ECO's in Odoo

Version info

2021/08/09	First version of document
2021/10/26	Update for Multiple ECO's
2022/11/08	Update Odoo process and add Solidworks Product Data management (PDM) storage
2023/01/24	Update the Process to discuss the documents tab in Odoo

Table of Contents

About ECO's

Enconnex ECO

Enconnex uses ECO's (Engineering Change Order) to make modifications to the process or Materials used by production. The QMS procedure is here:

📄 QMP-4-015 Ver 3.0 Engineering change control procedure.pdf

How we implement the procedure is through our ERP system Odoo. The ECO has several pieces of information

This accomplishes several goals:

- It modifies the qty's and types of material used to assist in maintaining accuracy in the stock of materials.
- It provides notifications to the Quality department to ensure that assembled products are inspected and checked for quality.
- It updates the Work orders to indicate the correct components, qty's, and major process steps. and provides simplified access to the current procedures for production personnel.

However, it is only a tool, and training still needs to be done for many of the actual workers performing the tasks. Additionally many other things may be affected by the changes, for example Purchasing may need to modify the types and quantities of materials that are ordered, Quality may need to develop inspection criteria, the Product manager may need to have marketing materials updated, etc. So in addition to the above goals, ECO's also provides a method to inform all responsible parties, when, and how the changes are to be made.

This is accomplished by the signoff process for each ECO.

Single vs. Multiple ECO's

Single ECO's are the standard ECO written in Odoo, and follow the process in ECO Process

Multiple ECO's are used in special cases where the same change, or a nearly identical change will happen to more than one product. In this case, it is convenient to group all of the similar ECO's together and approve them all with a single Verification process, and a single Approval process.   The individual ECO process is still followed, but additionally a group is created that allows all of the approvals to be given by the approvers with a single step.

The ECO's still show up in the Kanban board under the "Multiple ECO" category. Additionally, naming rules allow us to identify which ECO's are grouped into multiple groups.

There are several special rules that apply only to Multiple ECO's:

- Use the Multiple ECO Page to view the grouped ECO's
- When creating an ECO group, You must create the ECO through the Multiple ECO process, it cannot be created as a single ECO and then added to the group.

- ECO's can be created through the Multiple ECO process until the "Start new Revision" button is pressed. After this point any new ECO must be done either singly or as a separate group ECO.
- When Verifying Multiple ECO's be aware that you are taking responsibility for that you have verified each of the attached ECO's.
- Approve Multiple ECO's Any approval or stage change done to the group affects all members of the group including:
  - It is possible to change the stage of an individual ECO, but the stage will be overridden by the stage change for the whole group. (for example if ECO0100is in stage "Approvals" and it is part of an ECO group; if the group is moved to "Draft" stage, ECO0100 will also be moved from "Approvals" to Draft, and will require new approvals to move up again.) A consequence of this is that if a particular ECO in the group needs to be expedited, it can be, but it will also be transitioned back to move with the group ECO. (for example, approvals are given for only one ECO from the group, and it is moved to the complete stage. When the group ECO is transitioned to a different stage, the expedited ECO will be moved out of the "COMPLETE" stage and into wherever the rest of the group ECO has been moved to.
  - Approvals and rejections can be given to individual ECO's, but an approval given at the group level will override the individual and apply to all ECO's in the group.
- In the Multiple ECO Group, the "BoM Changes" tab lists all of the changes for all BOM's without obvious indication of what the changes apply to. It is therefore recommended that review be done on the individual ECO to see what applies to that particular part number/skew.

Critical ECO Notes

1. Each affected part number and skew needs a separate ECO (including with the Multiple ECO Process).

2. BOM's are not just a list of Parts used to make a product. They also include the process steps that a product will take as it moves through the production process. The "Operations" Tab of the BOM lists the assembly steps. Each step is updated to include Instructions and procedures used to make a product.

3. Be careful when modifying BOM's. If you access the BOM through the ECO (top right button on the ECO screen), you will be modifying the new "Archive" BOM, but if you access the current BOM, you could very easily modify the active BOM. **!!Don't modify the active BOM!!** this should always be done through an ECO.

ECO Process in Odoo

The ECO follows a Kanban process which has 5 stages/steps:

1. WIP (Work in Process):

This is the first stage where the ECO and all associated documents are drafted or changed. When all of the updated documents are ready, the Author approves the ECO and moves it to the Verification stage.   Author also sends a message to another subject matter expert asking them to verify the ECO. Do the following:

    a. [Create the ECO](#)
    b. Ensure that you address all of the information as the Author from the [Quality Procedure](#)
    c. If the changes you are making require external documents create them and attach google drive links into the "Notes" tab of the ECO
    d. If necessary [Make a new Bom Revision](#), and /or Modify the BOM
    e. fill in the Notes section of the ECO. The notes must contain all relevant information about Why the change is being made, What is changing, any information available about statuses of products being changed.
    f. All documents must have a link to the location where the document is being stored that have been changed are referenced with one of the 3 following instructions:
        i. **Release**- tells document control that this is new and should be saved
        ii. **Revise**- tells document control that new versions of the documents need to be saved and old versions need to be archived
        iii. **Obsolete**- tells document control that the old versions need to be archived.
    g. ECO's can be modified at any time. When all changes are made and the ECO has all the correct information [Approve the ECO](#) as the Author.
    h. Move the ECO to "Verification"
    i. Change status on any PDM documents to "Submit for Verification"
    j. Send a request to another subject matter expert to Verify the ECO

2. Verification:

The Author will ask another subject matter expert to look at all of the documents, BOM's, and the ECO to make sure that all of the changes have been correctly made. If they are not, either the Author or the Verifier can make updates to ensure accuracy, but both need to agree that the documents are correct. When all of the changes have been verified. The Verifier will approve the ECO, and move it to the Approvals stage. The Verifier follows these steps:

    a. [Open the ECO](#).
    b. Note what your responsibilities are as verifier from the [Quality Procedure](#)
    c. Verify the ECO
        i. Read the Notes field and verify that you understand exactly what is being changed and why based on the description.
        ii. Look at any comments or notes in the chatter section of the ECO and evaluate that any issues have been addressed.

iii. if applicable, open the BOM. Make sure that any updates to the BOM are correct including both to the "Components" and ensure that the "Operations" have all necessary instructions and documentation attached

iv. From the ECO, make sure that all documents that have been changed are referenced with one of the 3 following instructions:
1. **Release**- tells document control that this is new and should be saved
2. **Revise**- tells document control that new versions of the documents need to be saved and old versions need to be archived
3. **Obsolete**- tells document control that the old versions need to be archived.

v. Verify that each referenced document is correct and has all changes made, title boxes are correct, etc.

d. If all good, Change the status on any PDM documents to "Submit for Approvals"
   i. This will create a new revision of any PDM archived documents. Remove any documents that have the old revision number from the BOM and/or ECO, and attach the appropriate documents with the new revision

e. When all changes are made and the ECO has all the correct information Approve the ECO as the Verifier.

f. Move the ECO to "Acceptance"

g. Send a message to appropriate approvers for each approval category asking them implement and approve the ECO.

3. Acceptance:

At this stage, the ECO should be technically accurate, since it has had 2 subject matter experts look at and review the change. This stage notifies the rest of the stakeholders that actually implement the changes what is being changed. The stakeholders may have additional questions, or identify things that were missed in regards to their department. They should address issues or questions to the Author and/or Verifier and notes should be taken in the chatter to describe any changes or issues identified. When each stakeholder understands what actions they will need to take due to the ECO, they will approve the ECO, and it will be moved to Released. Each stakeholder should follow these steps:

a. Note what your responsibilities are to your department from the Quality Procedure
b. Open the Kanban Board
c. Select the ECO in question.
d. Evaluate how the ECO applies to your department.
   i. Read the Notes field and verify that you understand exactly what is being changed and why based on the description.
   ii. Look at any comments or notes in the chatter section of the ECO and evaluate that any issues have been addressed.
   iii. Evaluate the BOM changes to see if they have any relevance to your department.
   iv. Make notes in the chatter section describing any actions that you will be taking to make the changes occur.

    v. If applicable, open any referenced documents to evaluate their impact on your operations.

  e. When all changes are understood, and the ECO has all the correct information, [Approve the ECO](#) for your department.

  f. If you are the last Approver, notify the author.

  g. **Author or Verifier** will

    i. Change the status of the ECO to "Release"

    ii. Change the status of documents in PDM to "Submit to Document Control"

4. Release

At this stage, the ECO should be technically correct, all parties will have taken action to make sure that when the ECO is complete, the change will actually occur in the correct timeline. Therefore all that is left is to make the BOM's in odoo active, and to save all documentation to the company [Compendium](#). These steps are all taken by Document Control and will be:

  a. Note the responsibilities of Document Control are in the [Quality Procedure](#)

  b. [Open the Kanban Board](#)

  c. Select the ECO in question.

  d. Move the appropriate files based on the description in the "Notes" field of the ECO. They will be referenced with one of the 3 following instructions:

    i. **Release**- tells document control that this is new and should be saved

    ii. **Revise**- tells document control that new versions of the documents need to be saved and old versions need to be archived

    iii. **Obsolete**- tells document control that the old versions need to be archived.

  e. If PDM documents are included, change their status to "Release Documents", this will move each document to the "Released" directory in PDM.

  f. If PDM documents need to be obsoleted, change their status to "Obsolete", this will move the Files to the "Archived" directory.

  g. When all documents are saved, [Approve the ECO](#), and [Apply Changes](#). This will move the ECO to "Complete" status, and activate the BOM for all future Work orders.

5. Complete

This is the stage that all ECO's will be in after they have completed the process. Note: If an ECO in this stage is transitioned to a previous stage of the Process, it will need all approvals as required in the original ECO release, so view with caution.

Step by step instructions

Following are instructions to perform the most common tasks in Odoo

Parts of an ECO

Note tab

BoM Changes tab

Routing Changes tab

Approvals Tab

[Return to the ECO Steps](#)

View the Kanban board

1) Open Odoo or if already in Odoo go to the home screen
2) Open the PLM module by clicking on the "PLM" icon.
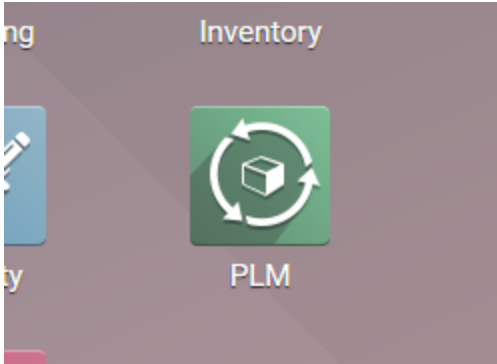
3) In the "Standard ECO" box, click on the "xx ENGINEERING CHANGES" Button to view the Kanban board.

4) Note that if an ECO is named "ECO_____: Multiple _____for product_____ it is a group ECO and follows special rules. See Single vs. Multiple ECO's

Parts of an ECO
Return to the ECO Steps

Create a Single ECO

1) View the Kanban board
2) Press the "CREATE" button to create a new ECO

PLM Overview / Engineering Change Orders

CREATE

Draft		Verification	
	3		
ECO1134: test eco		ECO0460: ECX-BV1724121-(	

3) Fill in the Boxes:

Short Summary
Change To BOM 720-0002-71

Type	New Product Introduction	Responsible	Benjamin Luke
Apply on	○ Product Only	Effectivity	● As soon as possible
	● Bill of Materials		○ At Date
Product	720-0002-71	Tags	
Bill of Materials	720-0002-71		

Note   Approvals

Description of the change and its reason.

    a) Add a brief description of the ECO purpose to the "Short Summary" field.

    b) Choose if it needs a Bill of Materials update

    c) **Select** the Product, and Bill of Materials number(if applicable)
       !! you can type a number or skew into the system, but you must select by clicking on the shortcut that appears below, otherwise Odoo will attempt to create a duplicate. If the Product or BOM does not exist create the BOM and set it's version to 0, Leave the rest of the BOM blank. you will add parts and operations as part of the ECO process!!

    d) Check that you are listed as the "Responsible" person.

    e) Choose Effective Date

    f) In the "Note" tab provide a detailed description for why the change is being made this is likely what most of the approvers will read to understand what they need to do. Follow the Quality Procedure
       !! This is the most important field for the ECO, it gives the context of why the ECO is written. It will be used by the approvers to understand how to implement the change, and in the future it will likely be used to explain why the ECO was necessary both by Enconnex employees, and outside auditors!!

4) Press "Save" to save the ECO.
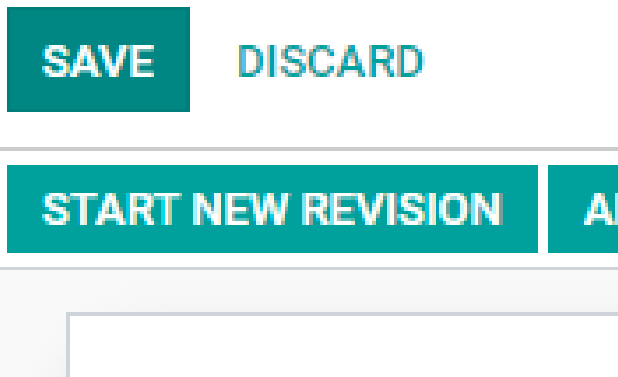
[Return to the ECO Steps](#)

Make a new BOM Revision

Once the ECO is created, you can now make the actual changes to the process. These won't go into effect until the ECO is in the "Complete" stage, but they allow you to see what the end result will be.

1) Create a [new ECO](#) or open an existing ECO from the [Kanban board](#)

2) Press "Start new Revision" this only needs to be pressed once per ECO. It will:
   a. Copy all "Components" and their qty's of the currently active BOM
   b. Copy all "Operations" of the currently active BOM including all attached documents
   c. Increments the version number, and sets the status of the new copy as "Archived" aka not currently active. (you can view the version number on the "Miscellaneous" tab of the BOM). When the ECO is moved to the "Complete" stage, the currently active BOM will become Archived and the BOM attached to this ECO will become Active.
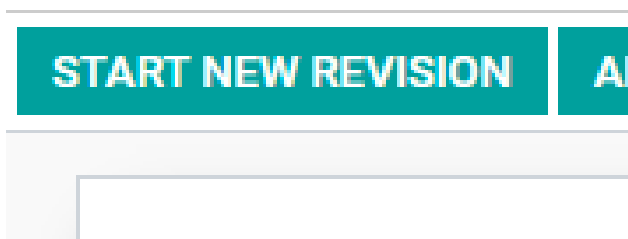
[Return to the ECO Steps](#)

Modify the BOM

1) Select the "BOM Revision :xx" button.
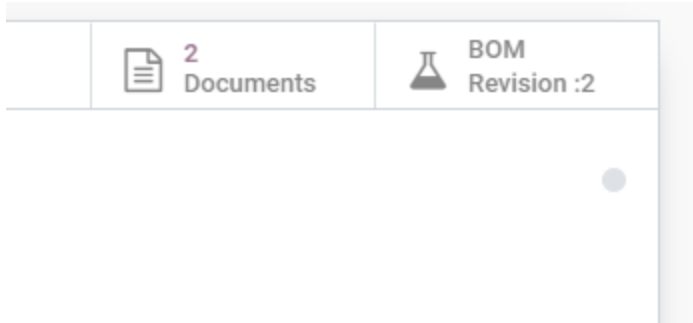
2) The BOM that will be active when the ECO is released will be displayed with the "Archived" icon across the top right corner.
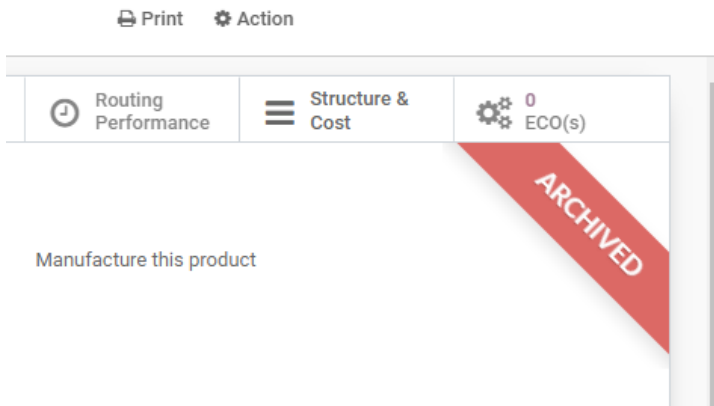
3) Press the "Edit" button
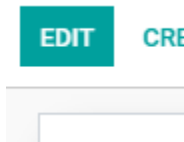
Modify Components

4) Select "Components" Tab.
5) Add, Remove, or Modify the component(s) used, Quantity, and Unit of Measure.

Modify Operations

6) Select "Operations" sometimes labeled "Routing" Tab.

| Components | Operations | By-products | Miscellaneous |

Operation

✛ Assemble rack

✛ Test and install RCU

7) Select the Operation that needs to be changed, deleted or added

8) Modify the Operation Name, Work center, duration, and description and upload any associated Files

Operation	Assemble rack	Duration Computation	○ Compute based on tracked time
Work Center	Warehouse floor ▾ ⬈		● Set duration manually
Bill of Material	ECX-ER5M-42U60-A01	Default Duration	60:00 minutes
		Company	Enconnex LLC ▾ ⬈

Work Sheet

Work Sheet	○ PDF
	○ Google Slide
	● Text
Description	Assemble per released instructions

SAVE DISCARD

9) When finished press the Save button to exit the popup window.

Save the BOM

10) When finished with all ECO changes, Press the "Save" button for the ECO.

SAVE **DISCARD**

11) At this point you will likely want to go back to the ECO, use the Use the Navigation list at the top of the page to Navigate back to the ECO main page

ders / ECO0011: Change To BOM 720-0002-71 / 720-0002-71

🖶 Print

12) Return to the ECO Steps

Attach Related documents to an ECO

There are 3 places that a document can be attached to an ECO. Documents used for Quality verification should be attached to the "Documents" tab. All other documents attached to the ECO are for Reference only as a courtesy to the acceptors

Attach Documents for inspection: "Documents" tab

Documents used for inspection of a product when it is received are uploaded to the "Documents" Tab of the ECO. When the ECO is released, this will perform several tasks. It will attach the document to the Product, and it will create a QC inspection point for the product.

1) With the ECO in edit and in the approvals stage attach the drawing to the documents tab.

Short Summary

ECO1488: Initial BOM release for Sennheiser PSU Tray 2

Type	Standard ECO	R
Apply on	Bill of Materials	E
Product	441-8111-01	
Bill of Materials	441-8111-01	
Company	Enconnex LLC ▾ ☑	T
		C

| Note | BoM Changes | Routing Changes | Approvals | Documents |

Documents	Document ▾
Attachments	🔗 ATTACHMENTS

2) Save the ECO

3) [Return to the ECO Step](#)

Attach documents for Reference to ECO

Any documents attached to the BOM are considered "For convenience" and are not controlled documents, a link to the controlled document must be included in the "Notes" section of the ECO.

1) Press the "Documents" button of the ECO.
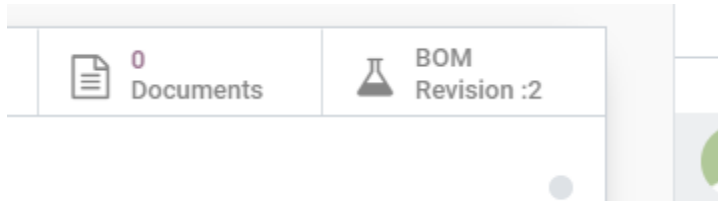
2) Press the "Upload" button
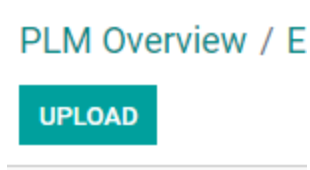
3) Select the appropriate files for upload.
4) [Save the ECO](#)
5) [Return to the ECO Step](#)

Edit an ECO

1) With an ECO open (If not, [open the Kanban Board](#), and select the correct ECO)
2) Press the "Edit" button
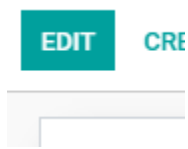
3) Make any necessary changes to any of the tabs. You don't need to Edit the ECO to [Edit the BOM](#) or to [add documents](#).

Save ECO

1) When all changes to the ECO are done press "Save"

2) [Return to the ECO Steps](#)

View ECO Changes

1) Open the ECO Kanban board.
2) Select the ECO that you will be evaluating.

3) To view the changes to the Bom and Routes, you can navigate to the associated tabs to view the things added, removed, or updated.

4) Return to the ECO Steps

Approve ECO Changes

1) Click on the Approvals tab. When you have verified that everything is finished and correct, and you have taken any necessary actions click on the "APPROVE" button.

PLM Overview / Engineering Chan

EDIT   CREATE

APPROVE | REJECT   UPDATE DOCUMEN

ECO0111: Release BOM for

2) The "Approvals" tab will allow you to see who has or has not approved the change.

Note	BoM Changes	Routing Changes	Approvals				
Role		**Approved by**	**Status**	**Approval Date**	**Approval Stage**	**Req**
Corporate Managment			Not Yet		Validation	Ro
Engineering Management		Benjamin Luke	Approved	02/12/2021 16:07:18	Validation	Be

3) If all approvals for a stage are complete, move the ECO to the next stage.

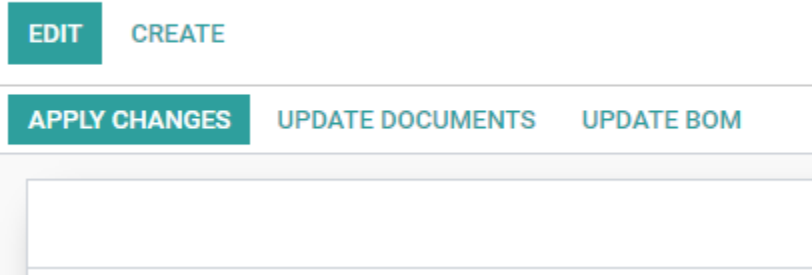| DRAFT	VERIFICATION	APPROVALS	RELEASE	COMPLETE

0 Documents

BOM Revision :2

4) **Send out a message in the ECO Log to all of the appropriate verifiers requesting that they approve the ECO**
5) Return to the ECO Steps

Release the ECO

1) Press the "Apply Changes" button

PLM Overview / Engineering Change Orders / ECO

EDIT CREATE

APPLY CHANGES UPDATE DOCUMENTS UPDATE BOM

Return to the ECO Steps

Open the Multiple ECO group page

1) From any location in the PLM module, (See View the Kanban Board)
2) Open the Multiple ECO group page by selecting "ECO"-"Multiple ECO"

PLM ECO Changes Master Data

PLM Overview

Overview
My Pending ECO
Multiple ECO
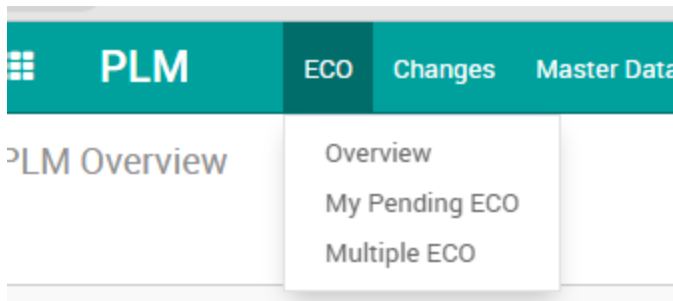
Return to Multiple ECO Steps

Create a new Multiple ECO group

1) Open the Multiple ECO group page
2) Press "Create"

Create Multiple ECO's

Search...

CREATE

▼ Filters   ≡ Group By   ★ Favorites

☐ Reference	ECO Reference
☐ Multiple A test	ECO1144, ECO1145
☐ Multiple Release drawings for 728-05XX-XX	ECO1122, ECO1123, ECO1124
☐ Release drawing for 728-04XX-XX	ECO1105, ECO1106, ECO1107, ECO1128
☐ Release drawing for 728-33XX-XX	ECO1097, ECO1098, ECO1099, ECO1100, ECO1101, ECO1102, ECO1103, ECO1104
☐ Release drawing for 728-34XX-XX	ECO1091, ECO1092, ECO1093, ECO1094, ECO1095, ECO1096
☐ Release drawing for 728-35XX-XX	ECO1075, ECO1076, ECO1077, ECO1078, ECO1079, ECO1080, ECO1081, ECO1082, ECO1083, ECO1084, ECO1085, ECO1086, ECO1087, ECO1088, ECO1089, ECO1090

3) Enter the information about the group of ECO's that will apply to the ECO

a) Type "**Multiple**" and a very short description that applies to all of the included ECO's in the "Short Summary" field. The first word **MUST** be "Multiple". This description will be the basis for the description of all attached ECO's, and the word "Multiple" will be the clue to verifiers and approvers that this is part of an ECO group.

b) Select the ECO type (it will always be "Multiple ECO" for groups of ECO's). Once the ECO's have been created they can't be moved from one group to another

c) Choose if it needs a Bill of Materials update or will just be in regards to product documentation.

d) Check that you are listed as the "Responsible" person.

e) Choose Effective Date

4) In the "Note" tab provide a detailed description for why the change is being made this is likely what most of the approvers will read to understand what all of the ECO's are about, and what they need to do. Follow the Quality policy: 📄 Engineering change control procedure.pdf

> **!! This is the most important field for the ECO, it gives the context of why the ECO is written. It will be used by the approvers to understand how to implement the change, and in the future it will likely be used to explain why the ECO was necessary both by Enconnex employees, and outside auditors!!**

5) When you have completed the form press the "Save" button to create the ECO group

**The ECO's have not been created yet, only the ECO group.**

Return to Multiple ECO Steps

Add Products to the ECO Group

1) Open the ECO Group that you will be working on from the Multiple ECO's page
2) Press "Edit" to Edit the Multiple ECO

Create Multiple ECO's / Multiple A test

3) Do not press Create ECO's at this time. Instead on the Multiple ECO's TabCreate the individual ECO's in the Multiple ECO group press "Add a line"
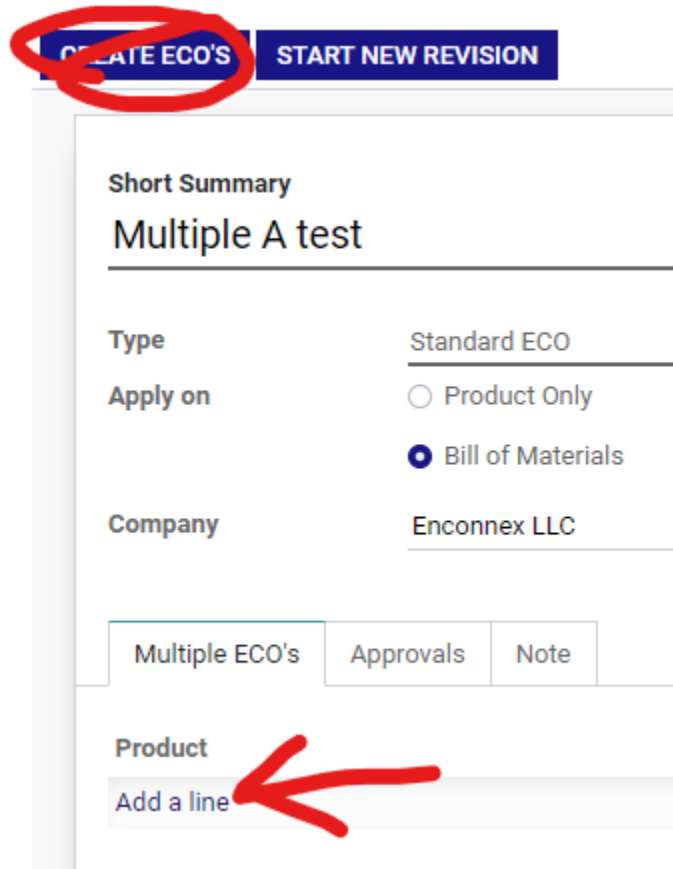
a. Each affected product (skew/Part Number) will need its own line. Enter the Part number for each of the affected part numbers or skews
    i. Under the "Product" Heading **SELECT** the Product, and Bill of Materials number(if applicable)
    !! you can type a number or skew into the system, but you must select by clicking on the shortcut that appears below, otherwise Odoo will attempt to create a duplicate. Both the Product and if necessary, the BOM must exist in order to be added to the BOM list. Unlike in the standard ECO you are not given the option to create a new BOM from this list, But you must first create the Blank BOM and set it's version to 0!!
    ii. to remove a line, click the "X" at the end of the line (remove any "blank" lines to avoid issues in the next steps.)

4) When you have added all of the affected products press the "Save" button.

The ECO's have not been created yet.

Return to Multiple ECO Steps

Start the Multiple ECO's

1) Open the ECO Group that you will be working on from the Multiple ECO's page
2) Ensure that all of the information for the group is correct
3) Press the "Create ECO's" button to create the ECO's
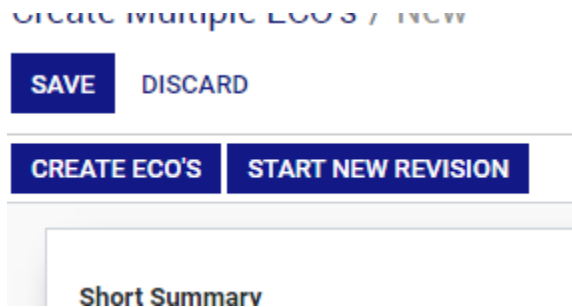
4) A button will appear on each ECO line to allow you to look at each ECO.

A new ECO number will be assigned to each ECO, and it will be visible in the appropriate column of the ECO Kanban board.

5) Press the "START NEW REVISION" button to create a new revision for each ECO. A new button will appear for "View BOM"

Company	Enconnex LLC		Tags

Multiple ECO's	Approvals	Note	BoM Changes

Product	Bom		
ECX-CAT5E-24AWG-AQ-0.5FT	ECX-CAT5E-24AWG-AQ-0.5FT	VIEW ECO	VIEW BOM
ECX-CAT5E-24AWG-AQ-10FT	ECX-CAT5E-24AWG-AQ-10FT	VIEW ECO	VIEW BOM

!!Note: ECO's can be added to the group until the "Start new Revision" button is pressed. After this point any new ECO must be done either singly or as a separate group ECO.!!

Return to Multiple ECO Steps

Make changes with Multiple ECO's

Changes to **each** part number or skew are done in the ECO in the same manner as the ECO process in Odoo. You will need to make the changes to each individual Skew in order for them to go into effect.

1) Select the ECO that you would like to make changes on one of the two following ways:
   a. Select the ECO in the "Multiple ECO's" kanban group from the PLM Overview page

PLM Overview

Standard ECO	⋮		Multiple ECO's
50 ENGINEERING CHANGES	My Validations	25	**0 ENGINEERING CHANGES**
	All Validations	25	

   b. select the ECO from the ECO group page.
      i. Follow instructions in Open the Multiple ECO group page
      ii. Select the ECO group that you wish to view

CREATE	⬇

☐	Reference	ECO Refe
☐	ECO to release multiple CAT5E cables to production number 2	
☐	ECO to release multiple CAT5E cables to production	ECO0347

      iii. select the ECO you would like to modify by clicking either the "VIEW ECO" button or go directly to the BOM for the ECO by clicking the "VIEW BOM" button

Company	Enconnex LLC			Tags

Multiple ECO's	Approvals	Note	BoM Changes

Product	Bom		
ECX-CAT5E-24AWG-AQ-0.5FT	ECX-CAT5E-24AWG-AQ-0.5FT	VIEW ECO	VIEW BOM
ECX-CAT5E-24AWG-AQ-10FT	ECX-CAT5E-24AWG-AQ-10FT	VIEW ECO	VIEW BOM

2) Edit the ECO and BOM as described in the Draft section.

    Return to Multiple ECO Steps

Verify Multiple ECO's

As noted above, it is possible to Validate and approve all of the ECO's from a multiple BOM at once. However, be aware, by approving you are indicating that you have checked each of the BOM's for accuracy, and found them to be correct. It is important to check each BOM individually to ensure that it is correct.

To Verify all of the BOM's with one validation it must be done from the ECO group page which looks similar to this:

ECO to release multiple CAT5E cables to production

Type	Standard ECO		Responsible	Benjamin Luke
Apply on	Bill of Materials		Effectivity	As soon as possible
Company	Enconnex LLC		Tags	

Multiple ECO's	Approvals	Note	BoM Changes

Product	Bom		
ECX-CAT5E-24AWG-AQ-0.5FT	ECX-CAT5E-24AWG-AQ-0.5FT	VIEW ECO	VIEW BOM
ECX-CAT5E-24AWG-AQ-10FT	ECX-CAT5E-24AWG-AQ-10FT	VIEW ECO	VIEW BOM
ECX-CAT5E-24AWG-AQ-10M	ECX-CAT5E-24AWG-AQ-10M	VIEW ECO	VIEW BOM
ECX-CAT5E-24AWG-AQ-12FT	ECX-CAT5E-24AWG-AQ-12FT	VIEW ECO	VIEW BOM

1. Follow instructions in Open the Multiple ECO group page, select the ECO that you wish to view

CREATE ⬇

	Reference	ECO Refe
☐	ECO to release multiple CAT5E cables to production number 2	
☐	ECO to release multiple CAT5E cables to production	ECO0347

2. select the ECO you would like to view by clicking either the "VIEW ECO" button or go directly to the BOM for the ECO by clicking the "VIEW BOM" button
3. View each ECO and it's changes, and ensure that they are correct
4. If all ECO's are correct press the "APPROVE" button for the ECO group.

5. When all approvals have been made, the ECO group can be transitioned to the Approvals state. Be aware that all documents from Each ECO will need to have it's status changed in PDM to "Submit to ECO Process"

NOTE: Changing the status of the ECO group will change the status of all individual ECO's

Return to Multiple ECO Steps

Approve Multiple ECO's

As noted above, it is possible to approve all of the ECO's from a multiple ECO at once. However, be aware, by approving you are indicating that you understand what the ECO is changing, how the change will affect your department, and that you will ensure any necessary actions are taken.

To approve all of the BOM's with one approval it must be done from the ECO group page which looks similar to this:

ECO to release multiple CAT5E cables to production

Type	Standard ECO	**Responsible**	Benjamin Luke
Apply on	Bill of Materials	**Effectivity**	As soon as possible
Company	Enconnex LLC	**Tags**	

Multiple ECO's | Approvals | Note | BoM Changes

Product	Bom		
ECX-CAT5E-24AWG-AQ-0.5FT	ECX-CAT5E-24AWG-AQ-0.5FT	VIEW ECO	VIEW BOM
ECX-CAT5E-24AWG-AQ-10FT	ECX-CAT5E-24AWG-AQ-10FT	VIEW ECO	VIEW BOM
ECX-CAT5E-24AWG-AQ-10M	ECX-CAT5E-24AWG-AQ-10M	VIEW ECO	VIEW BOM
ECX-CAT5E-24AWG-AQ-12FT	ECX-CAT5E-24AWG-AQ-12FT	VIEW ECO	VIEW BOM

1. Select the ECO group from the ECO group page.
   a. Follow instructions in Open the Multiple ECO group page, select the ECO that you wish to view

CREATE ⬇

	Reference	ECO Refe
☐	ECO to release multiple CAT5E cables to production number 2	
☐	ECO to release multiple CAT5E cables to production	ECO0347

2. Evaluate the group ECO and if necessary each associated ECO to the same standards as you would as in the single ECO approval process.
3. If everything is covered, any you have taken any appropriate actions, make a note in the Chatter section describing the actions you have or will take, and press the "APPROVE" button to approve all of the ECO's
4. If you are the last approver, Notify the ECO author that

NEW MULTIPLE ⟩ IN PROGRESS MULTIPLE ⟩ APPROVALS MULTIPLE ⟩ **RELEASE MULTIPLE** ⟩ COMPLETE MULTIPLE

5. The document control department will approve the change, save the files and Press the "APPLY CHANGES" button to make all of the changes effective. This will cause the updates to become active. Important. This will not affect Manufacturing orders that are already in existence. Only new manufacturing orders will use the new information. Additionally, all of the ECO's will be moved to "COMPLETE MULTIPLE".