milesi

TECHNICAL MEETING

POLYURETHANE PRODUCTS

TECHNICAL MEETING

PRODUCT RANGE PRESENTATION

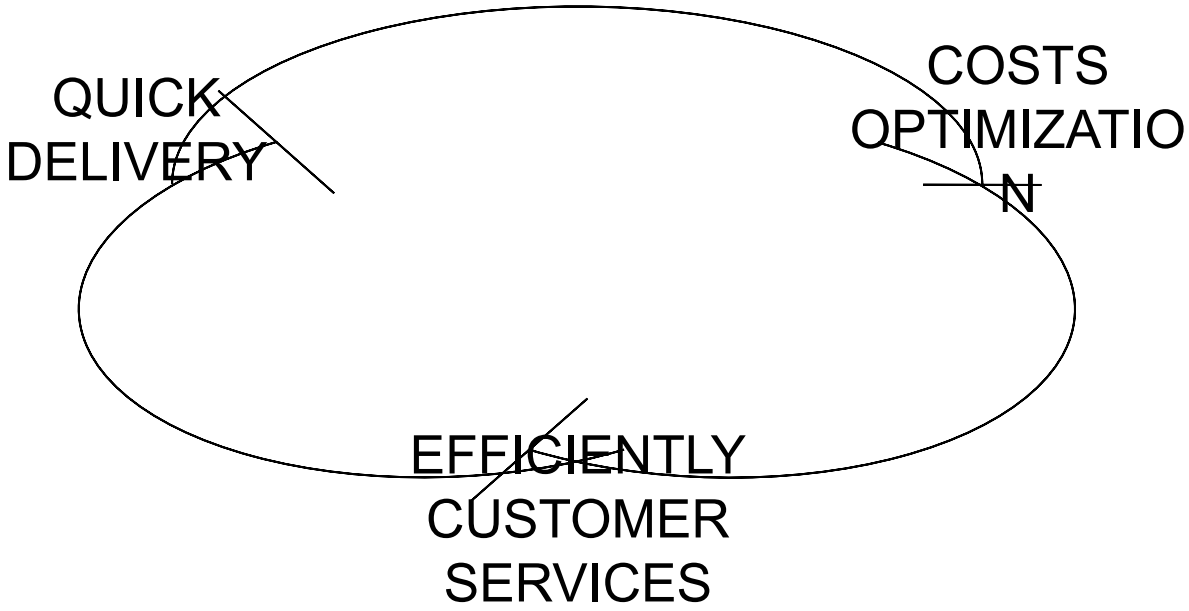
TECHNICAL MEETING

IT IS THE RESULT OF:

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

TECHNICAL MEETING

STOCK OF PRODUCTS



TECHNICAL MEETING

HOW TO IMPROVE IT?

FOLLOWING THE MARKET'S NEEDS

TECHNICAL MEETING

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

TECHNICAL MEETING

MILESI PRODUCTS

TECHNICAL MEETING

TECHNICAL MEETING

POLYURETHANE

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

TECHNICAL MEETING

POLYURETHANE 1st component

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

TECHNICAL MEETING

POLYURETHANE 2nd component

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

TECHNICAL MEETING

Polyisocyanate

ALIPHATIC

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

TECHNICAL MEETING

Polyisocyanate

AROMATIC

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

TECHNICAL MEETING

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

TECHNICAL MEETING

POLYMERIZATION:

reaction between 2 components

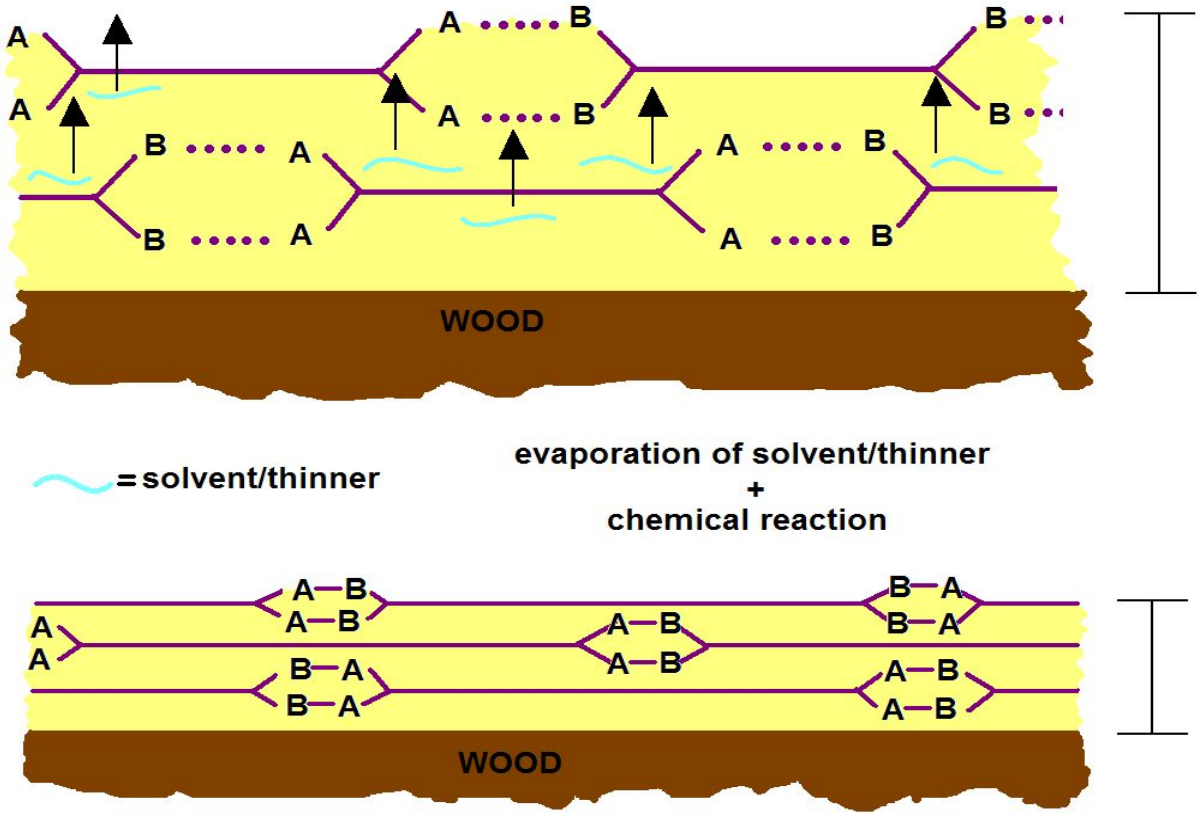
2 processes:

- 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



TECHNICAL MEETING

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

TECHNICAL MEETING

PU SEALER

- **CLEAR SEALER**
  - GENERAL USE - RESELLERS
  - FURNITURE
  - ELECTROSTATIC APPLICATION
  - NOT YELLOWING

- **WHITE PIGMENTED SEALER**

TECHNICAL MEETING

PU CLEAR SEALER

GENERAL USE - RESELLERS		
High competitiveness	LBA21 LNB21 (2:1)	By spray Good sandability, vertical hold and covering power
Medium quality	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	LBA38 LNB17 40%	By spray Excellent trasparency, filling power, levelling, vertical hold and mechanical sandability

TECHNICAL MEETING

PU CLEAR SEALER

FURNITURE		
High quality	LBA35 LNB17 (2:1)	By spray Excellent filling power, sandability, very fast dry, vertical hold
ELECTROSTATIC APPLICATION		
General use	LBA521	By spray Good filling power, fast dry and vertical hold – suitable for assembled furniture
Industrial equipment	LBA528	By spray Excellent filling power, wettability and vertical hold – suitable for assembled furniture

TECHNICAL MEETING

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

TECHNICAL MEETING

PU WHITE SEALER

- GENERAL USE
- HIGH QUALITY

TECHNICAL MEETING

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

TECHNICAL MEETING

PU CLEAR MULTILAYER

- POLYURETANIC
- NOT YELLOWING
- KOMBY

TECHNICAL MEETING

PU CLEAR MULTILAYER

POLYURETANIC		
General use	LGA8X LNB42 (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	LGA81X LNB99 (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

TECHNICAL MEETING

PU CLEAR MULTILAYER

NOT YELLOWING		
Excellent yellowing-resistance	LUA43X LNB99 (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	LUA13X LNB99 (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

TECHNICAL MEETING

PU CLEAR MATT TOPCOAT

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

TECHNICAL MEETING

PU CLEAR MATT TOPCOAT

GENERAL USE		
General 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

TECHNICAL MEETING

PU CLEAR MATT TOPCOAT

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

TECHNICAL MEETING

PU CLEAR MATT TOPCOAT

FURNITURE		
Industrial use - high quality	LGA23X LNB18 (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

TECHNICAL MEETING

PU CLEAR GLOSSY TOPCOAT

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

TECHNICAL MEETING

PU CLEAR MATT TOPCOAT

ELECTROSTATIC APPLICATION		
High quality	LGA53X LNB05 (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

TECHNICAL MEETING

PU CLEAR GLOSSY TOPCOAT

High competitiveness	LDA846 LNB837 (2:1)	by spray for furniture, doors, frames and wood parts
General use	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

TECHNICAL MEETING

PU PIGMENTED TOPCOAT

- INDUSTRIAL USE
- TINTOMETRIC SYSTEM

TECHNICAL MEETING

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

KROMOSYSTEM

TINTOMETRIC SYSTEM

MATT CONVERTER		
White pigmented converter	KKRx LNB77 (2:1) X=1 20 gl X=2 10 gl	by spray converter P.U. with excellent 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, assembled furniture and chairs
Clear converter	KDA1 LNB110 (2:1)	

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.

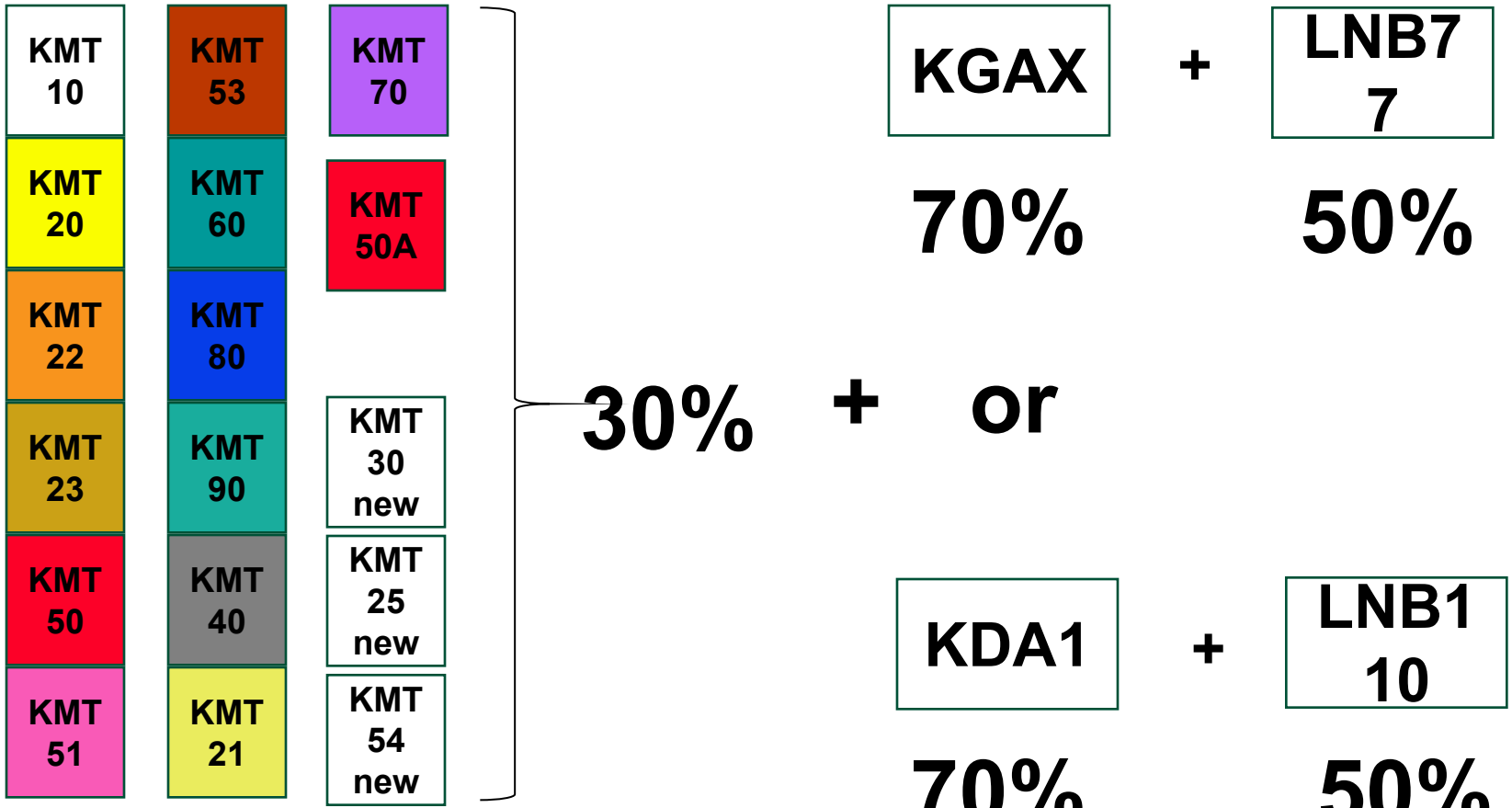
KROMOSYSTEM

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%

+

KMT 10
KMT 20
KMT 22
KMT 23
KMT 50
KMT 51
KMT 53
KMT 60
KMT 80
KMT 90
KMT 40
KMT 21
KMT 70
KMT 50A
KMT 30 new
KMT 25 new
KMT 54 new

0 to 7%

+

LNB7 7

50%

KHR1 (glossy)

100%

LNB1 10

50%

KROMOSYSTEM

TINTOMETER SCHEME