



TECHNICAL MEETING POLYURETHANE PRODUCTS



PRODUCT RANGE PRESENTATION





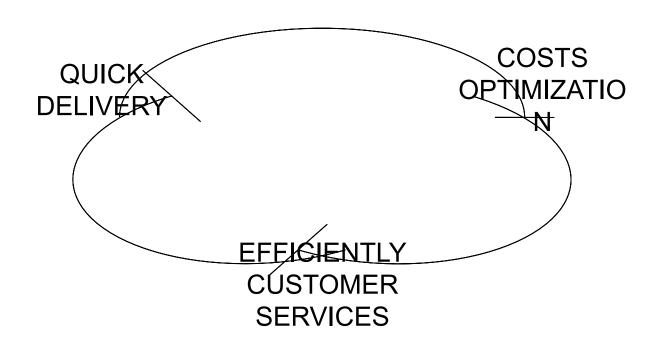


IT IS THE RESULT OF:

- OPTIMIZATION OF MARKET KNOWDLEGE
- RESEARCH AND DEVELOPMENT KNOW HOW
- PRODUCTION OPTIMIZATION
- SERVICES OPTIMIZATION



STOCK OF PRODUCTS







HOW TO IMPROVE IT?

FOLLOWING THE MARKET'S NEEDS





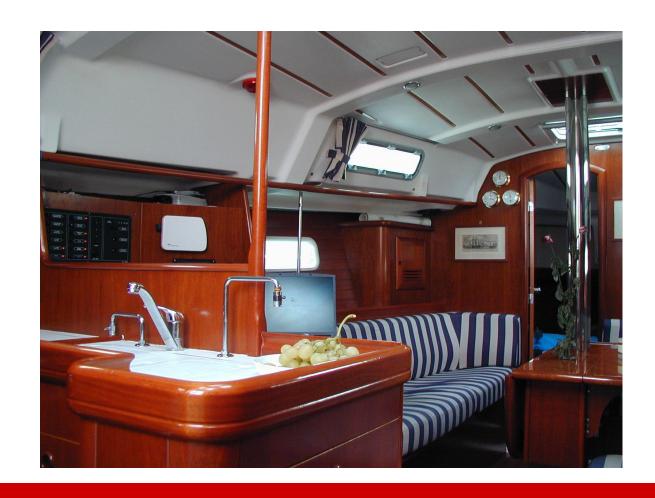
BECAUSE A PRODUCT RANGE IS
A "DYNAMIC INSTRUMENT"
TO GET TOGETHER OUR TARGET
BUSINESS



MILESI PRODUCTS











POLYURETHANE

- MOST POPULAR
- 2 COMPONENTS
- DRY AT ROOM TEMPERATURE or/and BY OVEN CLEAR AND PIGMENTED
- ☐ GLOSSY, MATT, SEMI-MATT





POLYURETHANE 1st component

- OH resins solutions
- ☐ Alkyd or acrylic resins
- Acrylic resins: very clear color, yellowing resistance
- Alkyd resins: more filling e versatility, cheaper





POLYURETHANE 2nd component

- The 2° component (hardener) is a solution of polyisicyanate polymer
- Polyisicyanate ALYFATIC no-yellowing
- Polyisicyanate AROMATIC are more yellowing





Polyisocyanate

ALIPHATIC

- No-yellowing
- □ Slow drying
- Better plasticity
- Expensive
- Less filling





Polyisocyanate

AROMATIC

- Yellowing
- □ Dark color
- ☐ Fast drying
- ☐ More hardeness
- ☐ More fragility
- □ Cheaper



POLYURETHANE PRODUCTS

- Chemical curing: the film of paint is formed through simple vaporization of solvents and through chemical reaction of the binders contained in single components (hydroxylic groups, isocyanic groups)
- Type of application: spray, Curtain coater...
- ☐ **Type of curing**: ambient temperature, hot air



POLYMERIZATION:

reaction between 2 components

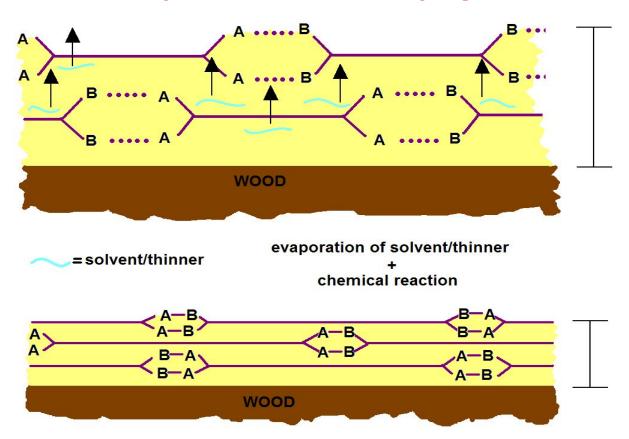
2 processes:

- PHYSICAL Process: solvent evaporation
- CHEMICAL Process: polimerization between 2 resins

- They start at the sametime, the 1°process must finish before the 2°one
- High temperature decrease the drying time

TECHNICAL MEETING

POLYURETHANE Physical & chemical drying





Why to use an Acrilyc product instead of a PU?

Clearness
Elasticity
Adherence to substrate
Chemical-physical resistance
Pot life
Absence of free TDI
Resistance to yellowing
Suitability also for chemically whitened cycles
Versatility to use



PU SEALER

- CLEAR SEALER
 - GENERAL USE RESELLERS
 - FURNITURE
 - ELECTROSTATIC APPLICATION
 - NOT YELLOWING
- ☐ WHITE PIGMENTED SEALER



PU CLEAR SEALER

GENERAL USE - RESELLERS			
High competitiveness	LBA21 LNB21 (2:1)	By spray Good sandability, vertical hold and covering power	
	LBA26 LNB77 (2:1)	By spray very good filling power, trasparency and removal resistance	
]LBA42]LNB42 (2:1)	By spray very good filling power and manual and mechanical sandability	
High quality	DLBA38 DLNB17 40%	By spray Excellent trasparency, filling power, levelling, vertical hold and mechanical sandability	



PU CLEAR SEALER

FURNITURE				
5 1 3]LBA35]LNB17 (2:1)	By spray Excellent filling power, sandability, very fast dry, vertical hold		
E	ELECTROSTATIC APPLICATION			
General use]LBA521	By spray Good filling power, fast dry and vertical hold – suitable for assembled furniture		
Industrial equipment	ILBA528	By spray Excellent filling power, wettability and vertical hold – suitable for assembled furniture		



PU CLEAR SEALER

NOT YELLOWING			
High competitiveness]LJA91]LNB99 (10:1)	by spray acrylic based for opened pores with good chemical-physical resistance	
General use]LJA99]LNB99 (10:1)	by spray acrylic based fast dry, good sandability	
High filling power]LJA612]LNB99 (10:1) (ex LJA13866)	by spray acrylic based with very good filling power for closed pores	





PU WHITE SEALER

- ☐ GENERAL USE
- HIGH QUALITY



PU WHITE SEALER

High Competitiveness]LBR16]LNB16 30%	By spray Very good sandability, fast dry and good white point
General use]LBR30]LNB77 40%	By spray and curtain coater Very good manual sendability massive and veneered woods, MDF
High quality]LBR102]LNB42 (2:1)	By spray and curtain coater excellent hiding power, manual and mechanical sendability for massive and veneered woods, MDF





PU CLEAR MULTILAYER

- **POLYURETANIC**
- **NOT YELLOWING**
- KOMBY



PU CLEAR MULTILAYER

POLYURETANIC				
Jonard dec	ILGA8X ILNB42 (2:1) X=3 35 gl X=4 20 gl	by spray and curtain coater very good filling power, vertical hold, fast dry for furniture and panels		
	KOMBY			
High competitiveness	ILGA81X ILNB99 (10:1) NEW X=1 60 gl X=2 40 gl X=3 20 gl X=4 10 gl	by spray very fast dry, good levelling and pore design for old style and modern furniture, turned parts		



PU CLEAR MULTILAYER

NOT YELLOWING		
Excellent yellowing-resi stance	ILUA43X ILNB99 (10:1) X=1 60 gl X=3 35 gl X=4 10 gl	by spray and curtain coater acrylic based with excellent trasparency certified DIN 4102 B1 and 68861 1B for furniture, doors, chairs, kitchen and office furniture
General use	ILUA13X ILNB99 (10:1) X=4 20 gl X=3 30 gl X=2 50 gl	by spray and curtain coater acrylic based with good not yellowing resistance and pore design for furniture, doors, profiles and tables
Natural effect]LUA118]LNB99 (10:1) (Ex 19075) 5 gl	by spray acrylic based wood effect for furniture, panels and wood pieces





- GENERAL USE RESELLER
- ACRYLIC NOT YELLOWING
- FURNITURE
- ELECTROSTATIC APPLICATION



GENERA	L USE
LGA2x/serie LNB77 (2:1) Complete range	By spray good mechanical and chemical resistance and excellent tactile smoothness for baseboards, frames, turned parts, furniture and wood pieces



ACRYLIC - NOT YELLOWING			
High competitiveness	LUA9X LNB99 (10:1) X=2 30 gl X=3 20 gl	by spray and curtain coater very good chemical-physical resistance against alcool liquids, good vertical hold and fast dry for furniture and wood parts	
General use	LUA46X LNB99 (10:1) X=3 25 gl X=4 15 gl X=8 3 gl	by spray and curtain coater excellent leveling, scratch resistance, chemical-physical resistance, soft touch and fast dry for assembled furniture and wood parts	



FURNITURE		
Industrial use - high quality	ILGA23X ILNB18 (2:1) X=0 65 gl X=1 40 gl X=2 30 gl X=4 10 gl	by spray and curtain coater excellent levelling, smoothness, trasparency and soft touch for furniture and tables





PU CLEAR GLOSSY TOPCOAT

- High competitiveness
- ☐ General use
- ☐ High tixotropy
- □ Not Yellowing



	ELECTROSTAT	IC APPLICATION
High quality	ILGA53X ILNB05 (2:1) X=2 45 gl X=3 30 gl X=4 20 gl	by spray excellent vertical hold, filling power and wettability for assembled furniture, turned parts and chairs



PU CLEAR GLOSSY TOPCOAT

High competitiveness]LDA846]LNB837 (2:1)	by spray for furniture, doors, frames and wood parts
]KDA1]LNB110 (2:1)	by spray very good brilliance, fast dry for panels, assembled furniture, chairs and furniture components
Not Yellowing]LDA401]LNB112 (2:1)	by spray acrylic based, excellent brilliance for flat panels and turned wood parts





PU PIGMENTED TOPCOAT

- INDUSTRIAL USE
- **TINTOMETRIC SYSTEM**



PU PIGMENTED TOPCOAT

INDUSTRIAL USE			
WHITE MATT]LKR132]LNB77 (2:1)	by spray and curtain coater excellent hiding power for furniture, internal door, frames, profiles and massive wood	
WHITE GLOSSY]LHR110]LNB110 (2:1)		

TECHNICAL MEETING



KROMOSYSTEM

TINTOMETRIC SYSTEM

MATT CONVERTER			
White pigmented	KKRx		
converter	LNB77 (2:1)	□by spray	
	X=1 20 gl	converter P.U. with excellent	
	X=2 10 gl	hiding power for flat surface, assembled furniture and chairs	
Clear converter	KGAx		
	LNB77 (2:1)		
	X=2 50 gl		
	X=1 20 gl		
	X=4 5 gl		

KROMOSYSTEM

TINTOMETRIC SYSTEM

GLOSSY CONVERTER		
White pigmented converter	KHR1 LNB110 (2:1)	
		□by spray
		converter P.U. with excellent hiding power for flat surface,
Clear converter	KDA1	assembled furniture and
	LNB110 (2:1)	chairs

KROMOSYSTEM OLD PASTES



OLD KROMOPAST PRODUCT RANGE SOLVENT-BASED PASTES FOR KROMOSYSTEM

KMT 10 KROMOPAST WHITE	KMT 51 KROMOPAST RED GLICINE
KMT 20 KROMOPAST YELLOW	KMT 53 KROMOPAST RED OX
KMT 21 KROMOPAST LEMON C.	KMT 60 KROMOPAST BORDEAUX
KMT 22 KROMOPAST GOLDY YELLOW	KMT 70 KROMOPAST VIOLET
KMT 23 KROMOPAST YELLOW OX	KMT 80 KROMOPAST BLUE
KMT 40 KROMOPAST GREEN	KMT 90 KROMOPAST BLACK
KMT 50A KROMOPAST RED	

KROMOSYSTEM

New pastes for Kromosystem:

- ☐ From 13 pastes to 16 (+ 2).
- □All color formulations has been updated considering the new 3 pastes
- ☐Tintometric system has been updated to guarantee:
 - better color reproducibility
 - better covering power
 - better economic competitiveness
- ☐ the old system was constituted by 13 pastes
- ☐ the new system is constituted by 16 pastes + 2 pastes not included in the Kromosystem (to satisfy all the requests from the market)
- New available pastes are:
 - KMT30: bright orange paste. High coloring power. Suitable for strong color (from 10%). With lower % it is not guaranteed the resistance to the light.
 - KMT25 yellow high competitiveness paste. Suitable for strong color (starting from 10%).
 - KMT54 red high competitiveness paste.

KROMOSYSTEM

Product range completion. Pastes not included in Kromosystem:

■ LMT55:

- •is the red paste KMT50A with a double pigment concentration. To obtain tones and coverage for the strong colors, where is required a resistance to light and a outdoor resistance also with low percentage of use.
- •The LMT55 is qualitatively an excellent product. with a premium price

□ LMT91:

- this paste allows to minimize the error during the weighing phase, with a lower coloring power
- we advise against the substitution of KMT90 (deep blzck) with LMT91. Max suggested percentage: 20%

Our Color Center Service has completed the revision of the following formulations:

- RAL K7 SOLVENT SYSTEM
- NCS cascade (starting from end of April 2010)
- ☐ file spectro-photometer SOLVENT SYSTEM
- ☐ the NCS complete formulations will be available starting from 1 May 2010.



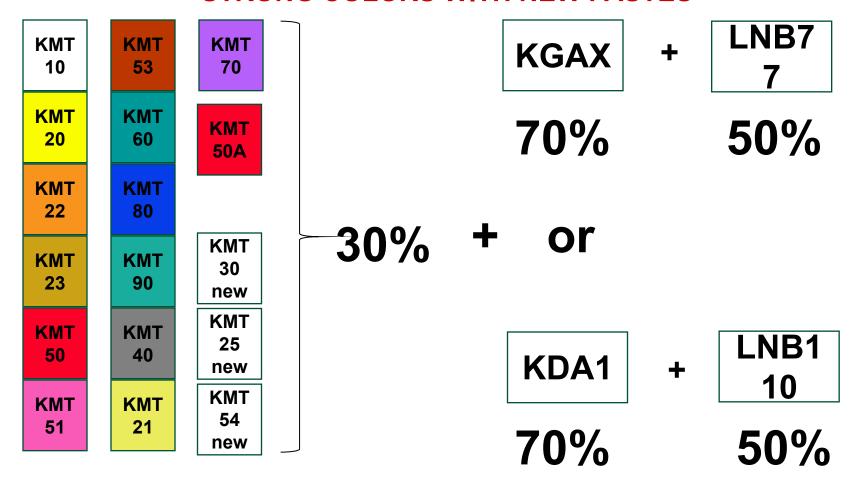
KROMOSYSTEM

NEW KROMOPAST PRODUCT RANGE SOLVENT-BASED PASTES FOR KROMOSYSTEM

KMT 10 KROMOPAST WHITE	KMT 51 KROMOPAST RED GLICINE		
KMT 20 KROMOPAST YELLOW	KMT 53 KROMOPAST RED OX		
KMT 21KROMOPAST LEMON C.	KMT 60 KROMOPAST BORDEAUX		
KMT 22 KROMOPAST GOLDY YELLOW	KMT 70 KROMOPAST VIOLET		
KMT 23 KROMOPAST YELLOW OX	KMT 80 KROMOPAST BLUE		
KMT 40 KROMOPAST GREEN	KMT 90 KROMOPAST BLACK		
KMT 50A KROMOPAST RED	KMT 54 KROMOPAST Red		
	(high competitiveness)		
KMT 30 KROMOPAST ORANGE (NEW)	KMT 25 KROMOPAST YELLOW (NEW)		
Product range completion			
LMT55 RED concentrated	LMT 91 BLACK (for "cuts")		

KROMOSYSTEM

STRONG COLORS WITH NEW PASTES



KROMOSYSTEM

PASTEL COLORS WITH NEW PASTES

KKRx (matt)

100%

KHR1 (glossy)

100%

KMT KMT 10 53 **KMT KMT** 60 20 **KMT KMT** 80 22 **KMT KMT** 90 23 **KMT KMT** 40 50 **KMT KMT** 21 51

0 to 7%

KMT 70 **KMT 50A KMT** 30 new **KMT** 25 new **KMT** 54 new

50% LNB₁ 10 50%

LNB7

KROMOSYSTEM

TINTOMETER SCHEME

