production Step - Enter Weight Method Bug  
QC import export window is empty  
OEE - Default UI package contain invalid reports  
Grader quick config - compact grader  
2019-T3 Grading Maintenance  
Grouping product lines on the A600 will result in data loss in Innova  
Grd\_history table is not always populated =>CL histogram report on TMS randomly missing pieces  
IDS-600 - Required parameters in TMS product settings not enforced