



SOLIDFITTM

Interactive Sizing Application

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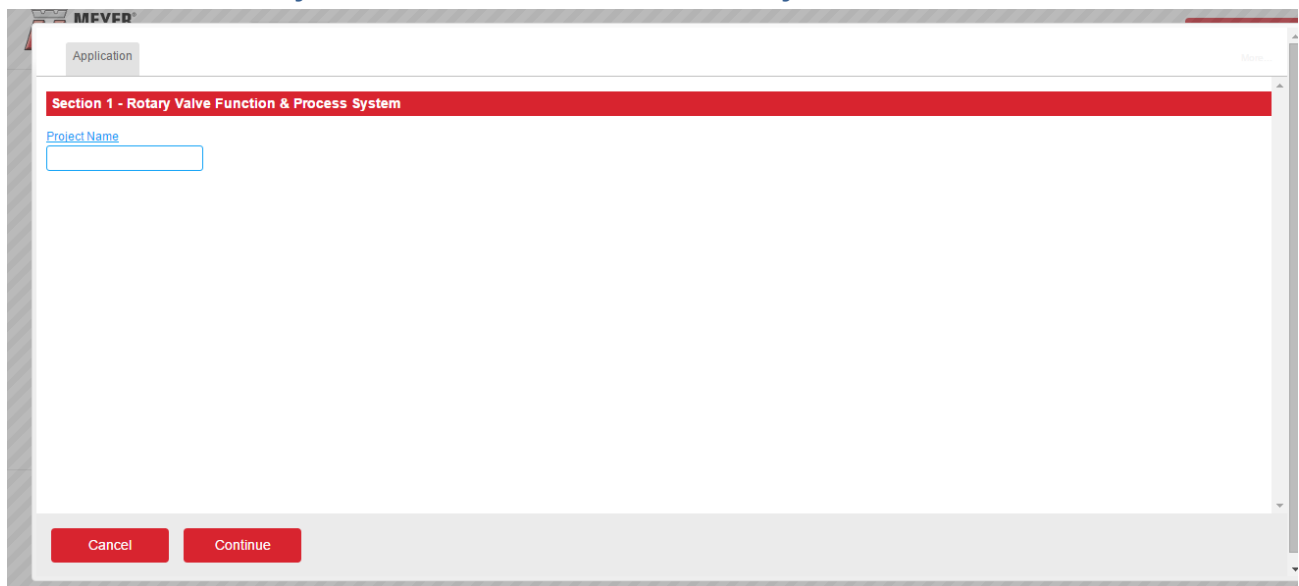
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Introduction

The intent of **SolidFit** is to offer possible sizing solutions that are specific to your project application criteria. The information you provide will generate a preliminary list of solutions, allowing for comparisons between Rotary Valve Types and Sizes during the early stages of your project scope.

Project(s) may be saved for future use, copied/edited or submitted for quotation. All quote requests require review by Meyer Sales Engineers before you are presented with an offer.

Section 1 – Rotary Valve Function & Process System

The screenshot shows a software window titled "MEYER" with a tab labeled "Application". Inside the window, a red header bar reads "Section 1 - Rotary Valve Function & Process System". Below this, there is a label "Project Name" followed by an empty text input field. At the bottom of the window, there are two red buttons: "Cancel" and "Continue".

1. Project Name – Enter a name to help you identify each of your projects, for example, Silo #5, Baghouse A, etc.
2. Click **Continue** to advance to the next set of questions.

Application

Section 1 - Rotary Valve Function & Process System

Project Name
test

Function of Rotary Valve
☒ Airlock ☐ Feeder ☐ Airlock/Feeder
Unit does not control flow of material. Acts as air seal only.

What's Above the Valve?
Cyclone

Pressure Units
PSI

Pressure
0.0

What's Below the Valve?
Hopper

Pressure Units
PSI

Pressure
0.0

Temperature Units
☒ Deg F ☐ Deg C

Material Temperature
100

Cancel Continue

1. Function of Rotary Valve – select one of the following:
 - a. Airlock – Unit does not control flow of material. Acts as air seal only.
 - b. Feeder - Unit controls flow of material. No significant pressure differential.
 - c. Airlock/Feeder - Unit acts as air seal and controls flow of material.
2. What's Above the Valve – select the type of device above the rotary valve.
3. Pressure:
 - a. Pressure Units – select the unit of measurement of pressure (i.e. PSI, "W.C., "Hg, or Bar).
 - b. Pressure value – enter the pressure value based on your pressure units.
Differential pressure > 10 PSI must be reviewed by Meyer.

Units	Range
PSI – Pounds per Square Inch	-14.7 to 15
" W.C. – Inches of Water Column	-406.8 to 419
" Hg – Inches of Mercury	-30 to 0
Bar	-1 to 1.0

4. What's Below the Valve – select the type of device below the rotary valve.

5. Pressure:

- Pressure Units – select the unit of measurement of pressure (i.e. PSI, “W.C., “Hg, or Bar).
- Pressure value – enter the pressure value based on your pressure units.
Differential pressure > 10 PSI must be reviewed by Meyer.

Units	Range
PSI – Pounds per Square Inch	-14.7 to 15
“ W.C. – Inches of Water Column	-406.8 to 419
“ Hg – Inches of Mercury	-30 to 0
Bar	-1 to 1.0

6. Temperature

- Temperature units – specify Fahrenheit or Celsius
- Temperature of Material – Acceptable Operating temperatures are -25°F to 750°F, all others must be reviewed by Meyer.

Section 2 – Process Material Information

Application

Section 2 - Process Material Information

Flow Rate Units
Lbs/Hr

Maximum Rate of Flow - Lbs/Hr
15,000

Process Material
SUGAR - GRANULATI

Material Moisture %
0

Bulk Density Units
Lbs/CuFoot

Bulk Density - Aerated - Lbs/CuFoot
50

Material Shape
Granular

Maximum Particle Size
< 1/2 in (13 mm)

Material Characteristics

Hygroscopic
☒

Sticky-Smears
☒

Heat Sensitive
☒

Tends To Pack
☐

Hazardous Material

Explosive
☒

Corrosive - Reactive
☐

Toxic - Emits Fumes
☐

Abrasiveness

☒ Non-Abrasive ☐ Abrasive ☐ Extremely Abrasive

Materials of Construction

Material of Construction
☒ Cl / Steel ☐ Stainless Steel

Sanitary or Cleanable?
☐ Yes ☐ No

Cancel Continue

1. Flow Rate:

- Units – Specify the Flow Rate units of measurement (i.e. Lbs/Hr, Kg/Hr, Tons/Hr, Metric Tons/Hr.)
 - Maximum Rate of Flow - Provide the numeric value of the flow rate.
2. Process Material – from the dropdown menu select your material. Choose other if your material is not listed.

3. Material Moisture % - Default is 0 or provide the percentage of moisture content of your material if known.
4. Bulk Density
 - a. Units – pre-selected based on the Process Material above.
 - b. Bulk Density- Aerated – Typical value shown based on the Process Material selected above. May be adjusted for your specific application.
 - c. Material Shape – populated based on Process Material selection. Use dropdown to change selection if different.
 - d. Maximum particle size – Use dropdown to select Maximum particle size.
5. Material Characteristics – Based on the selected Process Material certain characteristics may be pre-selected and greyed out. You can select any other characteristics available based on your application and knowledge of the material.
6. Hazardous Material – Based on the selected Process Material certain options may be pre-selected and greyed out. You can select any other characteristics available based on your application.
7. Abrasiveness – Level of the material’s abrasiveness is pre-selected based on the Process Material selected. A selection is required.
8. Material of Construction – Choice is defaulted based on information provided. Option can be changed based on your requirements.
9. Sanitary or Cleanable? – If your process equipment requires regular cleaning or sanitizing selecting **Yes** will limit the possible Product solutions and prompt you to choose the type of cleanable valve. (i.e. Kwik-Klean, Klean-In-Place or Klean-In-Place II)

The screenshot shows a software interface with the following elements:

- Material of Construction:** Two radio buttons are present. The first is labeled "CI / Steel" and is unselected. The second is labeled "Stainless Steel" and is selected (indicated by a filled circle).
- Sanitary or Cleanable?:** Two radio buttons are present. The first is labeled "Yes" and is selected (indicated by a filled circle). The second is labeled "No" and is unselected.
- Cleanable Type of Rotary Valve:** A dropdown menu is shown with a downward arrow. The menu is open, displaying three options: "Kwik-Klean", "Klean-In-Place", and "Klean-In-Place II".

Section 3 – Rotary Valve Sizing & Suggested Solutions

Section 3 - Rotary Valve Sizing Solutions

Fill Factor - % Target Speed - RPM

Suggested Solutions - Please Select One and Click Finish

Select	Size	Type	CFR	Height	RPM	Spd Factor	Cap Factor	Rel Price
<input type="checkbox"/>	08	DDV	0.24	12.00	22	0.83	0.83	1.00
<input type="checkbox"/>	08	UDV	0.24	12.00	20	0.57	0.91	1.05
<input type="checkbox"/>	10X10	HDX	0.34	15.00	20	0.57	0.64	1.80
<input type="checkbox"/>	08X08	HDX	0.17	12.00	26	0.74	0.98	1.40


1. Fill Factor % - Value is based on the function of the valve.

Function	Range
Airlock	50% to 70% *
Feeder	Up to 90%
Airlock/Feeder	50% to 70% *


* Depending on ΔP (Differential Pressure)




2. Target Speed – RPM –Value shown is based on the Process Material and Material Characteristics. User can overwrite value which may change the Suggested Solutions. Maximum limiting speed is up to 35 RPM depending on size of valve. Consult Meyer for more information.
3. Suggested Solutions table – Solutions based on information provided. Listed by valve size, type, RPM, etc. Relative Price is based on basic offering. Final selection will be reviewed by Meyer.
4. Select your choice of valve and click **Finish** to Save and proceed.

Project Summary

 Projects [Log in](#)

[+ New Project](#)
[✖ Collapse All](#)
[✔ Expand All](#)








test - 10X10 HDX

12/17/2015 8:50 PM
test - 10X10 HDX
Function: AirlOCK
Above Valve: Baghouse
Below Valve: Hopper
Material Temp: 100 Deg F
Max Flow Rate: 10000 Lbs/Hr
Process Material: ASPHALT FINES
Bulk Density: 55 Lbs/CuFoot
[Open Report](#) [Request Quote](#)

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Your chosen valve and application summary is displayed.

- Product photo is representative of the model and not of the final configuration.
 - Edit  – allows you to enter the application and make changes to your selections.
 - Copy  – allows you to copy the application information and make any changes necessary.
 - Delete  – Deletes the current item selected. To start over Select New Project.
 - Open Report** button - Provides a pdf of the data entered and the listing of the Suggested Solutions. (see example)



Date : 1/14/2016 5:05:02 PM

Application & Sizing Information Summary

Project Name : test70

Rotary Valve Function

Function : Airlock
Above Valve : Baghouse Pressure : -10 inches W.C.
Below Valve : Hopper Pressure : 0 PSI
Material Temperature : 175 Deg F

Material Characteristics

Process Material : SUGAR - GRANULATED
Maximum Rate of Flow : 15000 Lbs/Hr Moisture : 0 %
Bulk Density : 50 Lbs/CuFoot Material Char : Hygroscopic, Sticky-Smears, Heat-Sensitive
Material Shape : GRANULAR Hazardous : Explosive
Maximum Particle Size : C Abrasiveness : NON
Fill Factor : 70 %

Suggested Solution(s) are based on information provided.

Final selection shall be reviewed by Meyer Application Engineering.

Size	Type	RPM	Capacity Factor	Speed Factor	CFR	Height	Relative Price
10	DDV	22	0.65	0.63	0.496	15	1
10	UDV	15	0.96	0.43	0.496	15	1.06
08	UDV	31	0.97	0.89	0.238	12	0.84
--> 12X12	HDX	15	0.74	0.5	0.64	18.25	1.90
10X10	HDX	20	0.99	0.57	0.36	15	1.45

- e. Your valve selection is indicated by a green arrow.
- f. **Request Quote** button – Generates a request to Meyer for a Quote on the selected item. You will need to Register or login if you have an account. See next section Registration – Login.
2. New Project – Returns to the program interface and you can create your next project.
3. Collapse All – Click to hide product selection summary.
4. Expand All – Reveals product selection summary.

Request a Quote

1. If you are a first time visitor to the site please register. Enter your information and click **Submit**.

← → ↻ <https://configure.wmwmeyer.com/SolidFit/Account/Register> 🔒 ⚙️ ☆ ☰

SOLIDFIT™ Projects Help [Log in](#)

Last Name	Address
<input type="text" value="Enter Last Name"/>	<input type="text" value="Enter Address"/>
Email	City
<input type="text" value="Enter Email"/>	<input type="text" value="Enter City"/>
Company	State
<input type="text" value="Enter Company"/>	<input type="text" value="Enter State"/>
Password	Zip
<input type="text" value="Enter Password"/>	<input type="text" value="Enter Zip"/>
Confirm password	Country
<input type="text" value="Enter Password"/>	<input type="text" value="Enter Country"/>

[Submit](#)

2. If you are a returning visitor click on **Log In** at the upper right corner and enter your email and password.
3. Click on **Request Quote** and a notification will be sent to Meyer Sales Engineers who will be contact you.



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