

Key Drivers in Leather Business



Live Stock

- Slaughter Rate (availability)
 - Meat Consumption
 - Eating habit
 - Population growth
 - Economic conditions
- Quality of raw material

Raw Hide Price

- ... impacts tannery profit / willingness to expand production
- ... impacts leather price along value chain (too high => substitution)
- Variation

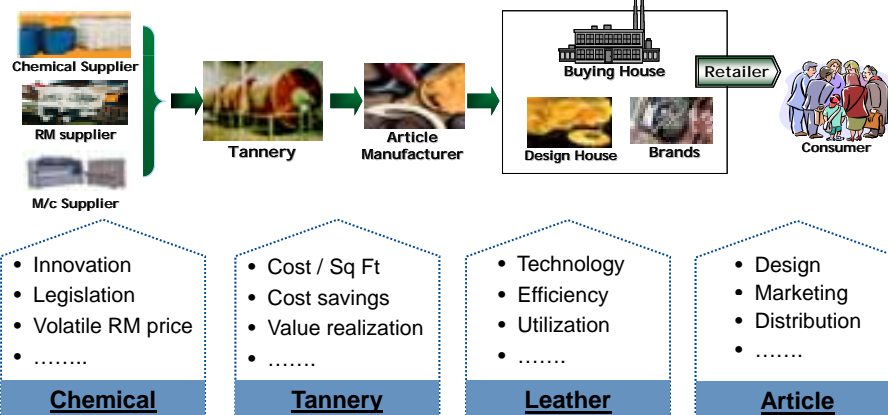
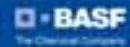
Leather Value Chain

- Raw hide price -> Leather price -> Substitute materials
- Cyclic demand linked with raw hide availability

Consumer

- Consumer confidence & spending pattern (jobs)
- Price of leather goods / prioritization of spending
- Fashion

Impact on Leather Value Chain



The dynamics at every step is highly interdependent

Market Trend - Ecology



Restricted & Harmful Substances

- Legislation (e.g. ReaCh)
- Automotive Standards
- Shoe Brand Standards
-

- NMP free
- APEO free
- VOC free
- FA free
- Boric Acid
- ...

Green (Process)

- Consumers
- Automotive OEM
- Shoe Brand
- Leather Working Group

- Nitrogen free deliming
- Water saving
- Wet White leathers
- Reduced solvent based finish
- Reduced Carbon footprint

Market Trend - Performance



- Consumers
- Shoe Brands

- High Performance waterproofing
- Non-migrating colour

- Consumers
- Automotive OEM

- Design & Comfort
- High performance finishing

- Tanneries
- Industry

- Maximize Cost - Performance
- Maximize Yield / rendement



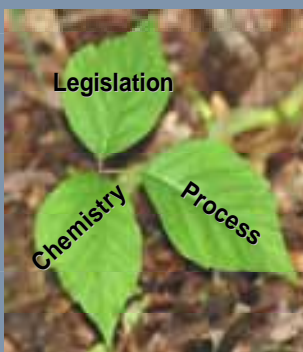
Virtually, any solution can be designed,

More possibilities exist today;

But, it's the attitude and willingness

that makes all the difference !

Shaping the future, together



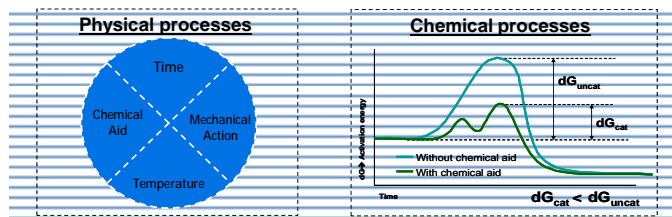
- **Towards A Responsible Beamhouse System**
Synergy for Value Addition & Water Conservation
- **Retanning Solution**
High in Performance – High in Ecology
- **Lugafast® Colorlock Technology**
Coloring with Innovation
- **Value Addition with Waterproofing**
"Economical yet Efficient"
- **Pro-Upgrade Systems**
Taking Upgradation to the next level(s)..

Direction is as important as Speed while undergoing change

Towards a Responsible Beamhouse System : Synergy for Value addition & water conservation



- Stronger orientation towards conventional processes, with commodity chemicals
- Higher emission levels and many open issues for effluent
- Increasing pressure on resource availability - Water, land, energy etc



Unorganized but metasystems - Higher inertia towards change

Towards a Responsible Beamhouse System : Synergy for Value addition & water conservation



Surfactants (Eusapon®)

- Wetting & dispersing
- Not sensitive to pH
- Biodegradable

- Flat grain, fine grain, full pores
- Eco efficient products

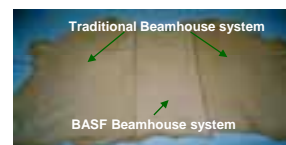
Deliming (Decaltal®)

Liming (Mollescal®)

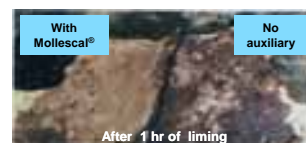
- Better removal of keratin & non fibrous proteins
- Less sulfide & lime

- Fuller leather with better value
- Improved Cr distribution & salt discharge

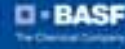
Tanning (Implenal®, Neutrigan®)



- Improved process efficiency
- Integrated process designs
- Reduced emission at source

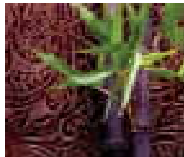


Towards a Responsible Beamhouse System : Synergy for Value addition & water conservation



Savings in Water and Energy !

- Improved wetting & cleaning abilities - eliminate multiple washing steps
- Shorter floats & processing times
- Integrated beamhouse processes that consume less water



A Cleaner Effluent, Easy to Treat !

- Eco efficient products – eliminate emissions at process
- Eliminate / reduce conventional harmful chemicals
- Eco friendly alternative for each process need



Synergies that improve Value Realization !

- Greater area yield and better sales value
- Better response and value addition in the downstream processes
- Enables to meet stringent brand specifications

Retanning Solution : High in Performance – High in Ecology



- New design aspirations
- Demanding specifications

- Challenging RM quality
- Need for value addition

Performance attributes

- Consumer safety needs
- Effluent concerns

- Increasing regulations
- Stringent test possibilities

Ecological Needs

Today's demand on retanning agents

Performance & Ecology are not two separate causes anymore!

Retanning Solution :

High in Performance – High in Ecology



Carefully designed new range for production of high quality leathers in ecological advantageous processes

Range of formaldehyde-free syntans for high quality leathers

Basyntan® IS
Basyntan® FO
Basyntan® EF liquid
Basyntan® AS
Basyntan® UR



- Excellent lightfastness
- Excellent heat resistance
- Free of phenol, naphthalene, APEO & AOX
- For fuller, softer, tighter leather with good buffing and dyeing characteristics

Eco friendly polymers for all round value additions

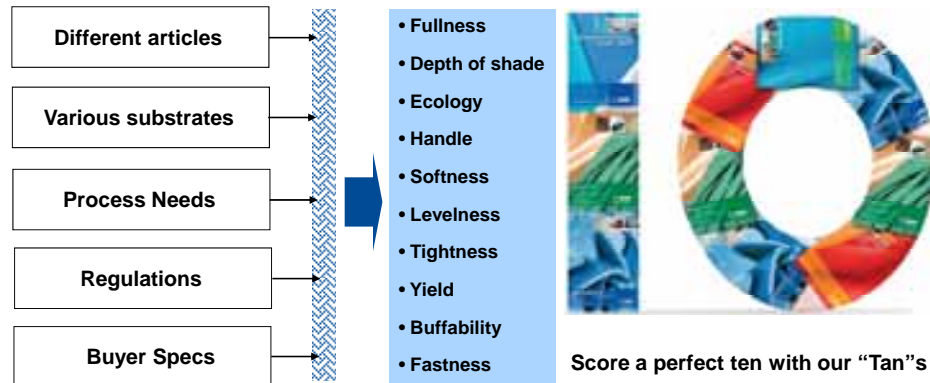
Relugan® Full ES
Relugan® Soft HF
Relugan® FS



- For making full, soft and tight leather
- Excellent lightfastness, heat resistance
- Free of phenol, HCHO, APEO, VOC & AOX

Retanning Solution :

High in Performance – High in Ecology

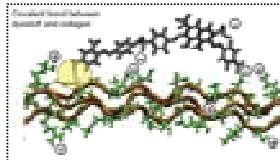


High in performance – High in ecology – Improved consumer safety

Lugafast® Colorlock Technology : Coloring with innovation



- A reactive dye that bonds covalently with collagen structure.



- A complete range for all coloring needs
- Process-optimized single-bath drum dyeing:
 - ✓ Excellent reliability
 - ✓ No layer under the grain
 - ✓ Versatile to suit various article making



A reactive dye system, thoroughly optimized for Leather

Lugafast® Colorlock Technology : Coloring with innovation



Improved fastness level on leather, can mean many things

New design avenues

Fusion materials

Better usage

Improved preference

Conventional

Lugafast

- Excellent fastness properties prevent colors from staining while ensuring migration fastness
- Color will not migrate onto skin
- Perspiration-resistant & wash-fast, improved rub fastness
- Color will not stain other materials (e.g. textiles or plastics)

Value addition with Waterproofing :

Economical yet efficient



Withstanding the Test of Time



The Densodrin® brand has withstood the test of time since 1980.

Withstanding the Test of Extremes



The Densodrin® brand has also consistently set benchmarks in the water-proofing segment.

Present Scenario

High Demand along the value chain

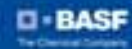


- Approach as high quality item
- Focus for premium segment
- Specific demands from west viz., sports shoes etc.

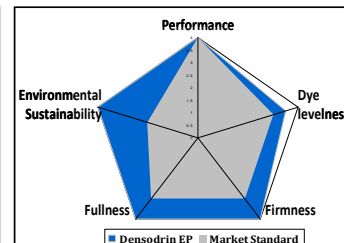
Further progression – Next generation for subsequent markets

Value addition with Waterproofing :

Economical yet efficient



- Next generation products improve efficiency and extend waterproofing possibilities.
- The full range offers a complete system for successful development of waterproof articles.
- 'Waterproofing' gives a functional face-lift
→ An opportunity to improve value realization



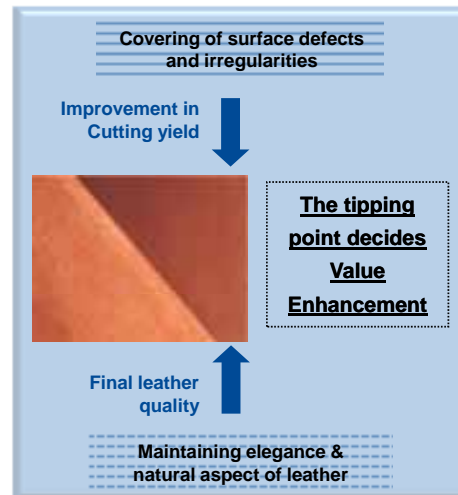
'Proof of concept'

Formal shoes with waterproof leathers

Added value for lower grade materials.

Pro-Upgrade Systems :

Enhancing value realization in Leather finishing



Opportunities for Substantial Upgradation

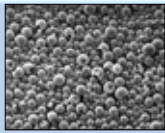
- To achieve covering while averting thick coats / strong correction
- Camouflage finishes that successfully deploy fashion aspirations
- Elegant finishes in line with specific article preferences.

→ *Each area needs a specific product offer for success !!!*

Pro-Upgrade Systems :

Enhancing value realization in Leather finishing

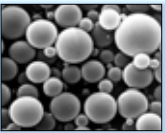




Density ~1100 kg/m³


Heat

75-120 °C

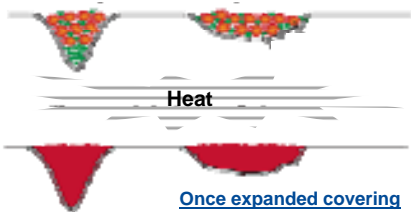


Density ~30 kg/m³

Microcapsules offer unique covering possibilities



Fillers with optimized particle sizes for filling varying irregularities



Heat

Once expanded covering is outstanding

- Outstanding upgrading effect - Natural, elegant leather free of all irregularities
- Improved cutting yield
- Better print definition and retention
- Easy to use under standard tannery conditions and regular processes
- Versatile to address an array of leather article & market requirements

And a complete finishing range to take upgradation to the next level(s)

Pro-Upgrade Systems :

Enhancing value realization in Leather finishing



Alternative Upgradation : Camouflaging defects by creating uniform unevenness



- Sealing with cationic base coats
- Application of fluorochemicals
- Antiques and Pull ups
- Crunch effect with waxes

Lepton® Wax EX-P :	For a colored pull-up effect.
Lepton® Wax E-ZP :	For a whitish frosted appearance which becomes transparent and glossy on plating at high temperature and polishing .
Eukesol® Oil GN :	Distinctive pull up effect with warm and pleasant handle .
Eukesol® Wax GW :	Pull up effects with dry and pleasant handle.
Lepton® Wax EE-HW :	Fluorochemical that retains natural characteristics & hides defects

Value improvement by deploying the right fashion trend!

Looking forward to meet you...



India International Leather Fair 2011

Visit us at Hall 2, Booth 2-08-03

