

# Process Equipment Cost Estimation Final Report Tutorial

**Process equipment cost estimation final report** is a critical document in engineering, project management, and industrial process design. It provides a comprehensive overview of the projected costs associated with acquiring, installing, and commissioning process equipment necessary for a manufacturing or processing facility. Accurate cost estimation is essential for budgeting, project feasibility analysis, investment decision-making, and ensuring that projects remain within financial constraints. This article delves into the core components, methodologies, and best practices for preparing an effective process equipment cost estimation final report.

## Understanding the Importance of a Final Cost Estimation Report

A final process equipment cost estimation report serves as a definitive reference that consolidates all cost-related data for a given project. It ensures stakeholders have a clear understanding of the anticipated expenses, reduces uncertainties, and aids in decision-making processes.

Key Reasons for Preparing a Final Cost Estimation Report:

- Facilitates accurate project budgeting and financial planning
- Supports bid preparation and contractor negotiations
- Provides a baseline for project cost control and management
- Helps identify potential cost overruns early
- Assists in evaluating project feasibility and return on investment

## Components of the Process Equipment Cost Estimation Final Report

A comprehensive final report encapsulates various cost elements related to process equipment. It should be structured clearly to enable easy understanding and reference.

### 1. Equipment Purchase Cost

This is the foundational cost of acquiring the equipment. It includes the price quoted by vendors or suppliers, often derived through detailed quotations, vendor negotiations, or cost estimation models.

Factors Influencing Equipment Purchase Cost:

- Equipment size and capacity
- Design complexity and specifications
- Material of construction
- Vendor location and manufacturing costs
- Market conditions and inflation

## 2. Installation and Construction Costs

This encompasses all expenses related to installing the equipment and preparing the site.

Key elements include:

- Foundation construction
- Mechanical and electrical installation
- Piping and instrumentation
- Structural support
- Commissioning and testing

## 3. Auxiliary Equipment and Accessories

Additional components necessary for operation, such as control panels, safety devices, and ancillary systems.

## 4. Engineering and Design Costs

Costs associated with detailed engineering, design, drawings, and project management related to the equipment.

## 5. Contingency and Miscellaneous Expenses

Provision for unforeseen costs, project delays, or changes in scope.

## Methodologies for Cost Estimation

Accurate process equipment cost estimation relies on selecting appropriate methodologies suited to the project's scope, complexity, and available data.

### 1. Parametric Estimation

Uses statistical relationships between historical cost data and equipment parameters such as size,

capacity, or throughput.

Advantages:

- Quick and cost-effective
- Suitable for early project phases

Limitations:

- Less precise, reliant on quality of historical data

## **2. Bottom-Up Estimation**

Involves detailed estimation of each component's cost, summing up to form the total.

Advantages:

- High accuracy
- Detailed insight into cost drivers

Limitations:

- Time-consuming and requires detailed data

## **3. Vendor Quotes and Benchmarking**

Utilizes quotations from suppliers and comparisons with similar projects.

Best Practices:

- Obtain multiple quotes
- Adjust for inflation and scope differences

## **4. Expert Judgment**

Engaging experienced professionals to provide estimates based on their knowledge.

## Best Practices in Preparing the Final Report

Ensuring the report's accuracy and usefulness involves adherence to certain best practices.

- **Data Validation:** Verify all cost data against reliable sources.
- **Clear Documentation:** Include assumptions, methodologies, and data sources.
- **Use of Standardized Formats:** Present data in tables, charts, and summaries for clarity.
- **Inclusion of Contingencies:** Allocate appropriate contingency funds to mitigate risks.
- **Periodic Updates:** Reflect market changes, inflation, and scope modifications.

## Structure of a Typical Cost Estimation Final Report

An effective report should be organized logically, covering all relevant aspects.

- **Executive Summary:** Overview of the project, key cost figures, and conclusions.
- **Introduction:** Project scope, objectives, and methodology.
- **Detailed Cost Breakdown:** Itemized costs for equipment, installation, auxiliary systems, engineering, and contingencies.
- **Cost Summary Tables:** Consolidated view of total estimated costs with comparisons to budgets or previous estimates.
- **Assumptions and Exclusions:** Clarify the basis of estimates and scope limitations.
- **Risk and Uncertainty Analysis:** Identify potential cost risks and mitigation strategies.
- **Appendices:** Supporting data, vendor quotations, calculation sheets, and reference documents.

## Utilizing the Cost Estimation Final Report for Project Success

Once prepared, the final report is a valuable tool for various project stakeholders.

Applications include:

- Budget approval and funding allocation
- Contractor selection and negotiations
- Project scheduling and resource planning
- Cost control and monitoring during project execution
- Post-project analysis and lessons learned

## Conclusion

A well-prepared process equipment cost estimation final report is vital for the successful planning and execution of industrial projects. It combines detailed cost data, sound estimation methodologies, and clear documentation to provide a transparent and reliable financial foundation. By adhering to best practices and comprehensive structuring, project teams can ensure accurate budgeting, minimize risks, and promote informed decision-making, ultimately leading to project success and operational efficiency.

## Process Equipment Cost Estimation Final Report: A Comprehensive Guide for Accurate Budgeting and Project Planning

In the realm of process engineering and project development, process equipment cost estimation final report serves as a critical document that encapsulates the financial outlook for procured equipment within a project. This report not only guides budgeting and procurement strategies but also influences decision-making, risk assessment, and project scheduling. Crafting a detailed and accurate final report requires a thorough understanding of cost estimation methodologies, data collection, analysis, and presentation techniques. This guide aims to provide a comprehensive overview of the process, ensuring engineers, project managers, and stakeholders can develop robust final reports that reflect true project costs.

### Understanding the Importance of a Process Equipment Cost Estimation Final Report

Before diving into the mechanics of preparing the final report, it's essential to grasp why it holds such significance:

- Budget Control: Accurate cost estimates prevent budget overruns and facilitate financial planning.
- Project Feasibility: Helps determine whether project scope aligns with available resources.
- Procurement Strategy: Guides sourcing decisions, supplier negotiations, and contract awards.
- Risk Management: Identifies potential cost-related risks and mitigation strategies.
- Schedule Coordination: Ensures timely procurement, installation, and commissioning based on cost estimates.

### Key Components of a Final Cost Estimation Report

A well-structured process equipment cost estimation final report typically includes the following sections:

- Executive Summary

- Brief overview of the project scope and objectives.
- Highlights of total estimated costs.
- Key assumptions and methodologies.
  
- Introduction
  
- Project background and purpose of the report.
- Scope of equipment included.
  
- Methodology Overview
  
- Description of cost estimation techniques used.
- Data sources and reference standards.
  
- Equipment List and Specifications
  
- Detailed list of process equipment.
- Technical specifications, capacities, and operational parameters.
  
- Cost Data and Estimation Details
  
- Breakdown of costs for each equipment item.
- Direct costs: equipment purchase price, fabrication, installation.
- Indirect costs: engineering, inspection, transportation, taxes, and contingencies.
  
- Cost Summary and Analysis
  
- Total estimated costs.
- Cost distribution by equipment type or process unit.
- Sensitivity analysis and risk considerations.

- Assumptions and Constraints
- Key assumptions influencing cost estimates.
- Limitations and potential variations.
- Appendices
- Supporting data, calculation sheets, references.

### Step-by-Step Process for Preparing the Final Report

Creating a comprehensive final report involves a systematic approach:

#### Step 1: Data Collection and Research

- Gather quotations from vendors and suppliers.
- Review existing cost databases and reference standards such as the Chemical Engineering Plant Cost Index (CEPCI).
- Collect historical cost data from similar projects.

#### Step 2: Equipment Cost Estimation

- Use appropriate estimation techniques:
- Factor Method: Applying cost multipliers to base equipment costs.
- Parametric Models: Using correlations and equations based on equipment parameters.
- Vendor Quotes: Incorporating actual quotations where available.
- Adjust costs for project-specific factors like location, scale, and technology.

#### Step 3: Cost Breakdown and Categorization

- Classify costs into categories:
- Purchase Price: Equipment cost as per quotations or estimates.
- Installation and Commissioning: Expenses associated with site prep, assembly, and startup.
- Indirect Costs: Engineering, supervision, inspection, transportation, and taxes.

#### Step 4: Applying Cost Factors and Contingencies

- Include escalation factors for inflation or future price changes.
- Add contingency percentages to account for uncertainties.
- Adjust for currency fluctuations or market volatility if relevant.

#### Step 5: Compilation and Analysis

- Summarize individual equipment costs into a consolidated total.
- Perform sensitivity analysis to evaluate how assumptions impact overall costs.
- Cross-verify with previous projects or industry benchmarks.

#### Step 6: Drafting the Final Report

- Organize findings logically, ensuring clarity.
- Illustrate data with tables, charts, and graphs.
- Clearly state assumptions, methodology, and sources.

#### Step 7: Review and Validation

- Have the report reviewed by technical and financial teams.
- Validate cost estimates against actual vendor quotes or updated data.
- Update the report based on feedback and new information.

#### Best Practices for Accurate Cost Estimation and Reporting

Achieving precision in the process equipment cost estimation final report involves adhering to certain best practices:

- **Use Multiple Data Sources:** Cross-reference quotations, databases, and historical data.
- **Maintain Transparency:** Clearly document assumptions, methodologies, and sources.
- **Update Regularly:** Reflect current market conditions and supplier prices.
- **Involve Experts:** Consult with vendors, engineers, and cost specialists.
- **Perform Sensitivity Analysis:** Understand the impact of variables on total costs.
- **Include Contingency and Risk Margins:** To account for unforeseen expenses.
- **Standardize Formats:** Use consistent templates for clarity and ease of review.

## Common Challenges and How to Address Them

While preparing the final report, several challenges may arise:

### Challenge 1: Fluctuating Market Prices

Solution: Use current quotations and include contingency allowances for price volatility.

### Challenge 2: Lack of Precise Data

Solution: Utilize industry benchmarks and parametric models; clearly state assumptions and limitations.

### Challenge 3: Scope Changes

Solution: Establish change management processes and update estimates accordingly.

### Challenge 4: Inconsistent Data Sources

Solution: Standardize data collection methods and verify data accuracy.

## Final Tips for a Successful Process Equipment Cost Estimation Final Report

- Be Detailed and Precise: Avoid vague estimates; specify units, currencies, and assumptions.
- Maintain Traceability: Keep records of all data sources and calculation methods.
- Align with Project Goals: Ensure the report supports decision-making and project planning.
- Communicate Clearly: Use visuals and summaries to make complex data understandable.
- Plan for Revisions: Recognize that cost estimates are iterative; update as new data emerges.

## Conclusion

The process equipment cost estimation final report is a fundamental document that encapsulates the financial blueprint of a process engineering project. Its accuracy and clarity directly influence project success, stakeholder confidence, and resource allocation. By following systematic methodologies, leveraging reliable data sources, and maintaining transparency, engineers and project managers can produce comprehensive reports that stand up to scrutiny and facilitate informed decision-making. Whether initiating a new project or revising existing estimates, a well-prepared final report is an indispensable tool in the arsenal of process industry professionals.

Remember, meticulous preparation and attention to detail in your cost estimation final report not

only safeguard your project against unforeseen expenses but also foster trust and credibility among clients, investors, and team members.

**Question** What are the key components included in a process equipment cost estimation final report? The final report typically includes detailed cost breakdowns for equipment, materials, labor, installation, commissioning, and contingency costs, along with assumptions, methodology, and supporting data used in the estimation process. How can accuracy be improved in process equipment cost estimation reports? Accuracy can be enhanced by using up-to-date market prices, detailed engineering designs, reliable vendor quotes, applying appropriate cost escalation factors, and conducting sensitivity analyses to account for uncertainties. What role does contingency planning play in the final process equipment cost estimation report? Contingency planning accounts for uncertainties and potential cost overruns, ensuring that the estimate remains realistic and provides a buffer for unforeseen expenses during project execution. How should the final report address equipment lifecycle and maintenance costs? The report should include estimates of ongoing operational expenses, maintenance, spare parts, and lifecycle costs to provide a comprehensive financial outlook beyond initial capital expenditure. What are common challenges faced when preparing a process equipment cost estimation final report? Common challenges include fluctuating market prices, incomplete design details, lack of vendor data, scope changes, and difficulties in accurately estimating installation and commissioning costs. Why is documentation and traceability important in a process equipment cost estimation final report? Proper documentation ensures transparency, allows for validation of assumptions and data sources, facilitates updates, and supports decision-making processes throughout the project lifecycle.

**Related keywords:** process equipment, cost estimation, final report, equipment pricing, project budgeting, engineering cost analysis, capital expenditure, procurement costs, equipment specifications, project financial planning

## dealing her final card

**Dealing her final card** is a phrase that can evoke a multitude of interpretations, depending on the context in which it is used. Whether it pertains to a pivotal moment in a card game, a metaphor for a decisive action in life, or a symbolic act within a narrative, understanding the significance and implications of this phrase requires a comprehensive exploration. This article delves into the various dimensions of dealing her final card, examining its origins, meanings, and applications across different scenarios, all structured to enhance your understanding and optimize search engine visibility.

Understanding the Meaning of ?Dealing Her Final Card?

## The Literal Interpretation in Card Games

In the realm of card games, dealing her final card typically refers to the last card dealt to a player, signifying the culmination of the dealing process. This moment often carries weight, as it can determine the outcome of the game or serve as the decisive move.

- Key aspects include:
- Final deal significance: The last card can be a game-changer.
- Strategic implications: Players often anticipate or gamble on the final card.
- Psychological impact: The anticipation or disappointment associated with the final card.

## The Metaphorical and Symbolic Usage

Beyond the literal sense, dealing her final card is frequently used metaphorically to describe a critical decision point or the last chance in a situation.

- Examples include:
- A person making their last effort before giving up.
- A character revealing their true intentions at a pivotal moment.
- An individual facing the final opportunity to turn their circumstances around.

## Historical and Literary Contexts

Throughout history and literature, the phrase can symbolize fate, destiny, or the decisive moment that seals a person's fate.

## The Significance of Dealing the Final Card in Card Games

### Popular Card Games Involving a Final Card

Several classic card games revolve around the concept of the final card, each with unique rules and strategies:

- Blackjack: The final card can determine if the player hits or busts.
- Poker: The last community card (the river) often influences betting strategies.
- Bridge: The final bid or play can decide the contract.
- Rummy: The last discard or meld can be crucial.

## Strategies for Dealing or Playing the Final Card

In competitive card play, the final card often requires careful strategy:

- Anticipation: Predict what opponents might hold.
- Bluffing: Use the last card to mislead opponents.
- Risk assessment: Decide whether to play aggressively or conservatively.

## The Role of the Dealer or Player in Final Card Decisions

The dealer or player must consider:

- Game state: Current scores and remaining cards.
- Psychological factors: Opponent tendencies.
- Probability: Odds of winning with the final card.

## Dealing Her Final Card as a Life Metaphor

### The Last Chance or Final Opportunity

In life, dealing her final card can symbolize the moment when an individual makes their last effort, faces their ultimate challenge, or approaches the end of a journey.

- Common scenarios include:
  - Making a final decision in a career or relationship.
  - Facing terminal illness with dignity and resolve.
  - The culmination of efforts in a significant project.

## Emotional and Psychological Implications

This metaphor often evokes feelings of hope, despair, or acceptance:

- Hope: Believing that the final move will change everything.
- Despair: Feeling that the last chance is futile.
- Acceptance: Recognizing that this is the inevitable end.

## Cultural and Literary Examples

Many stories and cultures emphasize the importance of the final act or decision:

- Literature: The climax of a novel often mirrors the final card?an ultimate revelation or choice.
- Films: The hero's last stand or decisive action.
- Philosophy: Acceptance of mortality and the final chapter of life.

How to Approach Dealing the Final Card: Tips and Best Practices

In Card Games

To optimize your chances:

- Know the rules thoroughly.
- Observe opponents' behaviors.
- Calculate risks carefully.
- Stay calm under pressure.
- Use psychological tactics like bluffing when appropriate.

In Life or Business Decisions

When facing your final card:

- Assess all options logically.
- Trust your intuition.
- Prepare for different outcomes.
- Remain adaptable.
- Seek advice or counsel if needed.

Common Scenarios Involving Dealing Her Final Card

In Relationships

Deciding whether to confront, forgive, or let go can be akin to dealing the final card, where the choice impacts future happiness or regret.

In Business and Career

Launching a new venture or making a pivotal career move can be the final card in a strategic plan.

## In Personal Growth

Overcoming fears or habits may involve taking the decisive action?the final card?that leads to transformation.

## The Symbolism of the Final Card in Various Cultures

### Tarot and Divination

In tarot readings, the final card drawn can symbolize the outcome or lesson of a reading, often associated with destiny and insight.

### Mythology and Folklore

Mythical stories sometimes revolve around characters facing their final challenge, with the last act determining their fate.

### Cultural Rituals

Certain rites of passage or ceremonies symbolize dealing the final card?marking the end of one phase and the beginning of another.

## Conclusion: Embracing the Final Card

Whether in a game or life, dealing her final card embodies moments of culmination, decisive action, and ultimate fate. Recognizing its significance allows individuals to approach these moments with clarity, strategy, and acceptance. By understanding the various contexts and implications, you can better navigate situations that call for your final move, ensuring you make the most of your last card.

## SEO Keywords and Phrases for Optimization

- Dealing her final card meaning
- Final card in card games
- Symbolism of final card
- Final opportunity in life
- Strategic final card play
- Life metaphor: dealing the last card
- Final decision in relationships
- Tarot final card significance
- How to handle the final card in poker

## - Last chance strategies

Meta Description: Discover the profound meaning of "dealing her final card," exploring its significance in card games, life decisions, and cultural symbolism. Learn strategies and insights to approach decisive moments with confidence.

## Mastering the Art of Dealing Her Final Card: A Comprehensive Guide

In the world of card games, few moments are as charged with anticipation and strategic significance as dealing her final card. Whether you're engaged in a high-stakes poker game, a casual game of blackjack, or a complex trick-taking game, understanding how to handle this pivotal moment can drastically influence the outcome. This guide aims to unpack the nuances, strategies, and psychological elements involved in dealing her final card, equipping you with the knowledge to master this critical aspect of gameplay.

### Understanding the Significance of the Final Card

Before diving into techniques and strategies, it's essential to grasp why the final card deal is so impactful.

### The Climax of the Game

In many card games, the last card can determine the winner or reveal a significant shift in the game's momentum. It's often the culmination of multiple rounds of skill, luck, and psychological play.

### Psychological Pressure

The final card deal is usually surrounded by heightened tension for players, spectators, and both sides. Handling this moment confidently can influence opponents' perceptions and even sway their strategies.

### Strategic Implications

Deciding who receives the final card, and how it's dealt, can be used to implement advanced strategies such as bluffing, misdirection, or ensuring fairness.

### The Role of the Dealer: Skills and Responsibilities

In many games, the dealer holds a crucial position not merely in distributing cards but in orchestrating the flow of the game.

## Responsibilities of the Dealer

- Ensuring fair and random distribution
- Maintaining the integrity of the game
- Managing the timing and sequence of deals
- Handling the final card with precision and confidence

## Essential Skills for Dealing Her Final Card

- Steady Hand and Precision
- Discretion and Composure
- Knowledge of Game Rules and Etiquette
- Ability to Read Opponents and Anticipate Reactions

## Techniques for Dealing Her Final Card

The method of dealing the final card can vary based on the game, the setting, and the players involved. Here, we explore several common techniques and best practices.

- The Standard Dealing Method

Description: The dealer distributes cards one at a time to each player, including the final card, in clockwise order.

Best For: Casual and formal settings where fairness and transparency are paramount.

### Tips:

- Keep a consistent pace.
- Maintain eye contact with players to ensure clarity.
- Use a gentle, controlled motion to prevent accidental reveals.

- The Pile or Stack Deal

Description: Cards are dealt from a pre-made stack or pile, often used in games like blackjack.

Best For: Fast-paced environments or when dealing with multiple decks.

Tips:

- Shuffle thoroughly before dealing.
- Use a smooth, confident motion.
- Be aware of the position of the final card in the stack.

- The Hidden or Face-Down Deal

Description: The final card is dealt face-down, often to add suspense or for secret strategies.

Best For: Games emphasizing secrecy or bluffing, such as poker.

Tips:

- Handle the card carefully to prevent accidental exposure.
- Use a subtle gesture to conceal the face.
- Prepare to reveal or play the card at the appropriate moment.

- The ?Fanned? Deal

Description: The dealer fans out the last few cards so players can see their options or select a card.

Best For: Games where choice or selection is involved.

Tips:

- Keep the cards evenly spread.
- Ensure no cards are exposed prematurely.
- Use this technique to build suspense and strategic depth.

Strategies for Handling the Final Card

Dealing the last card isn't just about technique—it's also about strategy and psychology.

### A. Timing and Pacing

- Control the tempo to build suspense or to signal confidence.
- Avoid rushing, as it can appear suspicious or unprofessional.
- Use pauses effectively to heighten tension.

### B. Misdirection and Mannerisms

- Employ subtle gestures to divert attention.
- Maintain a neutral or confident demeanor.
- Use eye contact and body language to influence perceptions.

### C. Placement and Positioning

- Decide whether to deal the final card from your dominant hand or from a specific position.
- Be consistent in your method to avoid suspicion.
- Consider the physical layout of the table to facilitate smooth dealing.

### D. Incorporating Rituals or Superstitions

Some dealers or players incorporate rituals, such as a specific way of shuffling or dealing, to create confidence or tradition.

### Ethical Considerations and Fair Play

While mastering dealing her final card involves skill and strategy, it's vital to uphold integrity.

- Avoid cheating or manipulating the deal to favor yourself or others unfairly.
- Respect the rules of the game and the expectations of all players.
- Be transparent when necessary, especially in casual settings, to maintain trust.

### Troubleshooting Common Challenges

- Card Slips or Accidental Reveals

Solution: Practice handling cards to develop steadiness; use techniques like dealing from the side of

the deck or from a concealed position.

- Suspicion from Opponents

Solution: Maintain consistent dealing patterns and demeanor; avoid sudden or unusual gestures.

- Distractions or Interruptions

Solution: Stay focused; handle the final card with deliberate calmness to minimize nervousness.

### Final Tips for Dealing Her Final Card with Confidence

- Practice regularly to perfect your technique.
- Develop a consistent routine that suits the game and your style.
- Observe experienced dealers and learn from their methods.
- Stay composed, even under pressure?confidence is key.
- Remember that in many games, the way you deal the final card can influence perceptions more than the card itself.

### Conclusion

Dealing her final card is a nuanced skill that combines technical proficiency, psychological insight, and strategic thinking. Whether you're a professional dealer, a casual player, or someone looking to refine their game, mastering this moment can elevate your overall play. By understanding the significance, honing your techniques, and practicing ethical play, you can handle the final card deal with finesse and confidence?ultimately turning a fleeting moment into a powerful tool for victory.

**Question**What does it mean to deal her final card in a game of poker? Dealing her final card typically signifies that she is completing her hand, often indicating the last stage of the game and that the winner will soon be determined based on the final cards. How can I improve my chances when dealing her final card in blackjack? To improve your chances, learn basic strategy, count cards if possible, and understand the game rules thoroughly to make informed decisions on whether to hit, stand, or double down. What are common mistakes to avoid when dealing her final card in a card game? Common mistakes include revealing the card prematurely, misdealing the card, or not paying attention to the game flow, all of which can affect fairness and outcomes. In tarot readings, what does it symbolize to deal her final card? In tarot, dealing her final card can symbolize closure, the culmination of a situation, or the revelation of an important message that guides the querent's next steps. Are there strategies for dealing her final card in collectible card games like

Magic: The Gathering? Yes, strategies involve deck optimization, understanding opponent's tactics, and timing your plays carefully to maximize the impact of your final draw or card play. How do I handle the pressure when dealing her final card in a high-stakes game? Stay calm, focus on your technique, ensure accuracy, and maintain a clear mindset to prevent mistakes and make the best possible decision. What are the cultural or symbolic significances of dealing her final card in different card games? It often symbolizes the climax or conclusion of a game, representing finality, resolution, or the last chance to influence the outcome. Can dealing her final card influence the outcome of a game unfairly? If not done properly or ethically, it can lead to cheating or disputes. Fair dealing is essential to ensure the outcome reflects skill and luck, not manipulation. What ethical considerations should be kept in mind when dealing her final card in a competitive setting? Always deal honestly, avoid cheating, maintain transparency with other players, and follow the rules of the game to ensure fairness. Are there specific techniques for dealing her final card smoothly in professional card magic performances? Yes, magicians use sleight of hand techniques like double lifts, false deals, and controlled shuffles to convincingly deal the final card without revealing their secret.

**Related keywords:** poker, winning hand, last move, gambling, strategy, game ending, card game, victory, showdown, luck

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