

# Pretreatment products and performances

# Introduction

- Siltex Asilon OL
- Siltex Asiol
- Siltex Stabiliser SJ

# Enzymatic Desizing

- Enzyme 5 - 7 gms / litre
- Asilon OL 2 gms / litre
- Common Salt 3 gms / litre
- pH 6.5 - 7
- Padding temperature 65 deg. C
- Dwell time 8 - 12 hours
- Pick up more than 90 %

# Scouring

- NaOH 40 - 60 g / litre
- Siltex Asilon OL 4 - 6 g / litre
- Siltex Asiol 2 - 3 g / litre
- Impregnating Temp 100 Deg. C
- Steaming Time 15 - 20 mins
- Pick up 100 %

# Bleaching

		Unit	Combi Steamer	U. Box	Pad Roll
<b>H2O2</b>	<b>50 %</b>	<b>g/litre</b>	<b>30-40</b>	<b>30</b>	<b>30</b>
<b>Sod Hydroxide</b>	<b>100 %</b>	<b>g/litre</b>	<b>20</b>	<b>20</b>	<b>20</b>
<b>Siltex Stabiliser SJ</b>		<b>g/litre</b>	<b>8 - 10</b>	<b>8</b>	<b>8</b>
<b>Siltex Asilon OL</b>		<b>g/litre</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>Magnesium Chloride</b>		<b>g/litre</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>
<b>Steam Temperature</b>		<b>Deg C</b>	<b>100</b>	<b>100</b>	<b>90</b>
<b>Dwell time</b>		<b>mins</b>	<b>15 - 20</b>	<b>20 - 50</b>	<b>60 - 120</b>
<b>Pick up</b>			<b>100%</b>	<b>100%</b>	<b>100%</b>

# Combined Alkali Treatment + Oxidative Desizing Bleaching

## Combined Alkali Treatment + Oxidative Desizing Bleaching

- 1) Singeing
- 2) Alkali Treatment + Oxidative desizing
- 3) Dwell time
- 4) Washing Off
- 5) Bleaching
- 6) Washing Off

• *Details in next pages*

# Alkali Treatment + Oxidative Desizing (Padding Liquor)

- Casutic Soda flakes 35 g / litre
- Sod Persulphate 5 g / litre
- Siltex Asilon OL 4 g / litre
- Temperature 90 - 95 deg C
- Pick up 80 %
- Dwell time 4 - 6 hours
- Washing off: 4 Compartments at 90 deg C.  
(counter current) 1 compartment cold rinse

# Bleaching

- H<sub>2</sub>O<sub>2</sub> 50 % 40 ml / litre
- Caustic Soda flakes 28 gm/litre
- Stabiliser SJ 10 gm/litre
- MgCl<sub>2</sub> . 6H<sub>2</sub>O 0.2 gm/litre
- Steaming Temp. 100 - 102 deg C
- Steaming time 20 minutes
- Washing off : Six compartments  
Temperature 85 - 90 Deg C

# Cold-Pad batch Bleaching

# Padding

- $\text{MgCl}_2 \cdot 6\text{H}_2\text{O}$  0.2 gms / litre
- Siltex Asilon OL 4 gms / litre
- Siltex Stabiliser SJ 10 gms / litre
- NaOH 50 % 40-60 gms /litre
- $\text{H}_2\text{O}_2$  50 % 35-40 ml / litre
- Sod. Persulphate 5 gms / litre
- Temperature Room temp.
- Pick up 75 %
- Dwell time 16 - 24 hours

» continued

# Rinse

- 1st + 2nd compartment -  
90 Deg. C           + 0.5 g/litre Stabiliser SJ  
                          0.5 g/litre Asilon OL  
                          1.0 g/litre NaOH 50 %
- 3rd, 4th +5th compartment  
90 Deg. C
- 6th compartment  
Cold

# Peroxide Bleaching

## Discontinous

<b>L:R</b>	<b>Package</b>	<b>Jigger</b>	<b>Jet</b>	<b>Winch</b>
	<b>1:10</b>	<b>1:3-1:6</b>	<b>1:8-1:10</b>	<b>1:10-1:20</b>
<b>Temp (Deg C)</b>	<b>98</b>	<b>90</b>	<b>98</b>	<b>98</b>
<b>Duration (minutes)</b>	<b>30-45</b>	<b>60</b>	<b>30-45</b>	<b>30-45</b>
<b>MgCl2 (g/litre ) 8-10 Deg dh</b>	<b>0.2-0.3</b>	<b>0.2-0.3</b>	<b>0.2-0.3</b>	<b>0.2-0.3</b>
<b>Stabiliser SJ</b>	<b>0.8-1.5</b>	<b>3-5</b>	<b>1.2-4.5</b>	<b>0.4-0.8</b>
<b>Asilon OL</b>	<b>0.5</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>NaOH 100 %</b>	<b>1.5-3</b>	<b>4-5</b>	<b>1.5-3</b>	<b>1-1.5</b>
<b>H2O2 35%</b>	<b>4-8</b>	<b>10-15</b>	<b>6-8</b>	<b>2-4</b>

# Bleaching on Soft flow

100 % Co. Knitted Goods

- Acid Extraction

1.5 g / litre      Stabiliser SJ

0.5 ml / litre    Formic Acid or Acetic Acid

pH    4

20 minutes at 40 Deg. C

» contd....

# Bleaching on Soft flow

100 % Co. Knitted Goods

- Bleach Step  
with same liquor add :  
0.2 g / litre  $MgCl_2$   
4 ml / litre NaOH 50 %  
8 ml / litre  $H_2O_2$  35 %  
1 % Blankophor BA liq  
45 - 60 minutes at 98 deg C

# Bleaching on Soft flow

100 % Co. Knitted Goods

- Treat the fabric for 20 minutes at 40 deg. C, then raise the temperature at the rate of 2 Deg. C per minute.
- Treat the fabric for 45 - 60 minutes, then lower the temperature to 80 Deg. C, then drain.
- Refill the machine with water, raise the temperature to 90 Deg. C, treat for 5 minutes. Drain.
- Refill the machine, raise the temperature to 60 Deg. C, treat for 5 minutes . Drain.
- Refill the machine and give a cold rinse or softener treatment.