











bundle





# **Prevent Cargo Damage**

Paper Dunnage Bag

With 40 years experience we know how to protect your goods in trucks, containers, ships and rail wagons.

# Reliable **Performance**

Made from one layer of quality paper from FSC certified suppliers & an inner PE film bladder, ensuring an ultimate airtight seal. Made in Denmark.

# Time & Cost Saving

Ouick and safe installation. Clean and cost effective. Fast loading for shipper. Fast unloading for receiver.

# Fast & Simple Inflation

Operator friendly inflation using compressed air. Unique valve system. Seals automatically after inflation.



# **BATES FLEX ECO**

## Paper Dunnage Bag

SERVICES
INTEGRATION
AUTOMATION









Flex Eco is used to secure cargo by container or road and is at risk of being exposed to loads up to 9 tons. Flex Eco is equipped with the patented Flex valve which allows for very quick inflation. The valve can be turned 360°, which makes it possible to inflate the airbag from all angles. The valve closes automatically after inflation. Flex Eco is available in seven sizes, comes in handy box quantities and are easy to store.

### Benefits and Features

### Maximizes Load Security

to release the air.

Filling the void by inflating the airbag, secures the goods during transport all the way from the sender to the receiver. Clean, simple and easy to use.

# Reduces Loading and Unloading Time Placing the airbags is a very fast and time saving way of securing your goods before departure. And when unloading the goods the airbags are simply deflated by puncturing them

■ Environmentally Friendly Materials
Entirely made from environmentally friendly
materials. High wet strength due to the choice
of materials and composition. Can withstand up
to 90% relative humidity (RH) at 60°C.



Flex Eco inflated in position



Flex Eco inflated in position

Inflation Time						
60x110	11 sec					
100x220	46 sec					

### Inflation

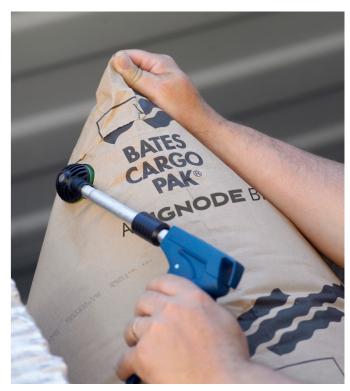
We recommend that the Bates Flex Inflator is used to inflate the airbags. To inflate, the nozzle should be pushed all the way into the valve. The airbag must not come into contact with sharp or pointed objects and should be kept min. 5cm clear of the floor to avoid contact with water or other liquids. In the table above filling time is based on a 3/4" hose and a pressure of 4 bar (56 psi).

### Deflation

The airbag is deflated by puncturing it in one corner with a sharp object. It can then be removed immediately.







*Inflation with Flex Inflator* 

Packaging Specifications									
Size in cm	60x110	85x120	85x185	100x120	100x150	100x185	100x220		
Item Number	711730	711735	711750	711755	711730	711770	711790		
Pcs per Carton	50	40	30	35	30	30	25		
Pcs per Pallet	400	320	240	280	240	240	200		
Gross Weight per Carton	16.8	19.9	22.3	20.2	21.4	25.8	25.9		
Gross Weight per Pallet	148	172	192	174	184	219	223		

## BATES FLEX ECO

## Paper Dunnage Bag









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unitize warehouse transport

### Working Pressure & Strength

Technical Specifications									
Size in cm		60x110	85x120	85x185	100x120	100x150	100x185	100x220	
Load in tons in a gap of:	10cm	2.3	4.1	6.6	4.9	6.4	8.0	9.7	
	15cm	1.5	2.7	4.6	3.4	4.5	5.7	6.9	
	20cm	0.9	2.0	3.4	2.5	3.4	4.4	5.5	
	25cm	0.5	1.3	2.3	1.8	2.4	3.1	3.9	
	30cm		0.8	1.5	1.2	1.6	2.3	2.7	
	45cm				0.4	0.6	0.8	1.1	
Max gap in cm 25		37	37	45	45	45	45		

The maximum load depends on the size of the airbag and the gap between the cargo. The table above shows what load the various sizes of airbags can withstand in a gap from 10 to 45cm. For example, if there is a gap of 10cm and an airbag of the size 100 x 220cm is used, the airbag can withstand a load of 9.7 metric tons.

### Working Pressure

The maximum recommended working pressure is 0,2 bar (2,9 psi). Compared with the high bursting pressure this gives a security margin of factor 3-8 depending on the gap. If changes in temperature, you should take into consideration the following:

- If the air in the airbag becomes significantly colder after inflation, the pressure in the airbag drops. It is possible to compensate for this during inflation by increasing the working pressure slightly.
- If the air in the airbag becomes significantly warmer after inflation, the pressure in the airbag increases. It is possible to compensate for this during inflation by reducing the working pressure slightly
- Consideration should also be given to the working pressure at different altitudes, from high to low and low to high.

During inflation consideration should of course be given to whether the cargo and packaging can withstand the selected working pressure.

#### **Certified Manufacturing Plant**

ISO 9001 Quality Management System





Produced using sustainable energy





**Distributor:** 

