

# **CEG-KO-04-I SEWS Packaging Guidelines**

Sumitomo Electric Wiring Systems, Inc.  
Wire Harness Production Management Business Unit  
Quality Assurance Department  
Component Evaluation Group  
12/20/2023

# PURPOSE

- This standard specifies the CEG general requirements of mass production shipment packaging for wire harness components that were kicked off by Sumitomo Electric Wiring Systems Procurement Division El Paso Procurement Department.
- Initial concept packaging specification (PSDS) is submitted after New Project Kick-off Meeting. Initial concept packaging is required on an as needed basis and will be discussed at kick off.
- Official packaging specification (PSDS) is submitted along with PV test package. Official PSDS is needed for all new projects kicked off by Sumitomo Electric Wiring Systems Procurement Division El Paso Procurement Department.

# SEWS Involved Departments

- El Paso Customer Service Center Material Control Dept.
- K&S Aguascalientes Material Control Dept.
- Procurement Division El Paso Procurement Dept.
- Quality Assurance Dept. Component Evaluation Group
- T&S Mexico Supplier Quality Assurance Dept.

## Resin Type: Nylon

- **General Requirement:** Nylon parts must be moisturized and enclosed in plastic bags prior to packaging and shipment. Moisturization is required if there is a specification in the drawing and/or Inspection Standard.
- **Type of Water (for moisturizing nylon components)**
  - SEWS strongly encourages that suppliers use distilled water in order to control and minimize the amount of minerals that appear on the plastic parts after the moisturizing process.

# Resin Type: Nylon

- **Type of Plastic Bags**

- SEWS recommendation is 4mil plastic bag.
- Plastic bag may be 3 mil (below 3 mil is NG), only if shipping trial is conducted with no issues or no concerns observed by SEWS Quality Assurance.
- The judgment criteria for the packaging trial is to verify the size, quantity and severity of holes on the plastic bag at the final destination.

- **Method of Closing Bags**

- SEWS recommendation is heat sealing. This requires equipment such as the ULINE tabletop poly bag heat sealer.
- Other types of sealing are acceptable only if shipping trial is conducted with no issues or concerns observed by SEWS Quality Assurance.
- The judgment criteria for the shipping trial is to review any damage or breakage to the components at the receiving destination.

# Resin Type: Nylon

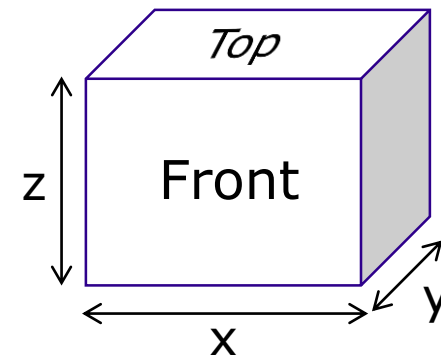
- **Quantity of Components in a Bag**

- The quantity of components stored in a plastic bag depend on the size of the component and the availability of the bag sizes at the supplier site.
- Example 1: Protector, Corrugate Clamp, etc. - SEWS recommends up to 50 pieces per bag. If the components can easily get tangled up, SEWS recommendation is to lower the quantity to up to 25 pieces per bag.
- Example 2: Small components such as Clip, Clamp, etc. - SEWS recommends a bag quantity of up to 300 pieces per bag.

# Resin Type: Nylon

## • Type of Package/Packaging

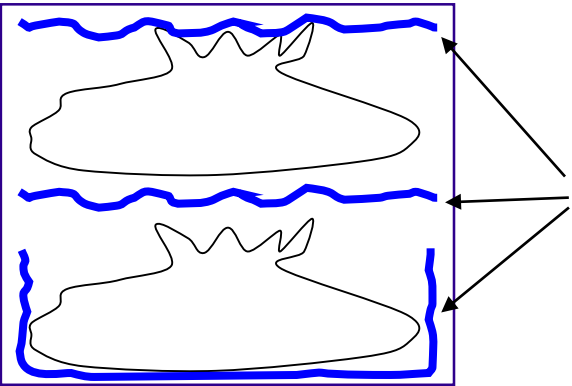
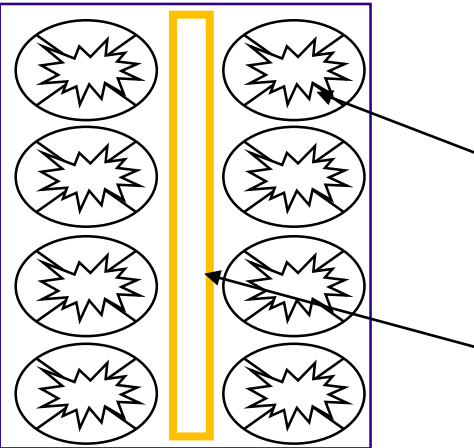

- SEWS recommends using bubble wrap on the bottom of the cardboard box to minimize external stress during the shipment. In addition, if a plastic bag is loaded on top of another bag, additional bubble wrap should be utilized to divide the two plastic bags.
- SEWS recommends using a cardboard divider to separate and protect one side of plastic bags from another side. The divider helps not only to separate the bags, but also to strengthen the box in the z-axis in case many boxes are stored on top of each other. See below image and next page for examples.
- How bags are stored inside the box depends on the size of the component and also the availability of the box sizes at the supplier site. SEWS recommends up to 2 layers and up to 8 bags in a row as the maximum capacity. This is subject to discussion and negotiation.



# Resin Type: Nylon

## • Package Illustration

- The illustration below is an example of packaging style.

<p>Side View</p>  <p>Bubble Wrap</p> <p>2 Layers Max (Recommended)</p>	<p>Top View</p>  <p>Individual Sealed Bag</p> <p>Cardboard Divider</p> <p>8 bags max (Recommended)</p>
<p>Example</p>	<p>Example: (Cardboard Divider)</p> 

## Resin Type: Polypropylene (PP)

- **General Requirement:** Parts must be shipped in a way that does not damage or dirty the parts within the packaging. Plastic bags are not required, but can be beneficial in some situations.
- **Type of Plastic Bags**
  - Plastic bags are not required; however, the use of the bag should be considered. SEWS may require the use of plastic bag based on the shipment trials and/or wire harness assembly trials.
- **Method of Closing Bags**
- SEWS has no specific requirement or expectation for method of closing the plastic bag (if used in MP packaging).

# Resin Type: Polypropylene (PP)

- **Quantity of Components in a Box**

- The quantity of components per box depend on the size of the component and also the availability of box sizes and shapes at the supplier site.
- The quantity of components should be discussed at the time of quoting and as necessary during APQP.
- Example 1: Protector, Corrugate Clamp, etc. - SEWS recommends up to 50 pieces per box.
- Example 2: Small components such as Clip, Clamp, etc. - SEWS recommends a box quantity of up to 300 pieces per box.

# Resin Type: Polypropylene (PP)

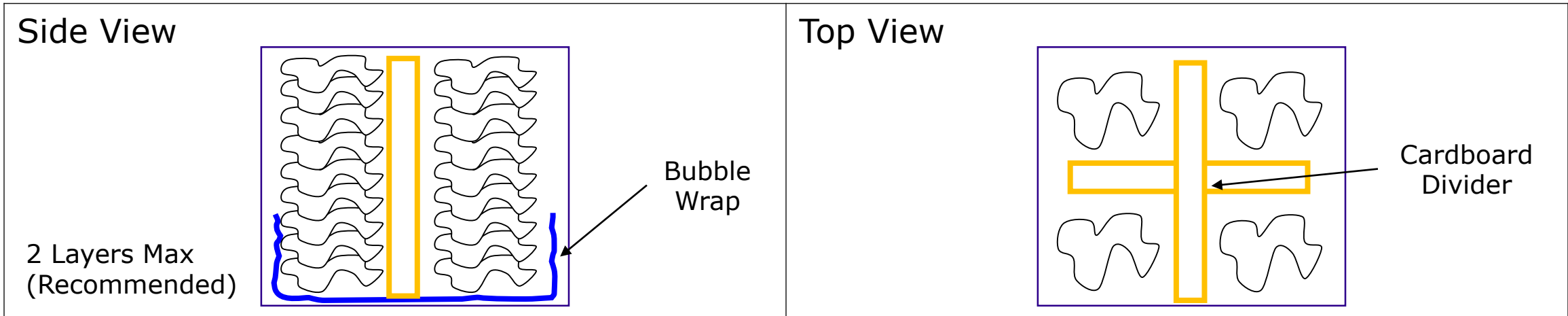
- **Type of Package/Packaging**

- SEWS recommendation is to use bubble wrap on the bottom of the cardboard box to minimize external stress during the shipment.
- SEWS recommends to have a cardboard divider to separate and protect one side of stacked parts from the other side. The divider helps not only to separate the parts, but also to strengthen the box in the z-axis in case many boxes are stored on top of each other.
- How components are stored in the box depend on the size and shape of the component as well as the availability of box types at the supplier site. The quantity and size of the box are subject to discussion and negotiation.

# Resin Type: Polypropylene (PP)

## • Package Illustration

- The illustration below is an example of packaging style.



## Examples



## Resin Type: Rubber

- **General Requirement:** Rubber parts must be placed in plastic bags prior to packaging in boxes or returnable containers to prevent cardboard dust from sticking to the rubber components.
- **Type of Plastic Bags**
  - There are no SEWS requirement regarding bag thickness. Supplier can choose a plastic bag based on bag availability at the supplier site; however, if any issues arise regarding bag integrity or damage during shipment, SEWS will request for improvement.
- **Method of Closing Bags**
  - SEWS has no specific requirement or expectation for method of closing the plastic bag (if used in MP packaging).

# Resin Type: Rubber

- **Quantity of Components in a Bag**

- The quantity of components per box depend on the size of the component and also the availability of bags at the supplier site.
- Example 1: Door, Tailgate Grommet, etc. - SEWS recommends up to 50 pieces per bag. If the grommet can easily get tangled up, SEWS recommendation is to lower the quantity to up to 25 pieces per bag.
- Example 2: Small components such as Connector Cover, Door Dash Grommet, etc. - SEWS recommends up to 100 pieces per bag.

# Resin Type: Rubber

- **Type of Package/Packaging**

- SEWS has not specific requirement or expectations.
- How components are stored in the box depend on the size and shape of the component as well as the availability of box types at the supplier site. The quantity and size of the box are subject to discussion and negotiation.

# LEVEL 1 COMPONENTS

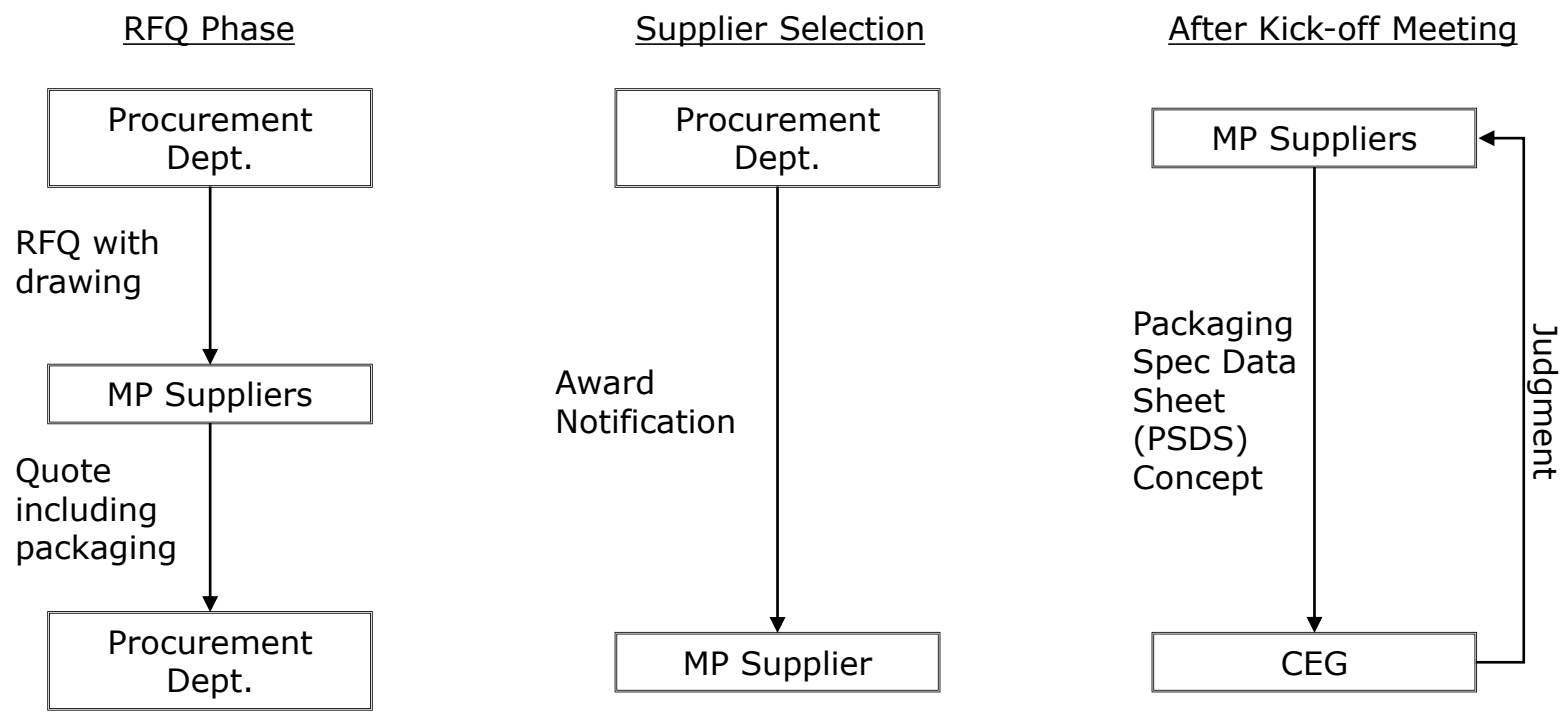
- **Considerations**

- LEVEL 1 components are components that are shipped directly from SEWS supplier to SEWS customers. Quality problems will likely not be caught by SEWS because these components will not go through SEWS wire harness assembly process.
- LEVEL 1 components are treated as high risk components.
- SEWS requests that all of the requirements in this document for PA, PP, and rubber parts are considered for LEVEL 1 components.

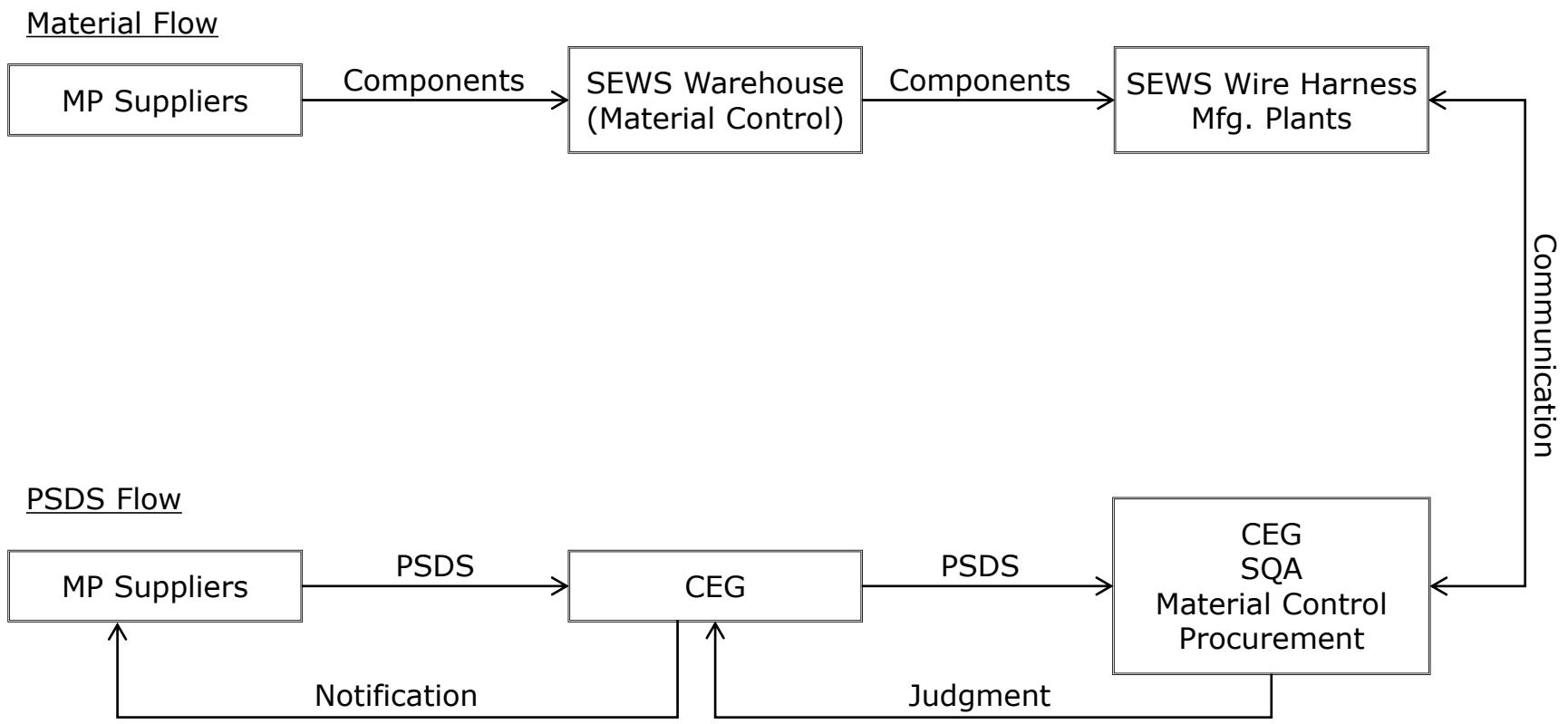
- **Additional Requirement**

- OEM-directed returnable packaging may be required. This will be discussed at quoting and kick-off.
- If parts are to be shipped in cardboard boxes, SEWS requires double-walled cardboard boxes.

# Package Concept Phase



# Package Official Phase (Mass Production)





# SUMITOMO ELECTRIC WIRING SYSTEMS

[www.sewsus.com](http://www.sewsus.com)

SUMITOMO  
ELECTRIC  
GROUP