



Polinas Plastik San. ve Tic. A.Ş.

**GUIDELINE FOR POLINAS FILMS**

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## **1. INPUT CONTROL OF BOBBINS**

### **1.1. ERRORS CAUSED BY TRANSPORTATION**

Our products are under the insurance coverage till it arrives to the stocking area of the customer. In case of a damage caused by transportation, probative evidences should be granted to recover damages from the insurance institution. Thus, the dispatched material should be controlled when it arrives to your storage yard and in case of a damage caused by transportation, Polinas Export / Sales Departments should be informed, and it shouldn't be received before the obligations are performed in the following. Otherwise, it is accepted that the customer bought the damaged material.

- Damages such as breakage of pallets and chipboard, soakage and edgewise crush by transportation should be recorded on the transportation documents.
- An official report should be made and signed by the authorities of transportation company and customer for explaining the damage and informing the amount.
- Determination of the damage and the pictures that show the damage should be added to the official report.

Polinas accepts the returns caused by inaccurate transportation process only if the conditions mentioned above are adopted and they are informed within the 7 days after the delivery.

### **1.2. QUALITY CONTROL OF BOBBINS**

After the product is received within the 7 work days, the compliance of the product with the order details should be controlled and approved by taking into consideration of the following points.

- Type of the product (film codes, thickness)
- Gauges (wideness, extent, internal and external caliber)
- Amount
- Visible quality parameters
- Corona edge and corona level
- Printing area
- Coated surface

Smoothness of the Bobbins and their suitability for usage

In case of nonconformity in the product, Polinas should be informed immediately, damaged product should not be returned without a written approval of Polinas and/ or an invoice shouldn't be drawn out. The packages which are opened should be remade and damage as well as fouling of bobbins should be prevented.

### 1.3. ERRORS THAT OCCUR BY USAGE

In case of a failure in the usage of the product, it should be turned off and Polinas should be informed immediately. Separate and keep damaged product for the control, without a written approval by Polinas, the product should not be returned and an invoice shouldn't be drawn out.

- Our customer should not use the damaged Bobbins and should package them in order to avoid fouling and damage and should stock properly with the conditions of BOPP film stocking.
- Even if the damage is caused by the film, in case of the usage of these products by our customers with or without knowledge, Polinas can only accept maximum one standard bobbin. It is expected for the customer to figure out the damage in the first usage. If the bobbin is used more than once customer is hold responsible. Polinas do not accept direct or indirect damages that occur in these situations.
- Errors such as corona inadequacy that occur during the usage are considered by their shelf life stated in the Annex 2. After the mentioned period ends complaints that are informed are not accepted.

## 2. COMPLAINT PROCESS

### 2.1. Report of Customer Complaints:

All complaints should be informed by fulfilling the Customer Complaints Information Request Form (Annex 1) In addition to the type of the complaint, should be sent according to the documentation and samples in the following.

- Pictures that clearly show damages such as sagging, smashed bobbin and transportation damages.
- Printed, unprinted and laminated samples in the problems of adhesion and lamination.
- Problems related with corona caused by a film, opacity, dampness, friction, heat sealing and the sample of 10 layer closed film sheared along with the width and folded properly through bobbin.
- Bobbins which are noted as damaged are placed in pallets avoiding any damage. Instructions by Polinas are expected.
- After the Polinas is informed with the required documents and samples, in accordance with complaint procedure technical departments begin examination. Products that are dispatched to our customers are produced in compliance with our product specs and in case of a problem these specs are accepted as a reference. After the delivery of document and samples based on technical and trade complaints it is concluded within 2 weeks. It should not be forgotten that the details and samples are demanded about the complaint in the Polinas complaint form to provide a better technical service.

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- According to the self quality guarantee system, our customer may use self complaints forms. However in these forms it is required to have information in the Polinas Customer complaints information form which is given in PolinasANNEX.

### 2.2. Technical Service

In case of the reason of the problem in the customer complaints is not found in the investigation made based on Polinas records, bobbins that are considered as damaged can be seen on site. This information is provided by Polinas sales representative. In that case, it is required for the customer to show the evidence of the damage to Polinas technical service. The following should be taken into consideration.

- The products which received complaints are kept ready in a place with the customer and authorized technical service for technical service officer to make an examination. ( Labels of the bobbins, amount of the complaints, reason of the problem and such information should be ready.)
- If an alleged complaint occurs by a machine or during a process, our customer should show the problem on the machine. Thus, this issue should be taken into consideration in the determination of date of travel.
- For the scrap products, which cannot be returned to Polinas in other words the scrap products which cannot be moved, scrap document can be recorded. (See Annex 3)This document states that the damaged products are examined on site. Polinas keeps the right of not accepting a return.
- On the date of the service, in case of technical service is not provided based upon the customer payment for the technical service officer is required.
- After traveling, the Technical Service officer organizes the report regarding the issue of the return, and distributes it to the related units.

### 2.3. Return

- The customer is informed by Polinas Sale Representative about the decision of return regarding the products which received complaints. A service vehicle is sent for the return of the product.
- To dispatch the bobbin, suitability of the service's return vehicle is controlled when the vehicle arrives. Control parameters:
  - Inside of the vehicle should be clean.
  - It should not be wet.
  - Upper part of the vehicle should be closed and covered with canvas, materials should not be affected by the weather conditions.
- The responsibility of the customer is to load the product which will be returned safely and by avoiding any damage.
- After the loading related dispatch information will be informed to Polinas.

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- The return is reviewed by the Quality Maintenance officers and related experts in accordance with the dispatch information of Polinas and the reports of the technical service. Approval is granted. Approval cannot be granted in case of a nonconformity and return invoice cannot be accepted before the agreement is made with the customer.

**3. STOCKING CONDITIONS**

- Bobbins that are delivered should be transferred as packaged by Polinas and stored.
- The temperature of the storage is recommended below 35°C and the relative humidity of the storage is recommended below 60% RH. Otherwise problems such as in the following may occur:
  - Corona level decreases
  - Adhesion decreases, surface may not hold pressure or glue.
  - Coefficient of friction decreases and the control of a film in machinery grow difficult due to abnormal slipping.
  - Dampness increases.
  - Brightness decreases.

Due to abnormal migration of additive agents in the internal layers and ambient air humidity blocking is observed in bobbin corners.

BOPP bobbins should never be exposed to humidity. Blocking caused by humidity causes disjuncture at the time of usage.

The stretch film which covers the pallet for protection should be left on that till the bobbin is ready to be used. Stretches on the pallets and packaging materials should be opened carefully as a little slit on the bobbin while cutting the stretches and chambers on the pallet may make bobbin nonfunctional.

There is a high risk of electrostatic charge on the pallet stretch. Thus, it shouldn't be opened nearby inflammable materials.

Bobbin pallets should not be superposed, an extra weight on a bobbin may cause edgewise crushing and blocking.

Similar stocking conditions are also applied to coated bobbins. It is recommended not to store coated films for a long period.

**4. SHELF LIFE**

Stocking conditions are very important in determining the shelf life of the products. Under recommended stocking conditions taking especially the surface potential and corona values into consideration, determined shelf life is stated in Annex 2. On a higher temperature of 35°C, surface potential of the film decreases in a short time. Film contraction and release as well as corner sagging are caused due to the conditions of temperature differences are higher during the day.

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Condensation in the bobbin corners in a higher humid environment causes blocking due to the temperature differences between day and night, and disjuncture may occur during the bobbin unrolling.

Keeping the temperature below 35 °C and relative humidity below 60 % will remove the possibility of such deformations. Date of production can be accepted as the delivery date.

### 5. POINTS TO CONDITION IN THE USAGE OF BOBBINS

Our customer has the responsibility of controlling the compliance of technical criteria stated in our specs before the usage of bobbins.

#### 5.1. Printing

- Bobbins should be brought to the printing area before 12 hours to bring bobbins to an ambient temperature, and in the cold months of winter, this period should be at least 24 hours.
- The pressing surface of bobbin is stated on its label. Until the pressing lasts bobbin labels should be kept and in case of a problem, the bobbin should be put aside avoiding any damage with its label for complaints.
- To avoid problems that may be caused by electrostatic, it is recommended to use antistatic bar in bobbin solution and before the packaging.
- To get a good result in printing and lamination, corona may be applied but it should not pass the limit of 40 dyne/cm.
- Before the printing, it is recommended to make adhesion tests in a laboratory with the inks which are going to be used by being filmed. Thus, losses that occur in printing cannot be accepted.
- Inks that are going to be used may affect heat sealing and slip specifications. Thus, taking these into consideration while deciding on the right ink will prevent possible damages.
- Corona guarantee cannot be provided due to the surface of metalized films, vacuum metalizing with AL coated surface potential decreases in a high speed. Primer/Priming coat is recommended for the high ink adhesion in AL surface.

#### 5.2. Drying

Ink drying after the pressing is related to the pressing design, specifications of the ink that is used and the design of the drying units and machine speed, it is not possible to set up a drying condition. It is recommended for drying stove temperatures to be 80°C at most. High temperature and tension may cause reduction in the width of the film and register problem in the printing process.

#### 5.3. Winding

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When the printing process ends film should be brought to an ambient temperature. However, the temperature of very low cooling roller in the humid environment can cause blocking due to condensation. Bobbins which are not cooled in the ambient temperatures shrinking can be caused after the winding. Especially in coated films rolling tension should be less than the uncoated. As high tension will cause bending in the film, hard coatings may cause deformations such as cleavage.

#### 5.4. Slitting

In the films that have a cavity it is recommended to use a circular blade for a smooth slitting and in the films with white mixed films ceramic coated blade is recommended.

In the processes of the cold glue it is recommended to make soft winding.

It is required to be certain about smooth spinning of all rolls that are contacted with metalized surface used in slitting of metalized films and it does not damage metalized surface. Otherwise, bar specifications can be damaged.

#### 5.5. Lamination

- To avoid any corruption in the lamination glue and bar specifications of the package in the metalized films, it is recommended to put in the film which is made/ / not to put in the metalized films.
- In the metalized sheet carton lamination which will be made with glues based on water, it is required to take the drying of the glue inside from the glue and prevent it to get wet. Otherwise, water that remains inside the glue can cause corruption/removal in metalized around 15-20 days.
- When using binary component lamination glues, components should be mixed due to the mass ratio of glue manufacturer.
  - Not mixing the components in proper amounts,
  - Reacting with the slip agents in the film and as a result causing friction (sticking)
  - Increasing the temperature of thermal adhesion
  - Decreasing in explosion proof
  - Due to polyurea, hardening of the package occurs
  - Decrease in lamination force
  - In the thermal adhesion films, white image occurs in the adhesion parts.

Antifog films are not recommended for lamination.

- Antifogging active agents are different than other migrating bopp film additives. They may react negatively with laminating adhesive components. Therefore antifogging films should not be used in lamination structure. Its use in lamination is totally under converter's responsibility.
- Any nonconformity related to laminated antifog films or complaints will not be accepted and it is not included in Polinas guarantee scope.



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## 5.6. Packaging

- Bobbins that will be packaged are required to be brought to the packaging area before a day especially in winter. Otherwise, bobbins that are exposed to cold weather and then hot ambient, adhesion problems due to exudation and due to not increasing the film to the required adhesion temperature in the same machine conditions may occur.
- In hot summer days, due to the high temperature in the parts of packaging machine friction problems may occur. As film adheres to the hot surfaces it may stick in the machine. In these conditions sticking a suitable teflon band to the hot surfaces is practical way.

Not: Information provided in this document is valid through our experiences and knowledge. If you would like to have further information please get in contact with Polinas technical units. Provided information and recommendations are out of our control thus they are not included in the scope of guarantee.