

# Pre-Crease and Folding recommendations

## Algro Volume

- Pre-creasing should be done from a thickness of 150 micrometers onwards
- Pre-crease width/thickness based on 2 point Didot, i.e. 0.71 millimeters as superior results are obtained if the creasing bulge faces inwards
- Best Practice should be on a flatbed Principle (eg Bobst) or second option an HB cylinder. Highly recommended above pre crease rolls eg in-line industrial folding-binding machines
- Pressure pre-crease knife as much as possible
- Channel width can be calculated as: 2x paper thickness plus 0.71 mm.  
Tolerance +/- 0.1mm
- Channel depth roughly 1.5x paper thickness  
Minimal 1x and maximal 2x paper thickness
- Folding direction: inside crease is outside fold
- Room condition RH ca 50 % humidity
- Knife in the center of the channel
- Preferable not to crease in the lacquers or ink covered areas

### Best practice Crease configuration based on Thickness

PAPER BASIS WEIGHT (m <sup>2</sup> )	PAPER THICKNESS (μm)	CHANNEL WIDTH (mm)	CHANNEL DEPTH (mm)	CREASE KNIFE WIDTH (mm)
220	270	1.20 - 1.40	0.30 - 0.40	0.71
240	310	1.30 - 1.50	0.35 - 0.45	0.71
270	355	1.40 - 1.60	0.40 - 0.50	0.71
300	405	1.50 - 1.70	0.40 - 0.55	0.71
330	445	1.55 - 1.75	0.45 - 0.60	0.71
350	475	1.60 - 1.80	0.50 - 0.70	0.71
380	515	1.65 - 1.85	0.55 - 0.80	0.71

### General Calculations

- Channel width:**  $0.71 + (2 \times \text{paper thickness} \pm 0.1 \text{ mm})$
- Channel depth:** Paper thickness still maximum 2x thickness
- Crease pressure:** Maximum possible

