



Bangladesh Technical Education Board Agargaon, Dhaka

Industrial Attachment Guideline for Wet Processing

Sl. No.	Section	Activities
1	HR, Admin & overall information	1. Project information. 2. Company profile. 3. Production capacity. 4. Different departments. 5. Organogram of manpower & job description. 6. Human Resources and Compliance.
2	General Functions	1. List of Machines. 2. Maintenance procedures & schedules. 3. Flowchart of dyeing process. 4. Flowchart of printing process. 5. Flowchart of finishing process. 6. List of Buyers/Brands/Customers. 7. List of Chemicals & Auxiliaries.
3	Fabric Inspection & Batching	1. Fabric inspection methods. 2. Yarn inspection methods. 3. Identification of Fabric/Yarn faults. 4. Fabric attachment process & rope length calculation. 5. Batch card preparation & marking. 6. Brushing/Shearing machine observation with fabric passage diagram. 7. Observation of Roll Breaker machine and Knitted Fabric turning process.

4	Singeing & Desizing	1. Observation of Singeing & Desizing machine with fabric passage diagram. 2. Specification of Singeing machine. 3. Desizing process observation with recipe, chemical and commercial name of chemicals used. 4. Observe the Singeing machine maintenance procedure.
5	Back Process/Pre-Treatment	1. Scouring & Bleaching machine specification. 2. Scouring & Bleaching method observation with recipe, chemical and commercial name of chemicals used. 3. Hydro Extractor machine specification and operation. 4. Details of Mercerizing process- concentration of Caustic Soda, Temperature control, Tension, Impregnation Time, Safety measures etc.
6	Dyeing Lab	1. Production planning & operation sequences of lab section. 2. Sample preparation of yarn & fabric. 3. Recipe prediction, generation & calculation with spectrophotometer (Data Color) & manual system. 4. Calculation & preparation of stock solutions. 5. Operation process of Lab dyeing machine. 6. Demonstration of color assessment system by manual & spectrophotometer (Data Color). 7. Swatch card/ Lab dip card preparation as per buyer requirements. 8. Observe Auto Dispensing machine.
7	Dyeing	1. Commercial names of dyestuffs, chemicals & auxiliaries, manufacturing company & country of origin. 2. Dyeing machine operating system. 3. Recipe calculation for bulk production. 4. Observation of different types of sample dyeing machines. 5. Observation of different types of bulk dyeing machines. 6. Shade wise (light, medium & dark shade) process follow up & sample collection. 7. Dyeing machine washing & cleaning process. 8. Shade matching process follow up. 9. Observe the after-treatment processes with different types of chemicals.

8	Finishing & Quality Control	1. Observation of slitting machine with operational process. 2. Observation of squeezer machine with operational process. 3. Observation of Stenter machine with operational process. 4. Observation of Brush & Sueding machine with operational process. 5. Observation of dryer machine with operational process. 6. Observe the application process of different chemicals used for different effects in finishing (ex: water proof, water repellent, anti-pilling, softener etc.) 7. Observation of compactor machine with operational process. 8. Observe different types of software used in different finishing machines. 9. Check dyed fabric quality (online & offline), 4-point system 10. Check & identify different types of faults of dyed fabrics.
9	Printing	1. Observe screen preparation process. 2. Observe design creation process. 3. Print paste preparation with recipe. 4. List of chemicals & their functions used in printing. 5. Observe Flat & Rotary screen printing machine with detail process. 6. Observe Digital Printing machine with detail procedure. 7. Observe Heat Transfer printing machine with detail process. 8. Observe Emboss, 3D, Sublimation & Heat setting process (if any). 9. Collection of different types of printed sample. 10. Observe washing process of printed fabrics with recipe.
10	Washing	1. Observe different types of washing machine. 2. Observe different types of washing process with recipe. 3. Collection of different types of washing sample. 4. List of dyes & chemicals & their functions used in washing process.
11	ETP	1. Observe ETP operation flow chart. 2. Observe the functions of different process involved in ETP. 3. Observe ETP sludge management system. 4. List of chemicals & their functions used in different process of ETP. 5. Check different parameters of wastewater (pH, Temperature, DO, BOD, COD, TSS, TDS etc.) 6. Observe the ETP lab & machine specifications. 7. Certification related to ETP (DoE, Accord, Alliance, LEEDS etc.)

12	Physical Testing Lab	1. Operational process sequence of testing lab. 2. Observe different physical testing procedure based on ISO, ASTM & others buyer methods. 3. Observe different testing machines for physical & color test. 4. Observe different color fastness testing procedure based on ISO methods. 5. Understand lab quality manual & SOP of respective lab.
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