

Jujo Thermal – Specialty Paper Expertise

A misty forest of evergreen trees, likely a coniferous forest, with a soft, hazy atmosphere. The trees are dense and cover a hillside. The overall color palette is dominated by various shades of green, from deep forest greens to lighter, misty greens. The lighting is diffused, creating a serene and natural setting.

JTK®

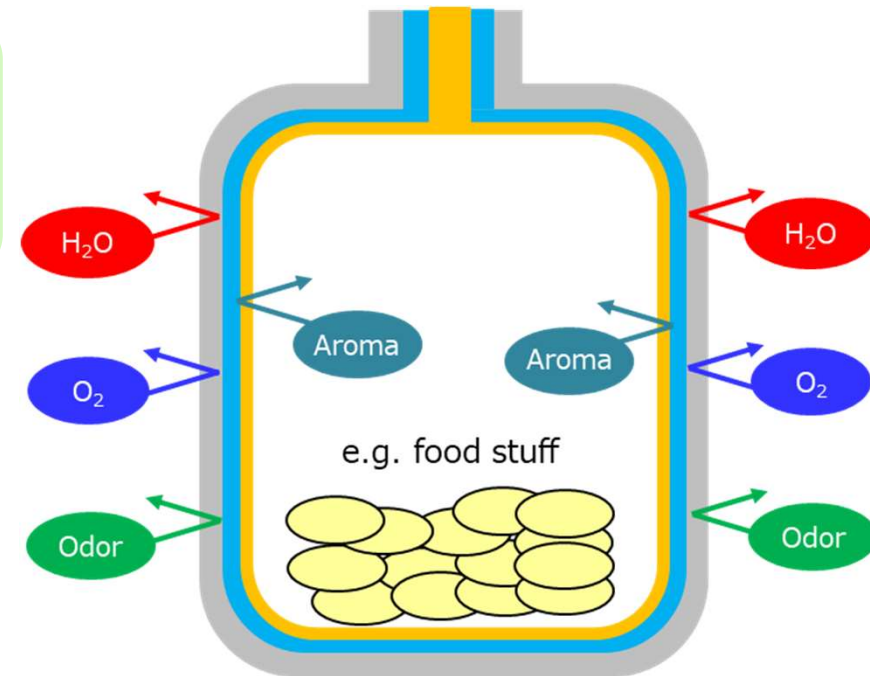
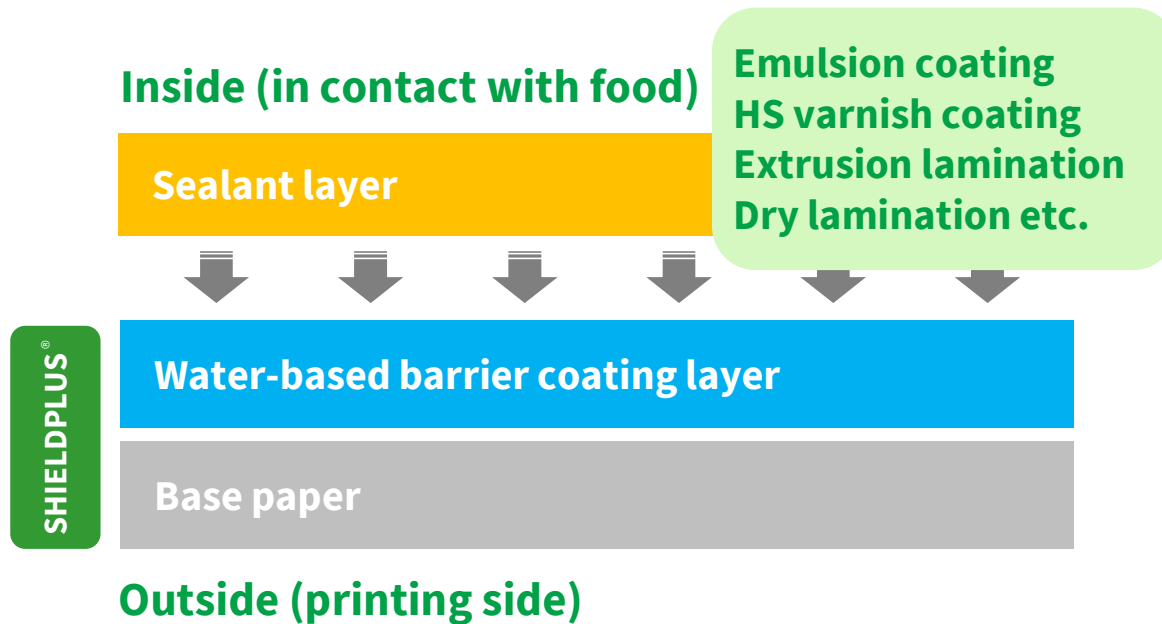
SHIELDPLUS

**Sustainable flexible packaging paper material with excellent
O₂ and H₂O gas barrier properties**

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Structure

SHIELDPLUS[®] = Specialty base paper + **Water-based** barrier coating



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Barrier properties

OTR* (23°C/50%RH)	ml/m ² ·day·atm	less than 5,0
WVTR(23°C/50%RH)	g/m ² ·day	less than 5,0
KIT value	visual evaluation	12
Hexane VTR	g/m ² ·day	around 10

* After coating of **commercial sealant dispersion** to barrier side of SHIELDPLUS

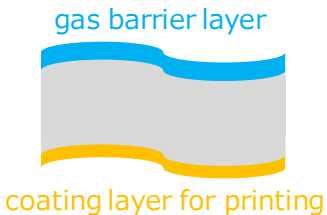
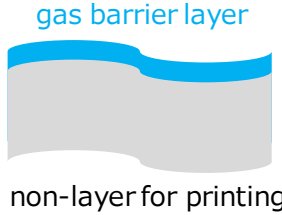
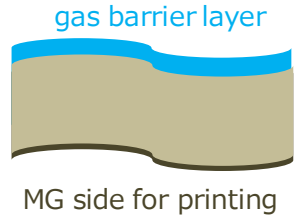
- **FSC and/or PEFC** chain of custody certifications
- Food safety management system: **ISO 22000**
- Product specific certificates: by **ISEGA**

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EXCELLENT BARRIER AGAINST

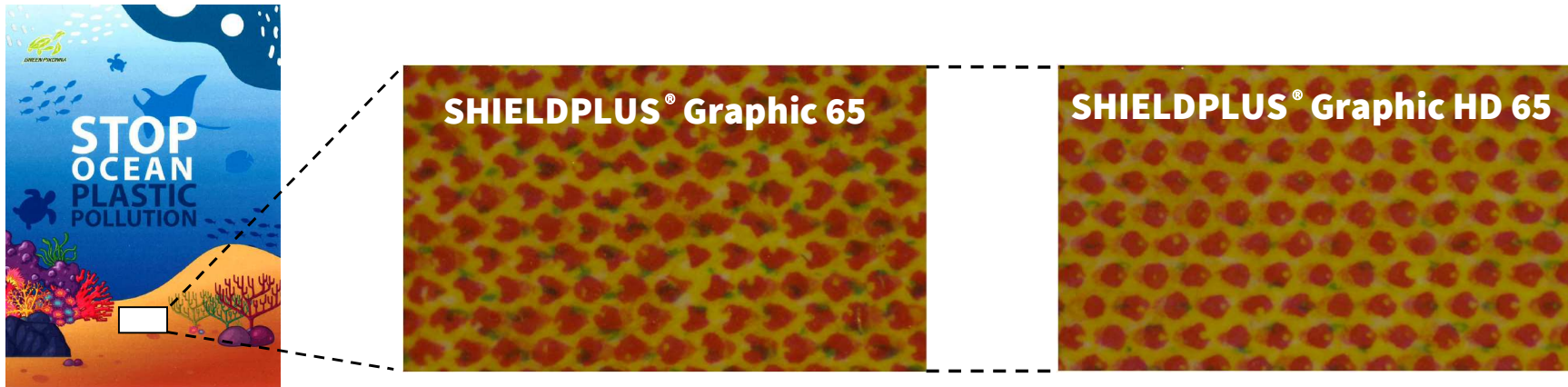
- Gas (O₂ and H₂O)
- Solvents
- Mineral oils

Product range

	SHIELDPLUS Graphic				SHIELDPLUS		SHIELDPLUS BR	
color	white				white		brown	
base weight(gsm)	65	HD 65	90	HD 90	58	80	60	HD 60
structure	 <p>gas barrier layer</p> <p>coating layer for printing</p>				 <p>gas barrier layer</p> <p>non-layer for printing</p>		 <p>gas barrier layer</p> <p>MG side for printing</p>	
printability	gravure/flexo/digital				flexo/digital		gravure/flexo/digital	
biodegradability (EN13432)	-	-	-	-	✓	✓	✓	✓
recyclability (CEPI test method v2)	✓	✓	✓	✓	✓	✓	✓	✓
application	dry, moist and fatty food(FDA CFR 21 176.170 and BfR XXXVI)							
other		high gravure		high gravure not officially yet		not officially yet		high gravure

HD grade for high RotoGravure quality

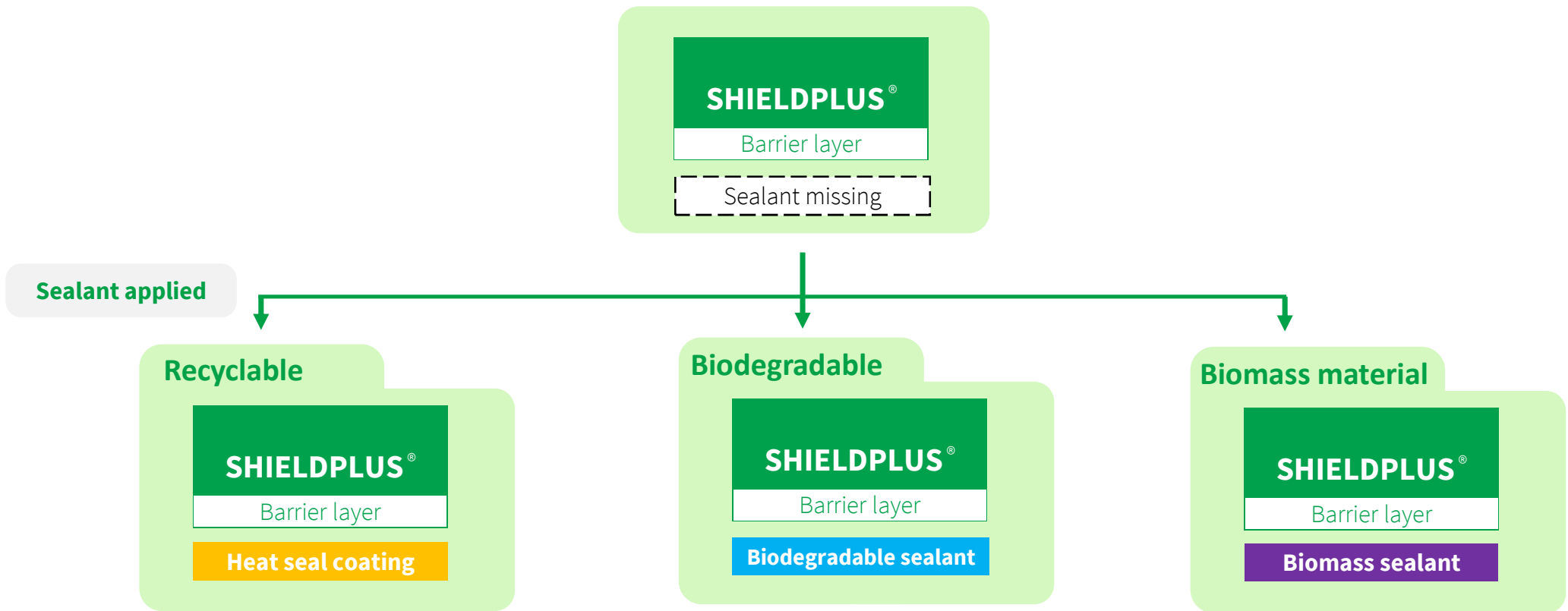
- **SHIELDPLUS[®] Graphic HD**
- **SHIELDPLUS[®] BR HD**



RotoGravure image

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Sealant options



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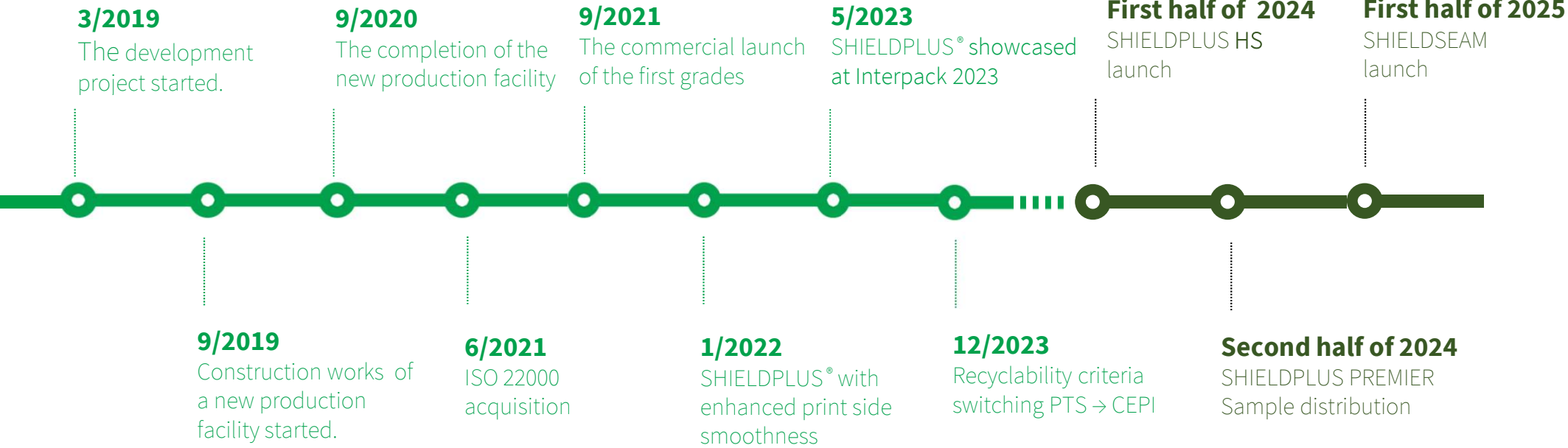
Product development path

Future concepts:

SHIELDPLUS HS with heat sealing ability

SHIELDPLUS PREMIRE for tropical conditions

SHIELDSEAM is high spec heat seal paper



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Thank you



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