

RapidDraw3D™

User Instructions

Revision E

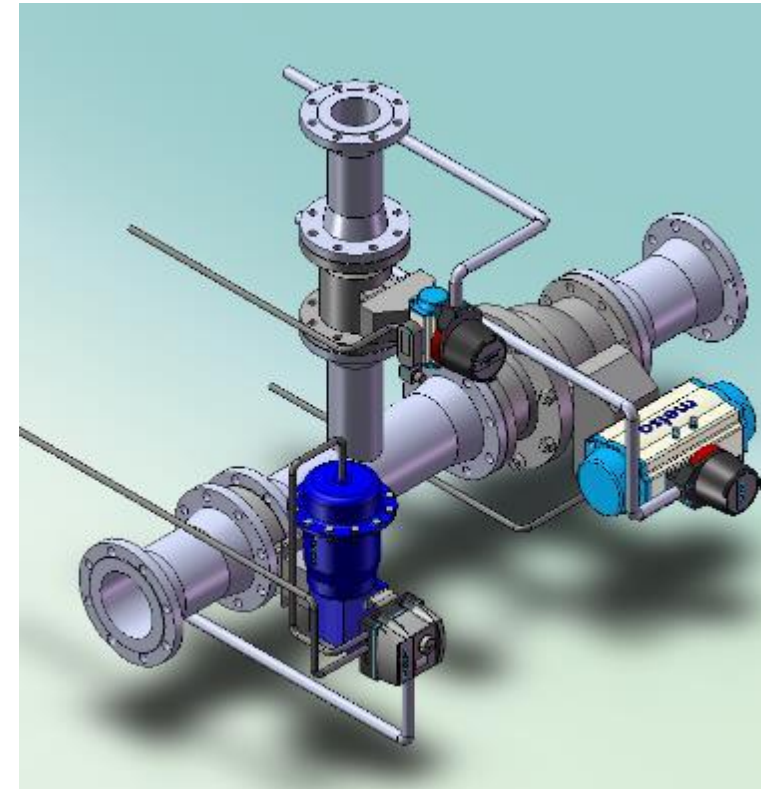
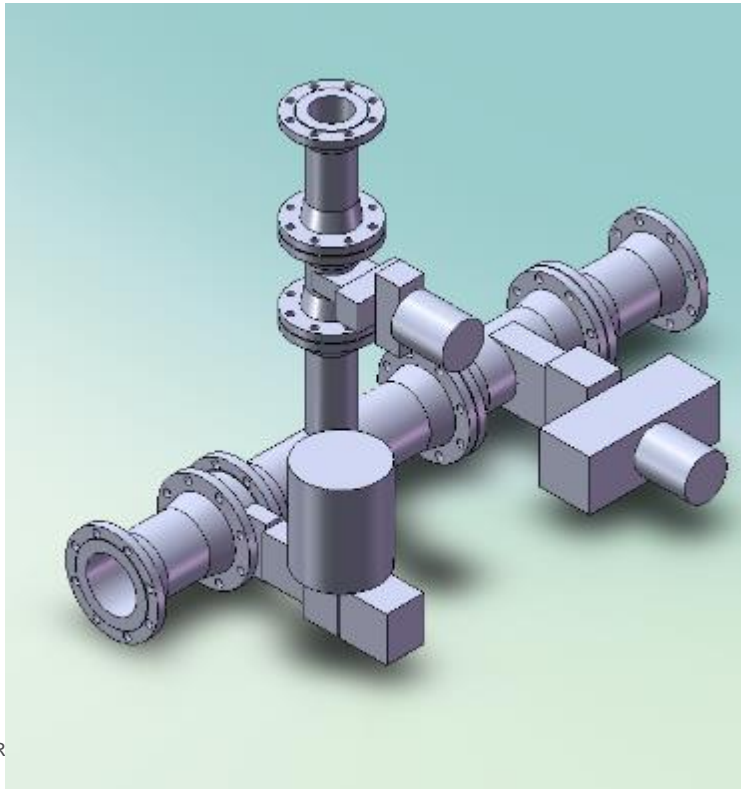
May 3, 2022

Topics

- What is RapidDraw3D
- How to find the application
- Logging In
- Terminology
- Main Page
- How to Start – New Single Assembly

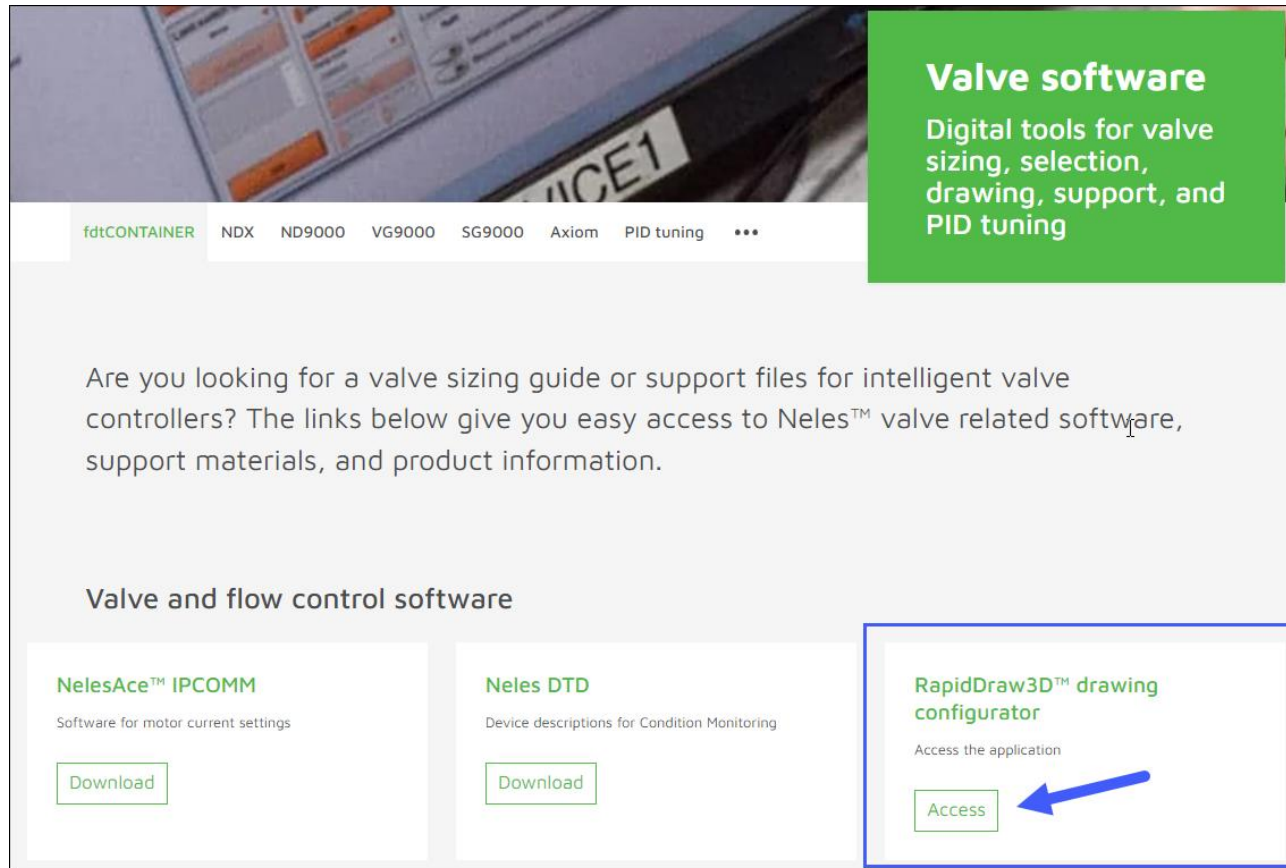
What is RapidDraw3D™

- RapidDraw3D is a graphical modeling application enabling users to create 2D and 3D models of Neles products in real time, when you need them
- 2D and 3D models are too scale, including pneumatic and electric connections, allowing greater detail into piping layouts
- It is easy to use, no special software is required, and it's free



How to find the application

- Go to <https://www.neles.com/valves-services/valve-software/>
- Once on page, select “Access” for RapidDraw3D



Valve software
Digital tools for valve sizing, selection, drawing, support, and PID tuning

fdtCONTAINER NDX ND9000 VG9000 SG9000 Axiom PID tuning ...

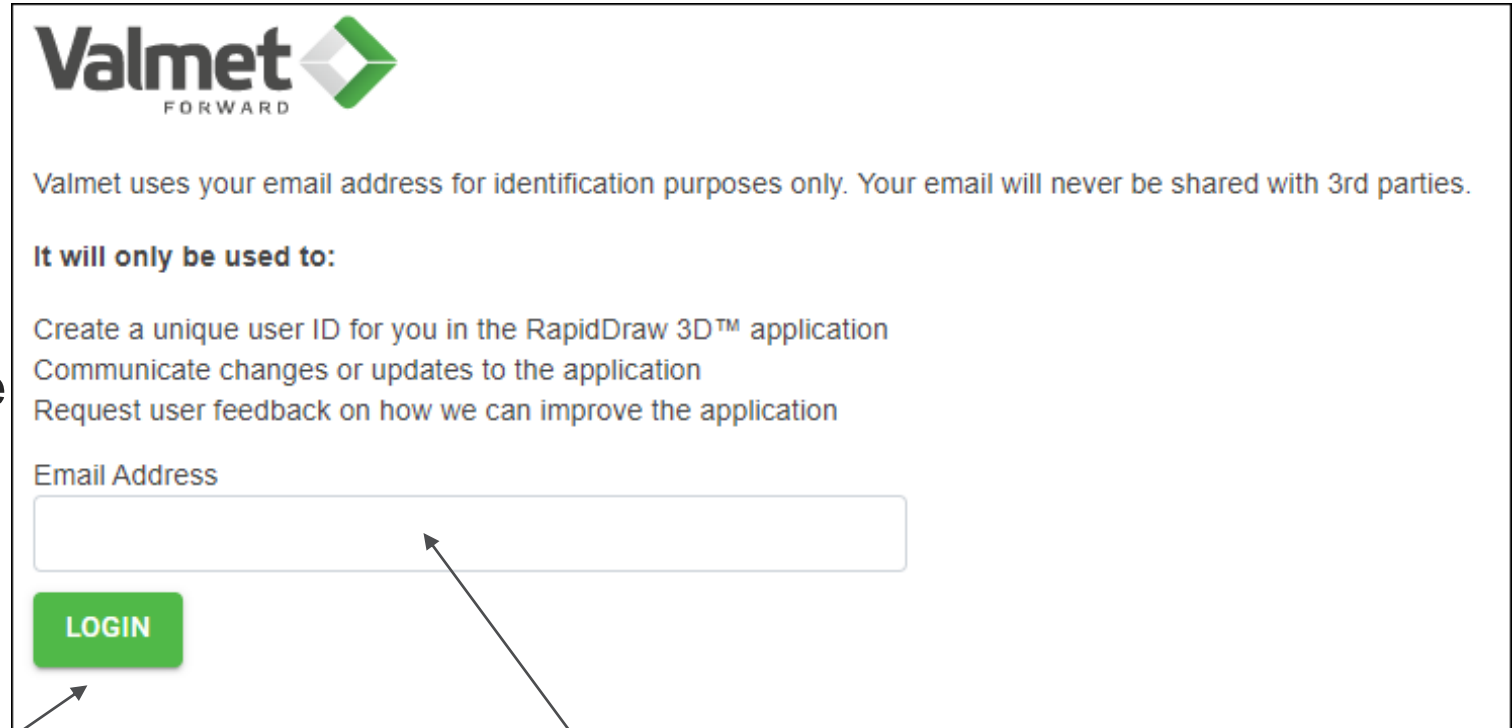
Are you looking for a valve sizing guide or support files for intelligent valve controllers? The links below give you easy access to Neles™ valve related software, support materials, and product information.

Valve and flow control software

NelesAce™ IPCOMM Software for motor current settings Download	Neles DTD Device descriptions for Condition Monitoring Download	RapidDraw3D™ drawing configurator Access the application Access
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Logging In

- Please note that Neles only uses your email to create a unique user ID for you in the application.
- Your email address will not be shared.
- Your email is used for communication when you provide feedback.



The screenshot shows the Valmet login interface. At the top left is the Valmet logo with the tagline 'FORWARD'. Below the logo is a privacy notice: 'Valmet uses your email address for identification purposes only. Your email will never be shared with 3rd parties.' Underneath this is the heading 'It will only be used to:' followed by three bullet points: 'Create a unique user ID for you in the RapidDraw 3D™ application', 'Communicate changes or updates to the application', and 'Request user feedback on how we can improve the application'. Below the text is a text input field labeled 'Email Address'. To the left of the input field is a green button with the text 'LOGIN' in white capital letters.

Select Login

Enter your email address

Terminology

- **Assembly**
 - Topworks assembly that typically can contain a valve, actuator/handle, limit switch and/or solenoid/positioner
- **Job/Single Assembly**
 - Individual assembly configured to customer requirements
 - Job is assigned to “Unassigned” project
- **Job Number**
 - System number associated with the job
- **Project**
 - Collection of jobs
- **Downloads**
 - File types associated with job
- **Configuration Name**
 - Job name to find easier in future.
 - Not Required

Main Page

Projects: Brings user to main page to create or view Projects and/or jobs

Configurations: Brings users to start screen for Unassigned Project

Downloads: How to locate and download created files

User Guide: How you access these instructions

Valmet FORWARD

Projects Configurations Downloads User Guide

ken.sundberg@neles.com

***** THIS IS A TEST SYSTEM *****

Welcome to the RapidDraw3D™ configurator. Click either of the buttons below to get started.

NEW SINGLE ASSEMBLY NEW PROJECT WITH MULTIPLE ITEMS

Number	Name	Type	Modify Date	Valve	Actuator	Status
▼ □	EDIT	Project : unassigned			RUN PROJECT	DELETE

How to Start

New Single Assembly

The screenshot shows the Valmet FORWARD logo in the top left. Navigation links for 'Projects', 'Configurations', 'Downloads', and 'User Guide' are in the top center. The user email 'ken.sundberg@neles.com' is in the top right. A warning message reads '***** THIS IS A TEST SYSTEM *****'. A welcome message says 'Welcome to the RapidDraw3D™ configurator. Click either of the buttons below to get started.' Below this are two buttons: 'NEW SINGLE ASSEMBLY' (highlighted in green) and 'NEW PROJECT WITH MULTIPLE ITEMS' (dark grey). A table below has columns: Number, Name, Type, Modify Date, Valve, Actuator, Status. A row shows 'Project : unassigned' with an 'EDIT' button. 'RUN PROJECT' and 'DELETE' buttons are also visible.

Select "New Single Assembly"

The dialog box is titled 'New Assembly Configuration' with a pencil icon. It contains a text input field labeled 'Configuration Name' which is currently empty. At the bottom right are 'CANCEL' and 'OK' buttons.

Enter a configuration name. Not Required to be filled in
Select "OK" to continue
Select "CANCEL" to cancel

The dialog box is titled 'New Assembly Configuration' with a pencil icon. The 'Configuration Name' input field now contains the text 'Example 1'. At the bottom right are 'CANCEL' and 'OK' buttons.

How to Start New Single Assembly

Project related to
Job

Job Number

**Enter Name,
Location and
Division**
RapidDraw3D
remembers this for
future

Choose language
RapidDraw3D
remembers this for
future

**Choose length
measurement
dimensions**
RapidDraw3D
remembers this for
future

Valmet FORWARD

Projects Configurations Downloads User Guide

ken.sundberg@neles.com

Project# : unassigned

Configure a Valve: 102413

1 Select a Configuration

2 Drawing Options

Select drawing options for the valve.

First Name* Ken

Last Name* Sundberg

Location* Shrewsbury

Division* Neles

Inch Metric

Language English

PREVIOUS NEXT

3 Valve Configuration

4 Accessories

5 Drawing Information

6 Customer Information

7 Save And Generate Drawings

< BACK TO PROJECTS

Select
Previous: Goes to
previous step
Next: Goes to next
step

How to Start New Single Assembly

Select "Valve Size"

RapidDraw3D Valve Description

Select "Actuator"

RapidDraw3D Actuator Description

Select "Valve Type"

Choose Flow Direction
Default is shown

Enter "Alternative Valve Description"
Not Required

Cross reference chart for Product Names to Industry Terms
See Next Slide

Valve to Actuator Mounting Set
More than one can be show. Choose one that fits your requirements

Select Previous: Goes to previous step
Next: Goes to next step

Enter "Alternative Actuator Description"
Not Required



How to Start

New Single Assembly

Valve Descriptions	Neles Valve Family
Ball Valve, 3-piece, full port, butt-weld, soft seated, ANSI B16.25	4J,K,L,P MOD B
Ball Valve, 3-piece, full port, socket-weld, soft seated, ANSI B16.11	4D MOD B
Ball Valve, 3-piece, full port, thread-end by socket-weld, soft seated, ANSI B1.20.1	4N MOD B
Ball Valve, 3-piece, full port, thread-end, soft seated, ANSI B1.20.1	4B MOD B
Ball Valve, 3-piece, standard port, butt-weld, soft seated, ANSI B16.25	4F,G,H,Q MOD B
Ball Valve, 3-piece, standard port, socket-weld, soft seated, ANSI B16.11	4C MOD B
Ball Valve, 3-piece, standard port, thread-end by socket-weld, soft seated, ANSI B1.20.1	4M MOD B
Ball Valve, 3-piece, standard port, thread-end, soft seated, ANSI B1.20.1	4A MOD B

Actuator Descriptions	Neles Actuator Family
Actuator, electric, quarter-turn, back-up powered, 1000-3000 in. lbs.	LADC
Actuator, electric, quarter-turn, back-up powered, 150-600 in. lbs.	ADC
Actuator, electric, quarter-turn, low cost, 150-600 in. lbs.	LCR
Actuator, electric, quarter-turn, NEMA 4/4X, 1000-3000 in. lbs.	LV

Cross Reference

Accessory Descriptions	Neles Accessory Family
Limit Switch, Explosion/Flame proof, Intrinsically safe	Quartz
Limit Switch, Hazardous areas and general purpose, VDI/VDE mounting	Eclipse
Position Indicator	Visual Indicator
Valve controller, Digital, Flameproof (Ex d) IP66 / NEMA 4X	ND9200
Valve controller, Digital, IP66 stainless steel enclosure / NEMA 4X	ND9300
Valve controller, Digital, Standard IP66 / NEMA 4X	ND9100
Valve controller, Electro-pneumatic	NE/NP700
Communications and control module	Axiom

How to Start New Single Assembly

Select "Mounting"

Select "Orientation"

Select "Limit Switch"
Not Required

Enter "Alternative Valve Description"
Not Required

Select "Positioner"
Not Required

Enter "Alternative Valve Description"
Not Required

Select "Solenoid"
Not Required

Select
Previous: Goes to previous step
Next: Goes to next step

Valmet FORWARD

Projects Configurations Downloads User Guide ken.sundberg@neles.com

Project# : unassigned
Configure a Valve: 102413

- Select a Configuration
- Drawing Options
- Valve Configuration
- 4 Accessories

Mounting

A B C D

Note: In the mounting images, above, the RED BALL indicates the electrical, pneumatic or hydraulic connection location on the selected actuator. For manual gear actuators the RED BALL indicates handwheel location.

Orientation

D-HU D-IL D-VD D-VU

PREVIOUS NEXT

5 Drawing Information
6 Customer Information
7 Save And Generate Drawings

Limit Switch
Quartz to VPVL200-300

Alternative Limit Switch Description
QX2VB02SDM

Positioner

Alternative Positioner Description

Solenoid
ASCO EF8551A001MS to VPVL...

Alternative Solenoid Description
ASCO EF8551A001MS 24 VDC



How to Start

New Single Assembly

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Project# : unassigned < BACK TO PROJECTS

Configure a Valve: 102413

- Select a Configuration
- Drawing Options
- Valve Configuration
- Accessories
- 5** Drawing Information
 - Drawing Number Example 1 DWG
 - Drawing Comment
- 6 Customer Information
- 7 Save And Generate Drawings

15 / 50

PREVIOUS NEXT

Enter "Drawing Number"
Not Required
Populates to 2D pdf

Enter "Drawing Comment"
Not Required
Populates to 2D pdf

Select
Previous: Goes to previous step
Next: Goes to next step

How to Start

New Single Assembly

Enter "Customer"
Not Required

Enter "Seller"
Not Required

Enter "Quote Number"
Not Required

Enter "Order Number"
Not Required

Enter "Tag Number"
Not Required

Enter "Customer PO"
Not Required

Enter "Seller PO"
Not Required

Enter "Quote Line Number"
Not Required

Enter "Order Line Number"
Not Required

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Project# : unassigned
Configure a Valve: 102413

- Select a Configuration
- Drawing Options
- Valve Configuration
- Accessories
- Drawing Information
- 6 Customer Information

Customer Customer 1	Customer PO Customer PO 1
Seller Seller 1	Seller PO Seller PO 1
Quote # Quote No	Quote Line # 001
Order # Customer Order	Order Line # 002

Tags
VFH-1
VFH-15

PREVIOUS NEXT

Save And Generate Drawings

Select Previous: Goes to previous step
Next: Goes to next step

How to Start New Single Assembly

Select Required File Types
Multiple selections allowed

Select User can receive emails with link to completed jobs to download files

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Project#: unassigned

Configure a Valve: 102413

- Select a Configuration
- Drawing Options
- Valve Configuration
- Accessories
- Drawing Information
- Customer Information
- 7 Save And Generate Drawings

Select outputs below:

3D Solid Assemblies

- SOLIDWORKS Part
- STEP *
- IGES *
- Parasolids *
- 3D PDF

2D CAD Drawings

- DXF
- AutoCAD DWG
- SOLIDWORKS Native Drawing

2D Dimensioned Drawings

- PDF

Receive an email notification when job is completed

PREVIOUS SAVE SUBMIT

Select Previous: Goes to previous step

Save: Saves configuration to generate job later and returns to main page for project

Submit: Runs job

Click submit to save your settings and generate new parts and drawings. The 3D Solid Assemblies and the 2D CAD drawings are not automatically dimensioned. This was done to give the user the maximum of flexibility when using these files to dimension and annotate as required. The 2D dimensioned PDF raster files are automatically dimensioned; however, they cannot be edited.

Note: If you have outputs available for this project from a previous run, the older outputs will be overwritten.

* For accurate weight use 2D PDF or SOLIDWORKS Part

Receive an email notification when job is completed

PREVIOUS SAVE SUBMIT

Each file type has a description. Hover over type for description to appear

7 Save And Generate Drawings

Select outputs below:

3D Solid Assemblies

- SOLIDWORKS Part SolidWorks Native 3D Assembly - SolidWorks SLDPRRT file suitable for placing in existing 3D piping layout, etc. and drawings. The 3D Solid Assemblies and the 2D CAD drawings are not automatically dimensioned. This was done to give the user the maximum of flexibility when using these files to dimension and annotate as required. The 2D dimensioned PDF raster files are automatically dimensioned; however, they cannot be edited.
- STEP *
- IGES *
- Parasolids *
- 3D PDF

2D CAD Drawings

- DXF
- AutoCAD DWG
- SOLIDWORKS Native Drawing

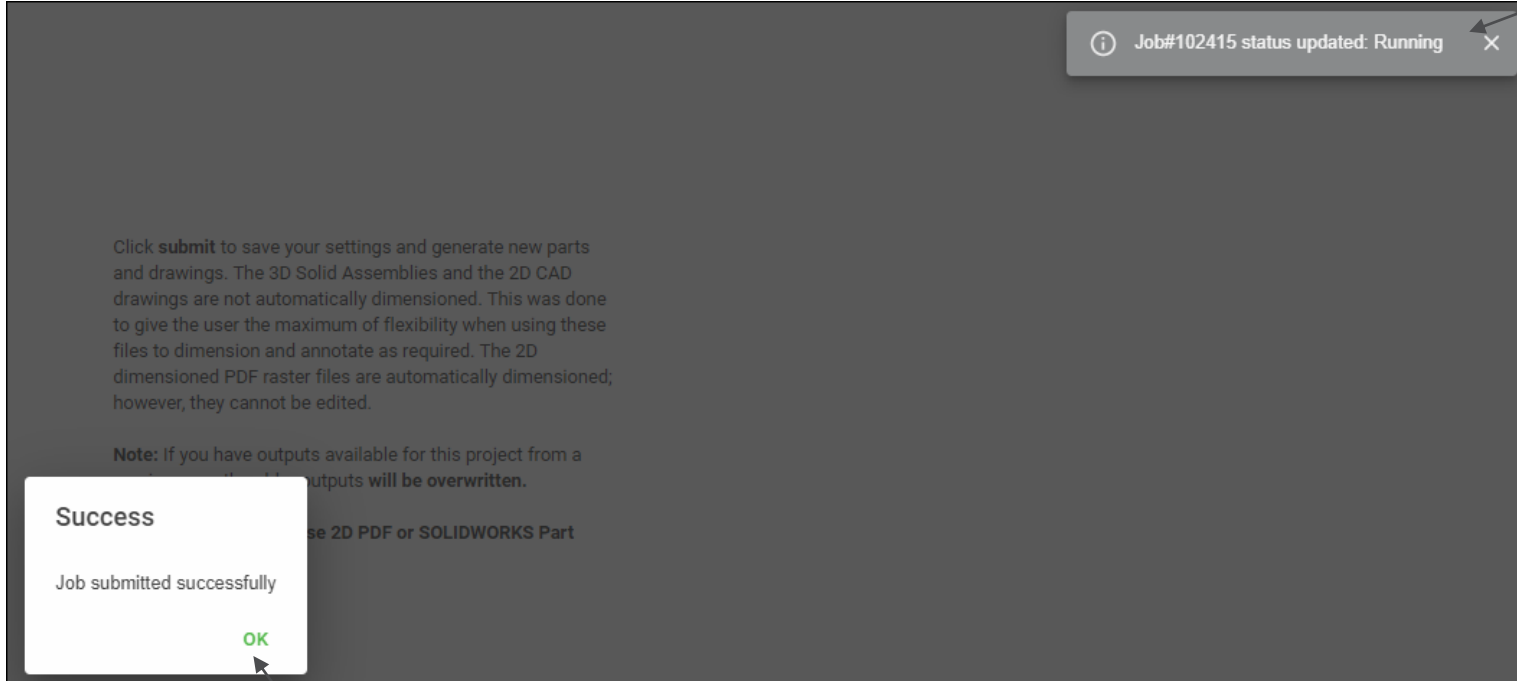
2D Dimensioned Drawings

- PDF

Note: If you have outputs available for this project from a previous run, the older outputs will be overwritten.

* For accurate weight use 2D PDF or SOLIDWORKS Part

How to Start New Single Assembly



Shows job is running

Select "OK"
Then returns to main page for project

How to Start New Single Assembly

Project# : unassigned < BACK TO PROJECTS

Configure a Valve

1 Select a Configuration

NEXT NEW ASSEMBLY COPY DELETE

Number	Name	Type	Modify Date	Valve	Actuator	Status
102413	Example 1	Assembly	5/3/2022 1:21:22 PM	4A	VPVL200DA	Running
102412		Assembly	4/13/2022 1:13:57 AM	9150/9180 Mod C	VPVL450DA	Completed
102411		Assembly				
102410	RNP150 Test 5	Assembly				
102409	RNP150 Test 4a	Assembly				

Shows job status
When complete
status changes

Job#102413 Example 1 status updated:
Completed DOWNLOAD FILES

Project# : unassigned < BACK TO PROJECTS

Configure a Valve

1 Select a Configuration

NEXT NEW ASSEMBLY COPY DELETE

Number	Name	Type	Modify Date	Valve	Actuator	Status
102413	Example 1	Assembly	5/3/2022 1:21:22 PM	4A	VPVL200DA	Completed
102412		Assembly	4/13/2022 1:13:57 AM	9150/9180 Mod C	VPVL450DA	Completed
102411		Assembly	4/12/2022 7:43:01 PM	9150/9180 Mod C	RNP150SR40C_N	Completed
102410	RNP150 Test 5	Assembly	4/12/2022 7:37:26 PM	9150/9180 Mod C	RNP150SR40C_N	Completed
102409	RNP150 Test 4a	Assembly	4/12/2022 1:24:29 AM	9150/9180 Mod C	RNP150SR40C_N	Completed

Message appears
to inform user job is
complete and user
can choose
Download to access
files

How to Start

New Single Assembly

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Downloads

Today

- Project: unassigned
- Job 102413: Example 1 5/3/2022 1:31:50 PM
 - SOLIDWORKS Part
 - PDF

Older

- Project: unassigned
- Project 4: Test12345
- Project 3:
- Project 2: ProjectTest1

DOWNLOAD

Downloads

RapidDraw3D_output (15).zip
[Open file](#)

[See more](#)

Select "Job" and/or file types to download
Select "Download"

File Home Share View

Clipboard Organize New Open

Pin to Quick access Copy Paste Move to Copy to Delete Rename New folder New item Easy access Properties Open Edit History

← → ↕ ↑ ↓ > This PC > Downloads >

Name	Date modified	Type
RapidDraw3D_output (15).zip	5/3/2022 9:36 AM	Compressed (zipp...

