

	<b>TECHNICAL SPECIFICATION</b>	INDEX <b>ST/Lamfol/WO</b>
	<b>LAMINATE POLYESTER FILM WITH PE FILM</b>	<b>Edition 2</b>
	<b>Lamfol</b> <b>GENERAL REQUIREMENTS</b>	Date of description <b>08.12.2008</b>
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## APPLICATION

Lamfol films are designed to production packaging of thermoforming method.

## CERTIFICATION FOR CONTACT WITH FOOD

Certification for contact with food is specified in the Technical Specification for each film type.

## FILM IDENTIFICATION

Film wounds are marked with labels located inside cores and outside wounds.

Identification labels contain the following information: logo and manufactured name; production date; film width; wound number; film length; film thickness; tare; net weight; order confirmation number; PE side of laminate (outside / inside); graphical sing – "product certified for contact with food". Pallet units are marked with the label containing the following information: logo; manufactured address and phone; customer name; order confirmation number; material (tread name or type film); pallet number; number of rolls on pallet; roll number and net weight; film thickness; film width; core inside diameter; net weight; gross weight; PE side of laminate (outside / inside); graphical sing – "product certified for contact with food".

**WOUND WEIGHT** is consistent with weight indicated on wound identification labels.

Weight tolerance for a single film:  $\pm 1$ kg

## ORDER QUANTITY TOLERANCE

Order weight	Execution tolerance [%]
$\leq 2000$ kg	$\pm 15\%$
$> 2000$ kg	$\pm 10\%$

## FILM WINDING QUALITY

**Film width:** 120mm – 1300mm

**Film width tolerance:**  $\pm 2$ mm in relation to film width specified in order confirmation and indicated at the wound identification labels

**Maximum external wound diameter:** 800mm

Maximum external wound diameter is consistent with diameter indicated at the order confirmation.

**Internal sleeve diameter** (nominal value/tolerance):

- 152.5mm / +1mm / -1mm

- 76.2mm / +0,5mm / -0,5mm

Nominal value of internal sleeve diameter is consistent with value specified in the order confirmation.

**Sleeve width tolerance** in relation to nominal film width: -0mm / +2mm

**Sleeve advancement** in relation to the front of wound film: -0mm / +2mm

### Film bonding

Maximum number of film bonding in the wound with external diameter  $\leq 400$ mm-1

Maximum number of film bonding in the wound with external diameter  $> 400$ mm $\leq 600$ mm-2

Maximum number of film bonding in the wound with external diameter of  $> 600$ mm-3

Film bonding is made using self-adhesive tape and marked with a red marker protruding beyond wound front, stick in the place of film bonding.

**Quality of film winding at the wound** – film wounds must meet the following criteria and must be free of the following faults

	DESCRIPTION	ALLOWABLE DEVIATION
Damaged wound edge	Film edge in the wound is cut, frayed or torn	No visible damage
Shift of fragments or single film layers in the plane of wound front	Irregular edge	Allowable shift $\leq 2$ mm
Longitudinal crease	Permanent film line deformation in the machine direction (unwinding)	No permanent visible crease at the single film layer subjected to small tension
Transverse crease	Permanent film line deformation in the transverse direction (crosswise in unwinding direction)	No permanent visible crease at the single film layer subjected to small tension

## PACKING

With various methods of packing wounds and forming loading units at the pallets depending on weight and dimensions of film wounds, for each case a protection of film wounds against mechanical damage, dirt or dampness, that may occur during storage or transport have to be provided.

### Packing standards

Width [mm]	Weight [kg]	Packing
$\leq 1400$	$\leq 250$	HORIZONTAL/VERTICAL
$\leq 1400$	$> 250$	HORIZONTAL
$> 1400$	$\leq 250$	
$> 1400$	$> 250$	

## STORAGE

Pallet units must be stored indoors, in dry and clean rooms to avoid soaking, dampness and direct influence of ultraviolet rays and sunlight, that may reduce film properties (smell, mechanical properties, transparency, etc.)

Pallet units must be stored in temperature 15 to 25°C in a minimum distance 1.5 m from active heating devices and other heat sources. If those conditions are not met, process of film ageing may be accelerated.

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### **TRANSPORT**

Film in original packing may be transported using roofed, dry, clean and free of intensive odors means of transportation according to transport regulations, securing load units against shifting, dirt and damage.

### **WARRANTY AND COMPLAINT CONDITIONS**

1. EUROCAST Sp. z o.o. gives quality warranty for laminate polyester film with PE film (trade name Lamfol) for 6 months from manufacturing date.
2. EUROCAST Sp. z o.o. guarantees quality of sold films according to properties contained in the Technical Specifications.
3. Condition to make a complaint is presenting an order documentation (bill or order specification), Quality Certificate, labels of wounds and samples of faulty material or photos enabling fault identification. When the documentation is not complete and complaint is made after warranty period, complaints will not be considered.
4. Complaints must be made during warranty period in writing, with statement of film type, thickness, quantity and description of fault or processing problems.
5. Film must be packed, marked with labels and secured against damage until the complaint is considered (it also concerns return of film to manufacturer's warehouse). Film which is damaged during considering complaint due to improper means of securing or storage (faults not being the subject of complaint are found) will not be considered for complaints.
6. Film cannot be returned to EUROCAST Sp. Z o.o. without written permission of the supplier.
7. In case of quality faults, EUROCAST Sp. Z o.o. will be liable for the actual value of provided faulty material.
8. In case of hidden faults (influencing further processing – printing, laminating, ect.) purchaser is obliged to stop film processing and inform EUROCAST Sp. z o.o. in writing. EUROCAST Sp. Z o.o. will be liable for the cost of processing first two wounds, but no more than 200 kg.
9. EUROCAST Sp. z o.o. will consider the complaint and inform Purchaser about its result in writing within 21 days from making a complaint. In case the film must be tested in the external laboratory, the deadline may be extended to 30 days.
10. In case the complaint is not recognized, Purchaser may order mediatory tests at his cost by independent lab accredited or not accredited but agreed by both parties. Samples for mediatory tests must be taken in presence of an EUROCAST Sp. Z o.o. representative. Mediatory tests carried out for film sample taken without presence of the EUROCAST representative are not considered reliable.
11. In case of deliveries on EUROCAST Sp. Z o.o. cost, purchaser must check if no mechanical damage occurred during transportation – free consignee, DDU base. In case of damage, Purchaser must notify EUROCAST Sp. Z o.o. by phone before unloading. EUROCAST will consider complaints only in case when order documentation (CMR, bill or loading) contains description of product damage signed by the driver.

***	Name	Position	Signature	Date
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