



Process Engineer

Full-Time, On-Site | Morena, Madhya Pradesh

Company Description

Craste is scaling sustainable manufacturing of high-performance materials from agricultural crop residue. Operating at the intersection of circular economy and industrial process innovation, the company transforms what would otherwise be burnt in open fields into pulp, formaldehyde-free engineered boards, and agri-based packaging. This work requires rigorous process engineering, operational excellence, and a commitment to building manufacturing systems that are resource-efficient, scalable, and grounded in grassroots impact — directly supporting farmer livelihoods while delivering industrial-grade performance.

Role Description

A hands-on role focused on the installation, commissioning, and ongoing process optimization of the Agri-Fiber Conversion Unit in Morena. The role bridges plant engineering and continuous process operations, with the expectation of translating design specifications into reliable, efficient manufacturing processes at scale. This position involves owning the technical commissioning, establishing operating standards, and driving continuous process improvement — suited to someone with a background in pulp & paper or related continuous process industries and hands-on expertise in plant layout, equipment integration, and vendor coordination.

Responsibilities

- Lead and support installation and commissioning of the Agri-Fiber Conversion Unit, including equipment setup, utility integration, and performance testing
- Support design and review of plant layout, utility planning, and equipment placement
- Coordinate with equipment vendors for installation, commissioning, and performance validation
- Establish and maintain standard operating procedures (SOPs) for start-up, normal operation, shutdown, and emergency scenarios
- Define and optimize process parameters for fiber pulping, washing, and recovery operations
- Monitor key performance indicators including yield, pulp quality parameters (e.g., kappa number, freeness), and energy, water, and chemical consumption
- Troubleshoot operational issues, identify root causes, and implement corrective actions
- Maintain accurate and detailed records of plant operations, process changes, and performance metrics
- Coordinate with external vendors, contractors, and internal teams to ensure timely project execution
- Evaluate technical specifications, engineering drawings, and vendor quotations
- Ensure compliance with safety and statutory regulations during plant construction, commissioning, and operation

- Drive efficiency initiatives to reduce energy, water, and chemical consumption
- Identify opportunities for equipment and process innovation — evaluate new technologies, methodologies, and configurations to enhance efficiency, reliability, and sustainability
- Document learnings from trials and scale-up activities to establish best practices and improve repeatability
- Collaborate with the R&D team on trials of new fiber feedstocks and process enhancements

Qualifications & Skills

- B.Tech / M.Tech in Chemical Engineering, Pulp & Paper Engineering, Process Engineering, or a related field
- 3–6 years of hands-on experience in pulp & paper mills, fiber or biomass processing, continuous manufacturing, or chemical process industries
- Hands-on experience with installation, commissioning, and validation of process plants
- Familiarity with pulp washing, recovery systems, and effluent treatment
- Solid understanding of pulping chemistry, unit operations, continuous process operations, and process control
- Ability to read and interpret technical specifications, engineering drawings, and equipment manuals
- Strong analytical and troubleshooting abilities in manufacturing environments
- Project management skills — planning, tracking, and delivering against timelines
- Vendor coordination, vendor management, and negotiation experience
- Strong documentation skills — SOPs, trial documentation, and operating guidelines
- Data-driven approach to process optimization and problem-solving
- Excellent coordination and communication skills across multidisciplinary teams
- Comfort working in a fast-paced startup environment with evolving processes, in a rural plant setting
- Innovation mindset — proactive approach to identifying and evaluating process and equipment improvements

Applications are considered across all experience levels. Technical aptitude, intellectual honesty, and a demonstrated willingness to learn are valued as much as years of experience.