

Process Equipment



Process Equipment

The Process Equipment knowledgebase gives you all the data you need to determine the cost of your equipment.

Through 125+ parametric calculation models in the knowledgebase, the knowledgebase Process Equipment gives you the prices you need for your estimate. By using the weights from the equipment you have calculated, or have picked from the knowledgebase, you can also calculate the cost of the installation of your equipment.

Whether you are looking to install vessels, columns, tanks or heat exchangers, you can find it all in this knowledgebase. The Process Equipment Knowledgebase helps you to quickly and accurately estimate all your projects related equipment and its installation.

“Data equipped for the job”

| Name | Value | Unit | Automatic | Description |
|---------------------------|--------------|------|-------------------------------------|---|
| GEPC1: | 556,10 | | | Chemical Engineering Plant Cost Index |
| Equipment name:* | Column | | | |
| Tag number:* | | | | |
| Material of construction: | Carbon steel | | | |
| Diameter:* | 4,00 m | | | Between 0 and 5 m |
| Tangent length:* | 10,00 m | | | Length of the straight side, between 3 and 40 m |
| Design pressure:* | 20,00 bar | | | Between 1 and 40 bar |
| Design temperature:* | 50,00 deg c | | | Between 20 and 300 °C |
| Wall thickness allowance: | 0,00 mm | | | Corrosion allowance |
| Wall thickness shell: | 35,00 mm | | <input checked="" type="checkbox"/> | |
| Wall thickness bottom: | 35,00 mm | | <input checked="" type="checkbox"/> | |
| Slirt length: | 6,00 m | | <input checked="" type="checkbox"/> | |
| Slirt wall thickness: | 44,00 mm | | <input checked="" type="checkbox"/> | |
| Thickness topping: | 65,00 mm | | <input checked="" type="checkbox"/> | |
| Thickness bottoming: | 65,00 mm | | <input checked="" type="checkbox"/> | |
| Isolation rings: | Yes | | <input checked="" type="checkbox"/> | |
| Quantity isolation rings: | 3,00 pieces | | <input checked="" type="checkbox"/> | |
| Tray support rings: | 1,00 pieces | | <input checked="" type="checkbox"/> | |
| Other internal elements: | 0,00 kg | | <input checked="" type="checkbox"/> | Like vortex breakers, baffles etc. |
| Other external elements: | 0,00 kg | | <input checked="" type="checkbox"/> | Like davids, nozzles, manholes etc. |
| Length cage ladder: | 16,00 m | | <input checked="" type="checkbox"/> | |
| Balcony 180deg: | 3,00 pieces | | <input checked="" type="checkbox"/> | |
| Balcony 360deg: | 0,00 pieces | | <input checked="" type="checkbox"/> | |
| Trays: | 0,00 pieces | | <input checked="" type="checkbox"/> | Tray quantity |
| Price tray/stepiece: | 2.250,00 | | <input checked="" type="checkbox"/> | Cost per tray (must be in euro) |
| Correction factor: | 1,00 | | <input checked="" type="checkbox"/> | Factor to adjust the total equipment price |
| Quote: | 0,00 EUR | | <input checked="" type="checkbox"/> | Quote price when available, this will overwrite the estimated value |

| Name | Value | Unit | Description |
|----------------------|------------|------|-------------|
| Component descr... | Column | | |
| Component cost | 441.853,84 | EUR | |
| Component weight | 78.258,00 | | |
| Component spare t... | 78.258,14 | kg | |
| Total mass | 78.258,14 | kg | |



Process Equipment

Knowledgebase Specifications

Process Equipment

Equipment:

Agitators & Mixers

Blenders

Classifiers

Columns & Internals

- Column (tower)
- Demister pad
- Packing
- Trays

Compressors

- Axial
- Centrifugal
- Reciprocating
- Rotary

Conveyors

Cooling Towers

Crushers & Grinders

Crystallizers

Drives

Dryers

Dust collectors

Ejectors

Evaporators

Fans

Filters

Heat Exchangers

- Air cooled
- Bayonet heat
- Double pipe heat
- Fixed tube, sheet or U-tube
- Flat Plate

- Floating Head
- Kettle Reboiler
- Multitube Hairpin
- Scraped Wall
- Spiral Plate/Tube,
- Teflon Tube

Heaters

Mechanical Separators

Pelletizers

Pumps

- Centrifugal
- Gear
- Reciprocating
- Vacuum

Reactors

Refrigeration

Screens

Tanks

Thickeners

Turbines

Pressure vessels

- Horizontal and Vertical

Equipment installation:

- Columns
- Compressors
- Equipment unload
- Heat exchangers
- Package units
- Pumps
- Tray's
- Vessels



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