

Certificate Course in Supervisory skilling programme on Jute Spinning Preparatory (S-1)

Duration: 560 hours

Domain Skill: 500 hours

Section	Batching to Finisher drawing stage	Contact Hours
Selection and Batching	<ul style="list-style-type: none"> • Different jute producing area and their quality • Gradation of Jute fibre • Raw Jute Moisture and its conversion • Different types of claim • Concept on the major and minor defects • Role of selector cum assorter • Analyze the jute physical parameters by hand and eye method • Method of Cost effective batch preparation • Jute softening, (functioning of spreader and softener, quality management of delivered sliver, emulsion and its purpose, various types of emulsion plants, important points during application of emulsion, Defects in Emulsions • Piling and various types of piling methods, pile duration, morah size. • Causes of minor breakdown and follow-up • Do's and Don'ts of spreader/softener operation and jute piling. • Practical demonstration. <ul style="list-style-type: none"> ○ Spreader/softener operation, machine safety, ○ Identification of machine parts, ○ Drawing of gearing diagram and calculations –Draft, draft constant, speed ratios, lead (%) etc. ○ Standard sliver feeding and receiving practices, ○ Material marking and stacking. • Identification of faults in spreader/softener and its rectification • Calculations of Formulation and Mixing of Emulsions, Spreader Calculations, Production calculations 	Theory 40 Practical 100
Carding	<ul style="list-style-type: none"> • Objectives of jute carding • Different types of cards & their basic features and principles 	

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	<p>of operations.</p> <ul style="list-style-type: none"> • Basic concept of different quality of jute processed in breaker, inter card, finisher card and teaser card • Basic idea of draft, Draft Change pinion and sliver weight. • Basic Idea of Lead, its importance & difference with Draft. • Basic idea of doubling and its importance in carding process • Important check points regarding carding machine and carding process control • Practical demonstration. <ul style="list-style-type: none"> ○ Machine operation, machine safety, ○ Identification of machine parts, ○ Drawing of gearing diagram and calculations – Draft, draft constant, speed ratios, lead (%) etc. • Carding Calculations – machine parameters • Production calculation • Quality control in Carding – sample size, testing procedure, calculation, etc. • Card waste (Process waste in different sections)& control of wastage • Do's and Don'ts of Carding operation • Machine Balancing – It's importance & methods 	<p>Theory 50 Practical 120</p>
Drawing	<ul style="list-style-type: none"> • Objectives of drawing • Basic mechanism of different types of jute drawing frames and their operation and path of the sliver in these drawing machines. • Basic idea of doubling and drafting. Importance of doubling plate. Concept of best draft and worst draft and its use in drawing machine • General information about draft of different drawing machine, draft constant, draft change pinion and sliver weight& its calculations. • Fibre floating and its control. • Can Reversal Mechanism, its importance • Calculation of production and efficiency of the drawing machine. • Wastages and their control in drawing department. 	<p>Theory 40 Practical 100</p>

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	<ul style="list-style-type: none"> • Practical demonstration. <ul style="list-style-type: none"> ○ Identification of machine parts ○ Machine operation, machine safety ○ Drawing of gearing diagram and calculations –Draft, draft constant, speed ratios, faller drops/min, lead (%) etc. • Do's and Don'ts of Drawing operation • Machine Balancing – It's importance & methods 	
Testing and Quality Control	<ul style="list-style-type: none"> • Concept of Quality and Statistical Quality Control • Role of Sampling for testing • Testing standard and SOP of test method • Fibre Testing – strength, fineness, defects, colour, MR • Sliver Testing – Sliver Weight and its CV% at different stages 	Theory 20 Practical 30
Basic Computer Skill	<ul style="list-style-type: none"> • Basic concept of computer application and its necessity in jute mill • Introduction of MS Office <ul style="list-style-type: none"> ○ Use of MS Word ○ Use of MS Excel ○ Use of MS PowerPoint • Internet and E-mail, procedures, use of apps etc. 	Theory 6 Practical 24
Soft Skill	<ul style="list-style-type: none"> • Basic concept about the man machine ratio and hands complements • Fire and industrial safety management 	Theory 5 Practical 5
Interactive Session / Mill Practice		20
Total		560