

General technical production and product specifications

In supplement to our Terms and Conditions for Sale, Delivery and Payment ("GTC")

and any special product specifications, the following General Technical Production and Product Specifications ("GTPPS") shall apply. :

1 Deviations \pm in the context of sections 2 to 3 shall be permissible in the case of all deliveries (as well as replacement deliveries)

2 Quantity deviations

2.1 Industrial Flexible packaging industry / CleanFlex® ready-made, reel material / automatic film > 150 my
 15% for quantities < 5 000 units or per linear metre
 10% for quantities < 25 000 units or per linear metre
 5% for quantities > 25 000 units or per linear metre

2.2 Consumer Flexible packaging consumption ready-made, reel material / automatic film up to 150 my, Technical film

30% for quantities	<	10 000 units or per linear metre
20% for quantities	<	25 000 units or per linear metre
15% for quantities	<	100 000 units or per linear metre
10% for quantities	<	1 000 000 units or per linear metre
5% for quantities	>	1 000 000 units or per linear metre

3 Size deviations

3.1 Weight deviations (average weight per unit area)

Kraft sack paper machine-finished (smooth on one side)	4.0%
lined paper	5.0%
Tar and special papers	7.5%
PE coatings	10.0%
PE films	5.0%

3.2 Thickness tolerance of polyethylene films

Deviation from measured average film thicknesses from target value:	5.0%
Spread 2 S of the individual values (S = standard deviation) from the measured average value:	12.0%
(shrink film 15%, pallet shrink 50 – 99 μ m 17%, stretch wrap	20%)

Note

These values apply to single and multi-layer PE-LD films. The spread is up to 3% higher for multi-layer films and films made of other polyolefin materials (PE-LLD, PE-HD, PP).

3.3 Length tolerance \pm

Paper and plastic bags	10.0 mm
Shrink covers	30.0 mm

Liner		20.0 mm
Bags		5.0 mm
Bag CleanFlex®		10.0 mm
Block bottom bag	up to 470 mm	3.0 mm
	over 470 mm	5.0 mm
Run length of reel material	up to 1,500 m	2.0%
	over 1,500 m	1.5%

For production reasons the occurrence of short reels cannot be ruled out.

3.4 Width tolerance ±

Paper and plastic bags with longitudinal seam		5.0 mm
Blown film plastic sacks and liners		10.0 mm
Base width		5.0 mm
Valve width		- 0 + 8 mm
Bags and pouches (bottom width)		5.0 mm
Block bottom bag		
Bag width	up to 320 mm	2.0 mm
	over 320 mm	3.0 mm
Base width	up to 180 mm	2.0 mm
	over 180 mm	3.0 mm
Front and side fold width of:		
Side fold blown film		10.0 mm
Flat film side fold sacks		5.0 mm
Shrink covers and heat-shrinkable tubing film		20.0 mm
Reel material, seamed (measured on the outside of the reel)		
Paper and composites	up to 500 mm	1.5 mm
	over 500 mm	2.0 mm
PE film	up to 500 mm	5.0 mm
	over 500 mm	7.5 mm

4 Manufacturing errors

Our products are predominantly customer bespoke materials produced completely mechanically. Our goal is to supply to the satisfaction of the customer.

However, for technical reasons manufacturing errors cannot be completely ruled out and up to a max. 0.5% of the order quantity shall not constitute defect or justify claims for consequential losses.

5 Dyeing of films

The master samples agreed shall be binding; the right to slight deviations and/or fluctuations is reserved.

6 **Print colours**

The colours used correspond to the state of the art in terms of wear resistance, light-fastness and waterproof qualities. The quality standard achieved depends crucially on the printed material.

7 **Quality deviations**

The quality characteristics agreed at order acceptance shall be binding for us. The relevant, valid national and international standards shall apply with regard to the testing methods. In individual cases testing methods based on DIN, ISO, EN or other common or reasonable methods, such as specific solutions of measuring equipment manufacturers shall be used. Deviations and fluctuations within the tolerated ranges shall not justify complaints. In the event of doubt the evaluation by an expert appointed by the Münster Chamber of Industry and Commerce shall be binding for both sides.

8 **Storage information**

- 8.1 For the products delivered by Bischof + Klein storage is recommended at 15 - 35°C and 45 - 75% relative humidity. They must be protected against UV radiation. Especially in the case of outdoor storage these products are exposed to environmental conditions (foreign dust, moisture, UV radiation) whose effects cannot be controlled.
- 8.2 Bischof + Klein will assume no liability for damage due to improper storage by the customer.

9 **Processing information**

- 9.1 The products supplied by B+K shall in general be manufactured according to the agreements made with the customer. The customer shall be responsible for testing the suitability of the product for the planned purpose. This shall in particular apply with regard to the planned filling material in the case of packaging *and surfaces that must be protected (e.g. interactions between packaging and filling material, migrations, leakage resistance)* and to the handling after processing (*e.g. Transport, redistribution, storage conditions*). Assured characteristics shall only apply to unfilled and unprocessed packaging and films.
- 9.2 In the case of reel material on cores the outer layers and the inner layers on the core must be rejected.
- 9.3 Splices and surrounding material must be removed before the further processing.
- 9.4 The products delivered by Bischof + Klein must be stored before processing for acclimatisation for 48 hours under processing conditions.
- 9.5 The processing must be carried out within six months after leaving the manufacturing plant, at the latest, however, nine months after the manufacturing date. If divergent quality agreements were reached in individual cases, these shall have priority over the ATPP.
- 9.6 Bischof + Klein will assume no liability in the event of improper storage or exceeding the processing period unless the damage is not attributable to exceeding the processing period or improper storage.

10 **Miscellaneous**

The right to technical changes that do not impair the intended purpose shall be reserved.

All the conditions described in the authorisation certificates regarding hazardous goods packaging must be observed.

In individual cases in individual conformity declarations the correspondence with current international, European and national regulatory codes (e.g. food law, environmental law, Pharmaceuticals Act, ...) can be confirmed.

As of: April 2017

Bischof + Klein SE & Co. KG
Lengerich