

PROCESS DESIGN FUNDAMENTALS

BECHT*CONNECT
Knowledge-on-Demand Network

DOCUMENT SUMMARY

To familiarize on equipment design principles / fundamentals to:

- Interact better with internal and 3rd party equipment specialists
- Oversee third party Stage 3 / Stage 4 design preparation (e.g., checking sizing of pumps, compressors, fractionating columns, etc.)
- Facilitate daily monitoring, troubleshooting, debottlenecking, process optimization, project development, operational changes

WHY CHOOSE BECHT'S PROCESS DESIGN FUNDAMENTALS?

1. **Practical, Engineering-Focused Approach:** Designed for engineers by engineers, these documents cut through unnecessary theory and focus on the essential principles that drive efficient process design. Whether you're developing new systems or refining existing ones, this resource provides clear, actionable guidance.
2. **Guidance on Key Design Considerations:** From fundamental design calculations to process safety integration and system optimization, these documents cover essential topics to ensure robust, high-performance designs. Engineers gain insights into best practices, material selection, control strategies, and process efficiency improvements.
3. **Built-In Troubleshooting & Optimization Strategies:** These documents go beyond design theory by incorporating troubleshooting guidelines and optimization techniques. Engineers can identify potential issues early and implement corrective measures, reducing inefficiencies and operational risks.
4. **Decision-Making Tools & Economic Considerations:** Engineers are provided with clear frameworks for evaluating design choices based on economic impact, energy efficiency, and long-term reliability. These insights enable smarter, data-driven decision-making for improved project outcomes.



Primary User
Process Engineers
Project Engineers



Secondary User
All other technical disciplines

Smart, Practical, and Proven

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Fired Heaters

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Fans and Blowers

Eductors and Ejectors

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Fluid Flow

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Instrumentation

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