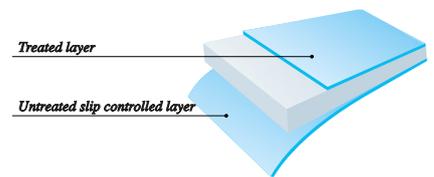


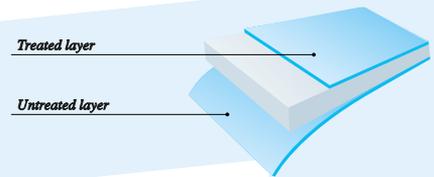
Manucor offers a wide range of films for **Wrap-Around Label** applications specially designed for carbonated and non-carbonated (mineral water, juice and other beverage) drink bottles.

### Transparent Films

**PL** is a one-side treated Ultra Clear film with outstanding optics for demanding “no label look” applications. PL offers a high modulus and stiffness with a controlled COF to ensure a high speed labelling performance with a lower film thickness. This downgauging possibility provides cost savings opportunities.

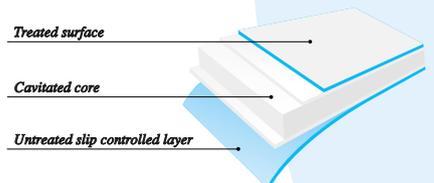


**LLS** is a one-side treated, glossy film with low COF for superior performance on labelling machines. LLS provides excellent ink and hot melt adhesion and web flatness for flawless converting and labelling operations. It is not recommended for UV inks

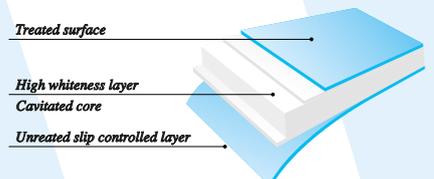


### White Films

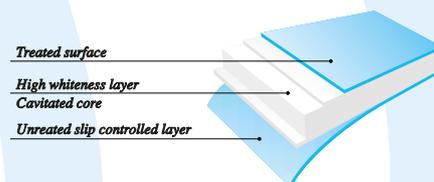
**LLM** is a high yield, very high gloss film, 5 layers cavitated BOPP film. The treated layer is easy to print with a variety of ink systems. LLM features a high stiffness and controlled COF for consistent and high speed converting and labelling processes. Suitable for UV ink applications



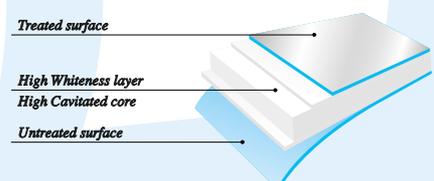
**LLG** is a high yield, high gloss, with enhanced whiteness, 5 layers cavitated BOPP film. This film is designed for use in wrap-around labelling applications where superior aesthetics and optimal machine performance are desired. Suitable for UV ink applications.



**LLGN** is a **NEW** high yield, high gloss, with enhanced whiteness, 5 layer cavitated BOPP film. This film is designed for use in wrap-around labelling applications where superior aesthetics and optimal machine performance are desired.

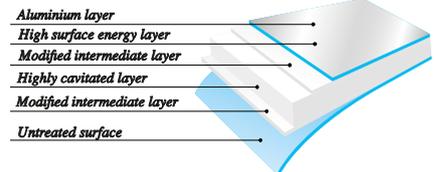


**LHY** is a **NEW** ultra-low density, cavitated with a new technology 5 layers BOPP film, delivering high yield with high gloss and opacity. This new film is designed for use in wrap-around labelling applications where higher yield and superior graphics are desired. Lower density of cavitated films means lighter label material with associated costs benefits.

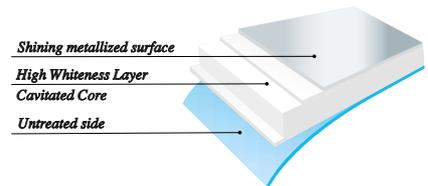


### Metallized Films

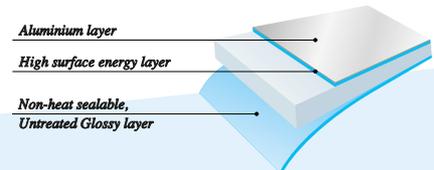
**LLDM** is a metallized high yield film with a superior metal appearance. It features a controlled COF and is designed for use in wrap-around labelling applications where outstanding product presentation and optimal machine performance are desired. A primer is recommended before printing



**LLGM** is a **NEW** metallized high yield film with a superior metal appearance. It features a controlled COF and is designed for use in wrap-around labelling applications where outstanding metallized product presentation and optimal machine performance are desired.



**PMM** is a high gloss shiny metal appearance film that offers good receptivity to most inks systems and good film performance on labelling machines. A primer is recommended before printing.



Family	Film	Thickness $\mu$	Density g/cc	Haze	Gloss	Whiteness Index	COF
Transparent	LLS	30, 35, 40	0.91	2.0	85	-	0.30
	PL	20, 25, 30, 35, 40	0.91	1.0	90	-	0.40
Cavitated white	LLM	38, 47	0.60	-	90	73	0.30
	LLG	38	0.60	-	86	86	0.30
	LLGN*	38	0.60	-	70	82	0.30
	LHY*	38	0.55	-	85	80	0.30
Metallized White	LLDM	38, 47	0.60	-	-	-	0.30
	LLGM*	38	0.60	-	-	-	0.30
Metallized	PMM	30, 35	0.91	-	-	-	0.40

\*New film in development

Whiteness Index Method: E313 – CIE  
Gloss Method: ASTM D 2457  
Haze Method: ASTM D 1003

Rev. Date 27/04/2016 - Please see our website [www.manucor.com](http://www.manucor.com) for the most updated version of this document. All the values given in this document are indicative only. Please refer to the technical data sheets for the exact values of each thickness.