OSTERMANN PP EDGINGS

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OSTERMANN PP edgings are thermoplastic edgings used to decoratively coat the narrow surfaces of wood-based materials. They function both as a protective and design feature. Uniform through colouring of the base material allows clean and problem-free edge rounding. OSTERMANN PP edgings are provided with a universal bonding agent (primer) on the back, which, when used in conjunction with any suitable adhesive, allows the edging to adhere perfectly to the substrate.

Applications/Areas of Use

OSTERMANN PP edgings have virtually unlimited applications: they are suitable to construct furniture in bathrooms, kitchens, offices and laboratories. They are also ideal for trade fair construction, shopfitting, household applications and contract furnishings. Due to their high resistance to chemicals and solvents, PP edgings are ideal for use in laboratory construction. Thanks to the particularly easy-to-process raw material composition of OSTERMANN PP edgings, they are suitable for straight line processing and can also be easily used in CNC/BAZ units for curved furniture geometries, regardless of whether inner or outer radii are involved. The material hardly exhibits any stress whitening.

Product Features

PP (polypropylene) is an impact-resistant, mechanically and thermally resilient, high-quality, chlorine-free plastic material and one of the most ecologically sustainable thermoplastic materials. PP has excellent resistance to chemicals. The semi-crystalline material has a high melting range and is therefore extremely resistant to high temperature and humidity fluctuations. Thanks to its very low specific weight of just 0.9 g/cm^3, PP is one of the lightest thermoplastics. OSTERMANN PP edgings correspond to category 2 of polycyclic aromatic hydrocarbons (PAH).

The PP edgings supplied by OSTERMANN correspond to the definition of "formaldehyde-free materials":
Formaldehyde emission is below 0.1 pm.

Manufacture
OSTERMANN PP edgings are manufactured using the extrusion or calendering process

Adhesive Properties
OSTERMANN PP edgings are provided with a universal bonding agent on the back which, when used along with commercially available hot-melt adhesives, ensures perfect adhesion of the edgings to the substrate. The bonding agent is designed for use with EVA, PA, APAO and PUR hotmelt adhesives. In cases where high, critical temperature ranges are expected, such as in the kitchen or during subsequent export shipment in containers, a highly heat-resistant adhesive must be used. Polyurethane hotmelt adhesives are particularly suitable for use in damp areas. Always observe the information provided by the respective adhesive supplier, in particular with regard to the application temperature and the application quantity of the adhesive.

EVA	-	ethylene vinyl acetate
PA	-	polyamide
APAO	-	amorphous polyalphaolefins (base: polyolefin)
PO	-	polyolefin
PUR	-	polyurethane

Surface
The surface of OSTERMANN PP edgings with decor is always sealed with UV lacquer for a scratch-resistant finish, giving the decors excellent resistance to scratches and abrasion. Uni-coloured OSTERMANN PP edgings in high gloss, matte, etc. have a corresponding lacquered surface.
Due to the chemical properties of coloured PP, dark and intense colours can be affected by pressure and heat, causing possible discolouration in the milled radius.

Quality Features/Technical Data

Deviations due to the process or material should not be noticeable from a viewing distance of 0.5 m. The defined pre-tensioning and plane parallelism of OSTERMANN PP edgings results in a tight, visually perfect joint pattern. Pre-tensioning also ensures the best possible bonding. This is due to absorption of the excess adhesive at the centre of the back of the edging and deep penetration of this adhesive into the substrate.

Properties / mechanical / electrical	Unit	Value	Standard
Lightfastness for indoor use	-	7-8	ISO 4892-2
Ball indentation hardness	N/mm^2	-	
Shore D hardness	-	~73	ISO 7619-1
Notched impact strength, 23°C	KJ/m2	-	ISO 179/2C
Impact strength unnotched, 23°C	KJ/m2	-	ISO 179/2D
Heat distortion temperature (50 °C/h, B 50N)	[°C]	~ 95°C	ISO 306
Chemical resistance	-	good 1-B	DIN 68861
Shrinkage (1h at 90 °C)	%	<0.5	Factory standards
Static charge	-	high	-

Processing Characteristics

Machining	Suitability
Capping	good
Milling direction	counter rotation
Pre-milling	good
Milling radii	good
Copy milling	good
Scraper machining	good
Buffing	good
Bonding	All commercially available hotmelt adhesives for edgings can be used
Polishing capability	medium
Stress whitening tendency	low
Paintability	It is not possible to paint over a PP edging.
BAZ capability (CNC)	Very good

Tolerances

Edging Width

Width [mm]	Tolerance [mm]
15 to 100	+ 0.50 / - 0.20

Edging Thickness

Thickness [mm]	Tolerance [mm]
0 to 1.0	+ 0.10 / - 0.15
1.1 to 2.0	+ 0.10 / - 0.25
2.1 to 3.0	+ 0.05 / - 0.30

Pre-tensioning

Thickness [mm]	Tolerance for width [mm]	
	up to 60	from 60
0 to 3.0	0.00 - 0.35	> 0.10

Plane Parallelism

Thickness [mm]	Maximum deviation [mm]
0 to 3.0	<0.10

Longitudinal Distortion

Thickness [mm]	Maximum distortion over 1 m length
0 to 3.0	3 mm

Storage

OSTERMANN PP edgings are resistant to rotting and can therefore be stored almost indefinitely at room temperature (<30 °C) and in a weather-protected environment. The edgings must be protected from sunlight (UV radiation) and dust. Edgings that are older than 12 months should be tested before processing.

Cleaning

OSTERMANN PP edgings can be easily cleaned with commercially available plastic cleaners. For safety reasons, the suitability of the cleaner should be tested before use

Disposal

OSTERMANN PP edgings should be recycled in accordance with the regulations of the respective country.

Radius Processing

PP edgings are particularly suitable for processing radii, especially tighter radii, as the material hardly exhibits any stress whitening.