

SECC Faculty Training on Creating Videos

Created by Tom Wylie, 4/8/24



SECC Faculty Training on Creating Videos

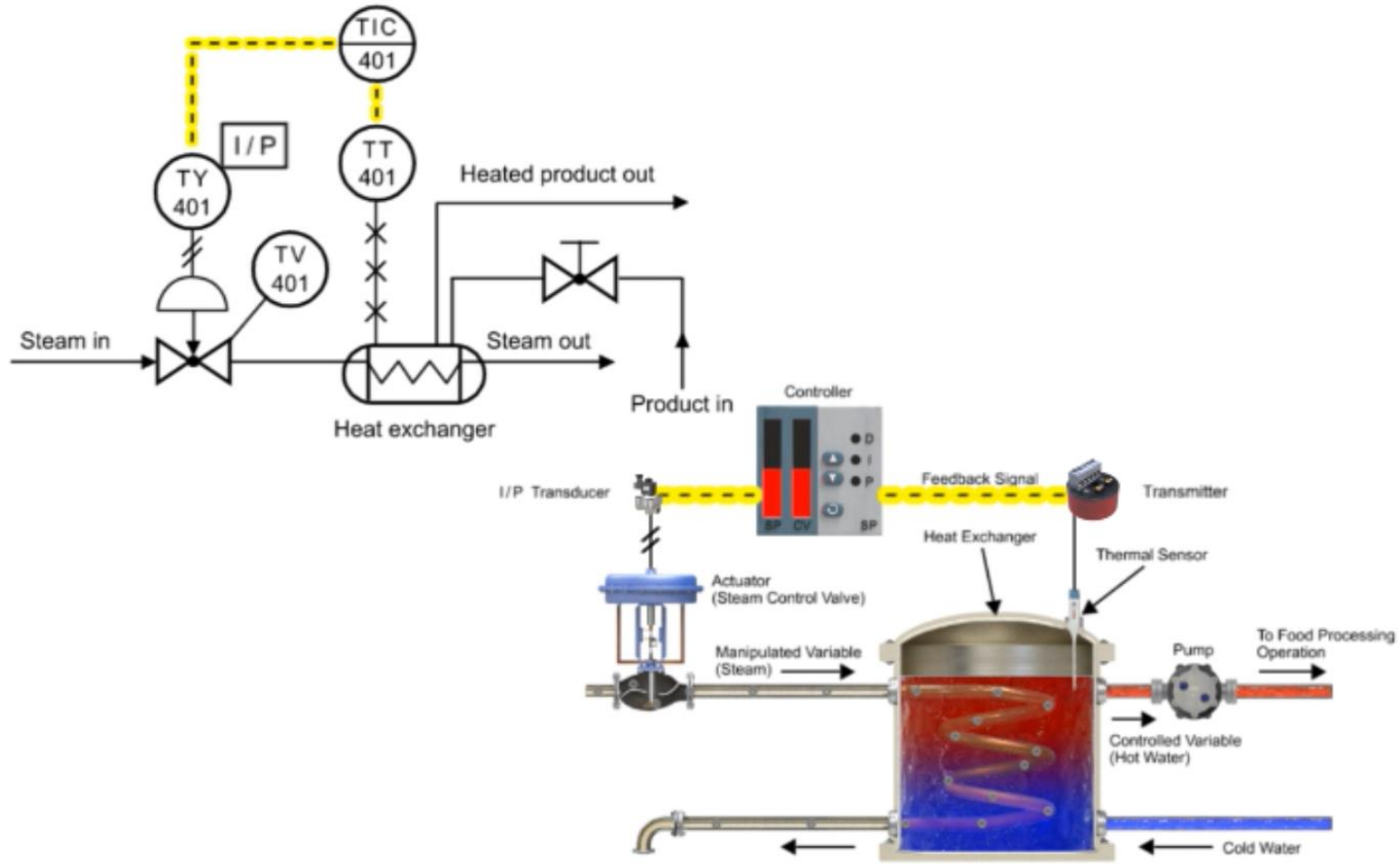
Training topics for this training session:

1. Review the steps to developing a module
2. Review a Learning Thread
3. Open Education Resources
4. Simulations
5. Review the development of a learning object
6. Introduction to creating Learning Objects
 - a. PowerPoint
 - b. Converting PPT to PDF
 - c. Voice over PPT
 - d. Creating videos with a camera
 - e. Creating a screen CAM video to show how to use software



Many good Videos from Eastern Iowa CC

Piping and Instrumentation Diagrams



Download Embeddable Simulation with Interactive Quiz Questions:
bit.ly/1IspWI8



Cameras for Creating Videos:

One of the common tools that our Industrial Technology Instructors use is a simple Panasonic Point and Shoot camera. It is small with a zooming lens, with a removeable SD card, and a very sensitive internal microphone. The inverting tripod allows us to position the camera upside down to shoot onto an object or whiteboard (laying on a desktop). One of the most powerful features is the Panasonic Image app that runs on the smartphone. The camera has its own WiFi portal, thus the phone connects to it, then the image app controls the camera zooming, taking photos and taking videos. The SD card is removed then put into a port on the computer where it is then transferred to the HD, and produced with the Camtasia Producer software.

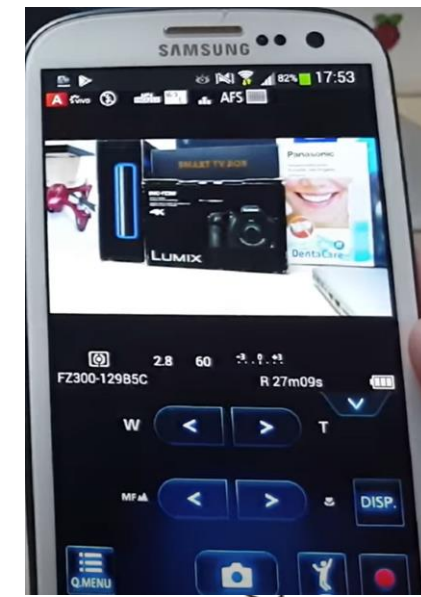
Panasonic Lumix Point & Shoot



Inverting Tri-Pod



Panasonic Image Smart Phone App





Cameras for Creating Videos:

I also use a high end camera when I need to use different lenses, use different lighting filters and want higher quality images and videos. This is primarily if I am doing something for a vendor who needs a little higher quality than for instruction. I can get UHD 4K video quality. Usually \$700+. It also has a removeable SD.

Olympus E-M10 Mark III



SD Cards for Recording Videos and Images:

The SD cards will be used in most cameras to store the videos and pictures that are taken with the camera. I seldom use an SD less than 128GB in size, because they will fill up quickly. Remove the SD from the camera and connect it to the computer, to load the videos and images, so you can use the software tools to develop the learning objects

SD Cards: GigaBytes

SD to USB Interface



GoPro Cameras:





Software used to Create Objects

TechSmith (Techsmith.com), located in Michigan, developed and distributes Snagit and Camtasia. These products are targeted toward Faculty. They are simple to use and give immediate results. Snagit is an image or video capture software, and Camtasia is a product with multiple uses, but in the end it produces high quality videos. MP4 is the preferred video format for creating instructional videos. MS PowerPoint is the other key software that is needed to create illustrated graphics and animations. Google Slides does not have all of the features that MS PowerPoint has.



Snagit 2019



Camtasia 2019 Recorder



Microsoft PPT



Snagit 2019 Editor



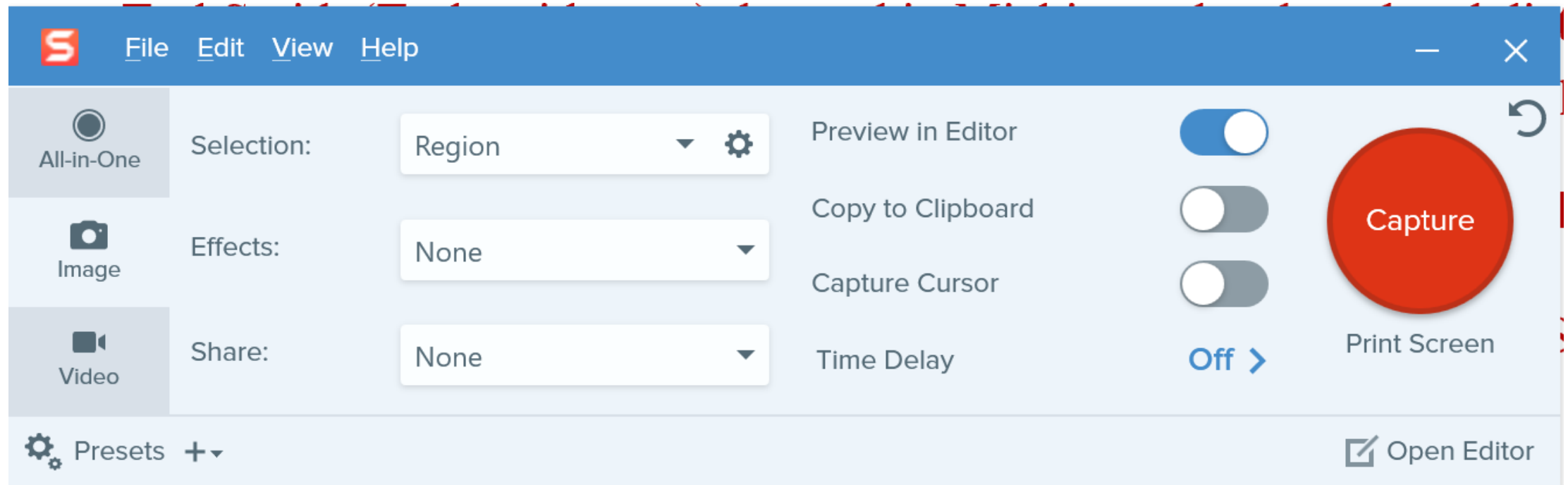
Camtasia 2019



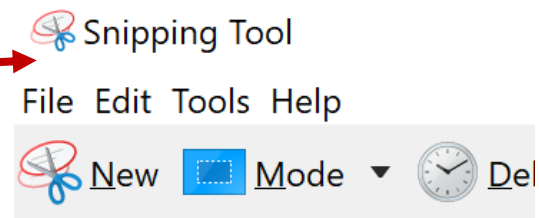


TechSmith Snagit 2019 (Capture):

This is the interface for Snagit capture. The user can designate a hot key such as the “PrtSc” key (Print Screen), which will bring up the cross hairs for capture.



Windows 10 Snipping Tools



TechSmith Snagit 2019 Editor:



Tools to modify the image

The screenshot displays the TechSmith Snagit Editor interface. The main workspace shows a circuit diagram with several annotations: a red arrow pointing to a 'Fused Disconnect' (A), a red circle around an ammeter labeled 'RMS Current 9.4 A' (B), a red circle around a motor labeled 'Nameplate Current 14.9 A' (C), a red circle around a 'Stop PB' (D), a red circle around a 'Start PB' (E), a red circle around a motor terminal (F), and a red circle around another motor terminal (G). A red arrow points to the text 'Lab 4.5' near the motor. The interface includes a menu bar (File, Edit, Image, Share, View, Help), a toolbar with tools like Favorites, Arrow, Text, Callout, Shape, Stamp, Fill, Move, Step, More, Undo, and Redo, and a right-hand panel with 'Quick Styles' and 'Tool Properties'.

Shows recently captured images

The bottom section of the screenshot shows the 'Recent' and 'Tag' sections of the Snagit Editor. The 'Recent' section displays a list of recently captured images, including a circuit diagram, a document, and a tablet. The 'Tag' section is currently empty. Below these sections is a search bar and a taskbar with various application icons, including TechSmith, PowerPoint, and other software.

TechSmith Snagit Editor Library



File Edit Image Share View Help

Snagit Editor

Sign In

Editor Capture

Type to search

January

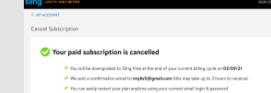
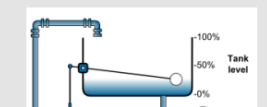
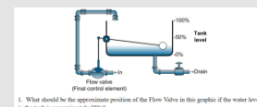
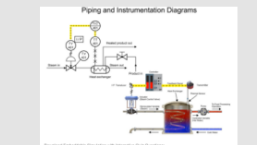
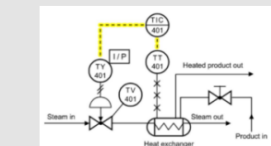
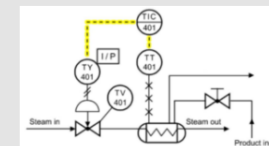
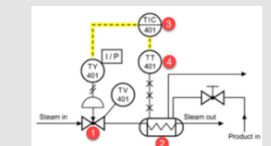
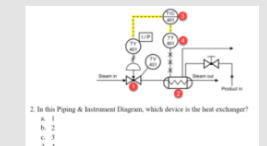
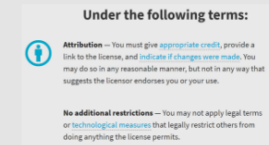
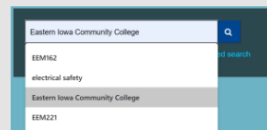
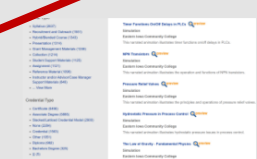
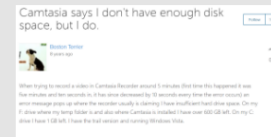
Name	Size	Date	Modified	Type	Dimensions	Tags
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Jan 28, 2021

User can go to any Month & Day for images

- February 200
- March 249
- April 202
- May 114
- June 180
- July 180
- August 180
- September 180
- October 371
- November 220
- December 246
- 2021 350
- January 185
- February 84
- March 81
- Applications

- Adobe Acrobat Reader DC 4
- Camtasia Recorder 2019 2
- Component of the Logix D 1
- Component of the RSLogix 3
- Google Chrome 1432
- Internet Explorer 25
- Microsoft Excel 51
- Microsoft PowerPoint 651





Four Primary Applications for Snagit

1. Capture a portion of a screen and save as a .PNG file or to clipboard
2. Record video from an existing video. I sometimes use this if I am recording something from a recording on a website that I want to save, or I am capturing an important video on YouTube, just as a backup in case they pull it down and I need to create one from scratch.
3. Capture a panoramic scrolling image. This is if I have a PDF that I want to backup, but the properties will not allow a download or to print it. I will scroll down through the document and save as a PDF. Always follow good legal practices.
4. Capture a block of text from the screen and “grab text” which will use OCR (Optical Character Recognition) and copy all and paste into a document so I can edit the text. I find old labs I created 10 years ago and I do not have the original files. Instead of re-typing them in, I use Snagit to capture the text as an object and convert it to editable text.



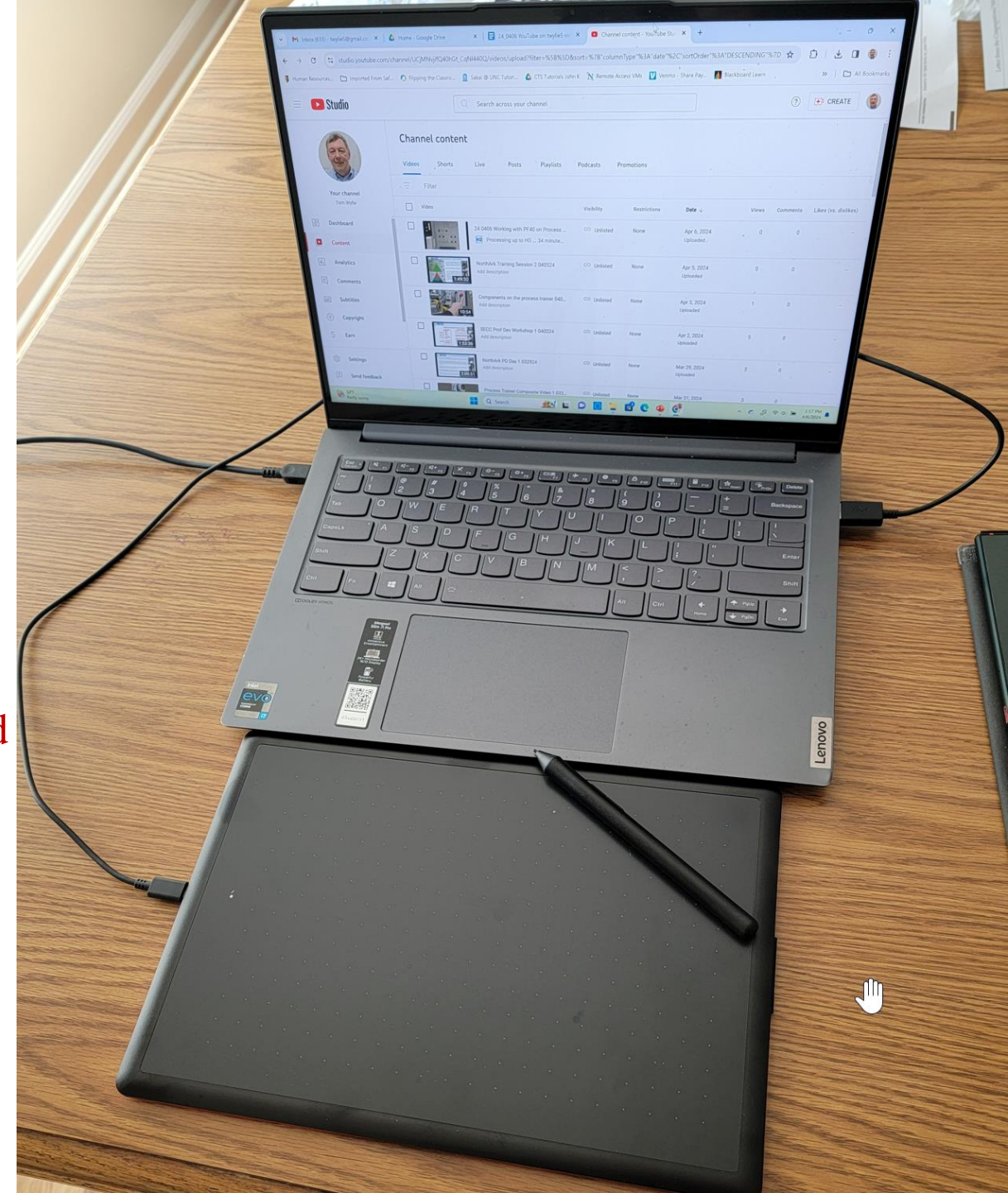
One by Wacom

One by Wacom connects via USB port



One by Wacom connected
To Lenovo IdeaPad

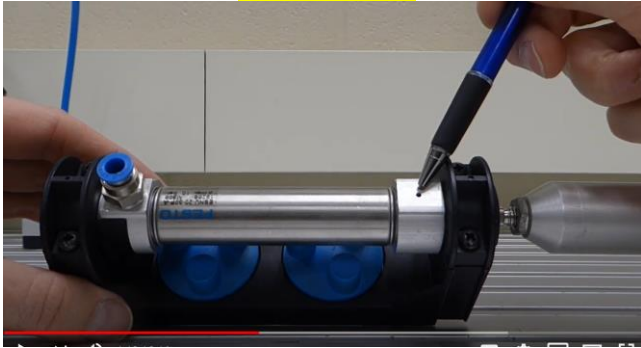
One by Wacom digitizing tablet is primarily for annotating on a PowerPoint slide and recording for a voice over PPT video. The cost for a small tablet is less than \$50, and a medium tablet is about \$75. This is not a tablet for an artist, those are usually \$300 plus.



Learning Objects the User Navigates

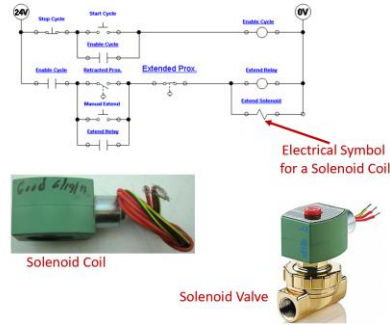


Videos



PPT/PDFs

Solenoid Coil:



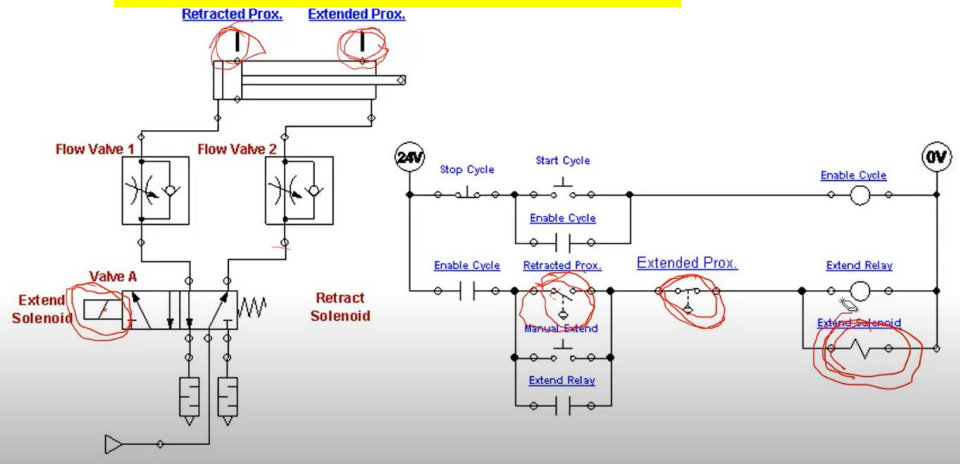
This slide shows the electrical circuit for the continuous operation circuit.

The most important part of this is to identify the solenoid coil symbol in the last rung of the circuit. This example shows a 2-way valve (2 ports). It is a valve that opens or closes off the flow of air, fluid, gas, etc.

The most important thing about these valves is that they have 2 parts: The valve (spring and plunger) that is actuated by the magnetic force of an electric solenoid. This type is termed an ASCO (manufacturer), red hat, due to the red cap. The cap is removed with a screwdriver, then the coil can be removed. If the device is on, you will feel the magnetism with a screwdriver. Sometimes the coil is bad (it opens), or the plunger sticks and must be replaced.

An important thing to remember is that if the coil is 120Vac, and is removed from the valve with power still on, a screwdriver must be inserted into the opening in the coil to keep the coil from burning up. No need to do this with a 24Vdc coil.

Voice over PPT Video



Independent Learning Objects are posted in an LMS for student access. These objects can be viewed in any sequence. The upper left graphic shows a video that was shot with a camera, explaining a single acting pneumatic cylinder.

The middle graphic is a PPT that will be converted to a PDF, then posted in the LMS.

The bottom graphic is a voice over PPT, where the graphic was put into PPT, then annotated with a stylus on the computer touch screen.

All of these objects can be viewed on a smart phone, phablet, tablet or computer screen.

Example Videos:

1. A video shot in the lab showing how to do something
(Video Links on Scaling Project site, Josh Coupling)
2. A screen cam video (22_0614 AS Basic Electrical Simulation)
3. A voice over PPT in Canvas (Voice over PPT with Wacom)

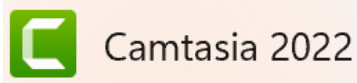
How to Create Videos



Video of how to Operate a CNC Controller



.MP4 or .MOV File

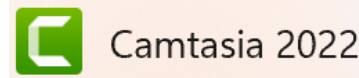
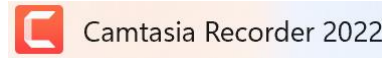


.MP4 File



Video Quiz

Video on how to Setup RSLinx Recording Computer Screen



.MP4 File

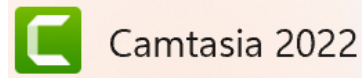
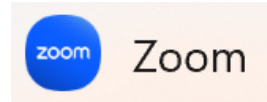


Video Quiz

How to Create Videos



Voice over PPT Video of a Print
Recording Computer Screen
Recording voice as you annotate
(Wacom tablet or mouse)



Video Quiz

.MP4 File



Video Quiz

Videos in Canvas:



- Account
- Dashboard
- Courses
- Calendar
- Inbox
- History
- Follett Discover
- Studio
- Commons

My Library

Date Added View all

Tom Videos

Tom Wylie

Tom First Video

Tom Wylie

1:06

Collection

Collection of Videos in Canvas:



My Library > Tom Videos

RECORD ADD

Airplane Icon means a Quiz was created for the Video

Date Added

View all media

More options

Voice over PPT with Wacom
062423
Tom Wylie

Voice over PPT P&ID mouse
Tom Wylie

Tom on creating videos 062523
Tom Wylie

23_0622 basic recording of help
file on RSLogix500
Tom Wylie

CompactLogix Overview
Tom Wylie

- Account
- Dashboard
- Courses
- Calendar
- Inbox
- History
- Follett Discover
- Studio
- Commons
- Help

Collection of Videos in Canvas:



YouTube

CANVAS

CANVAS

Studio

Video Quiz

Questions in the Video

Video Quiz

0:07 / 3:41

Question 2 of 5

The External Tool in Canvas used to record a screen recording video is called:

- Adobe Premier
- Camtasia
- Zoom
- Studio

Studio Quiz Question

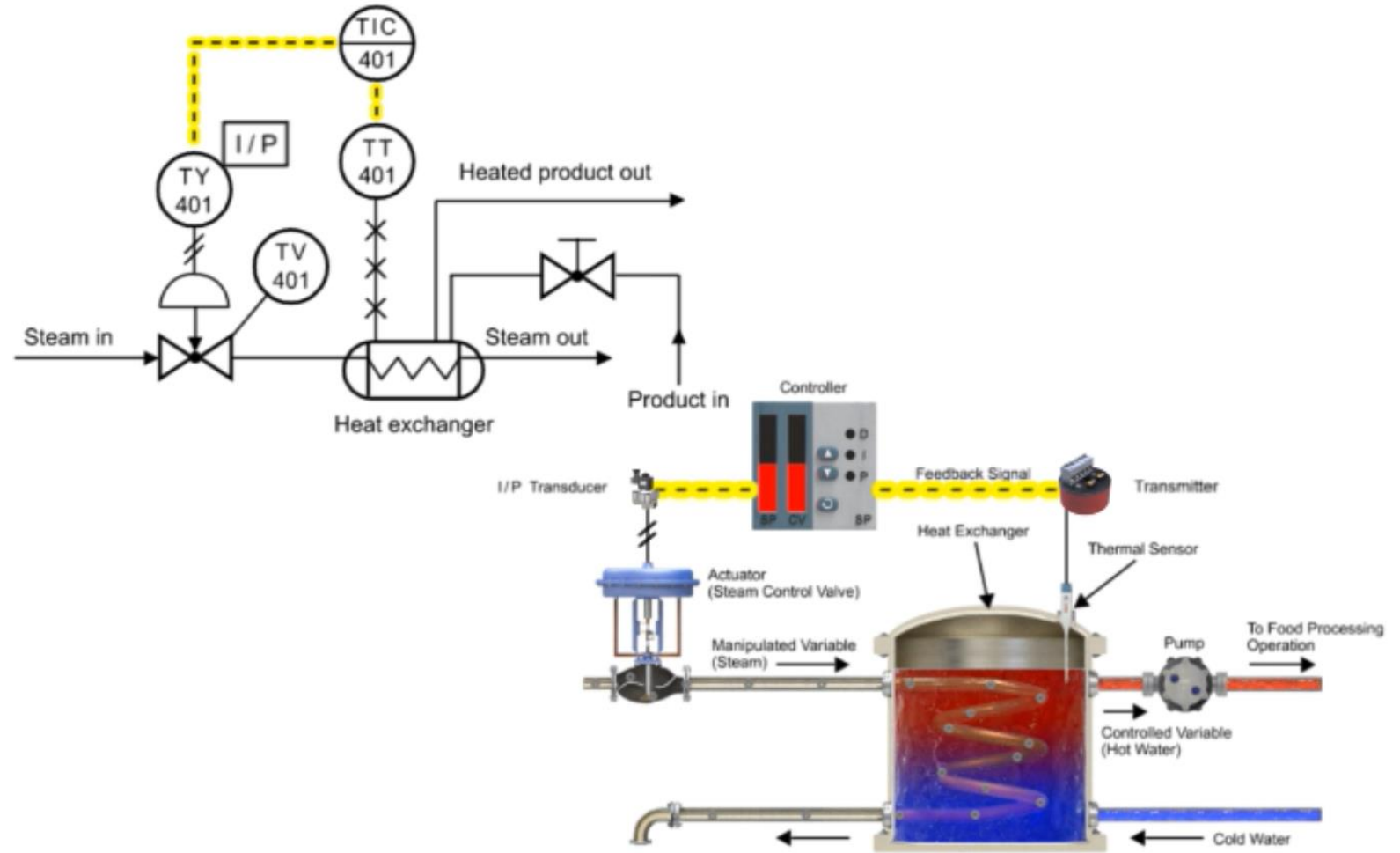
Re-watch since last question

Re-watch Continue

Many good Videos at EngineerTech.Org



Piping and Instrumentation Diagrams



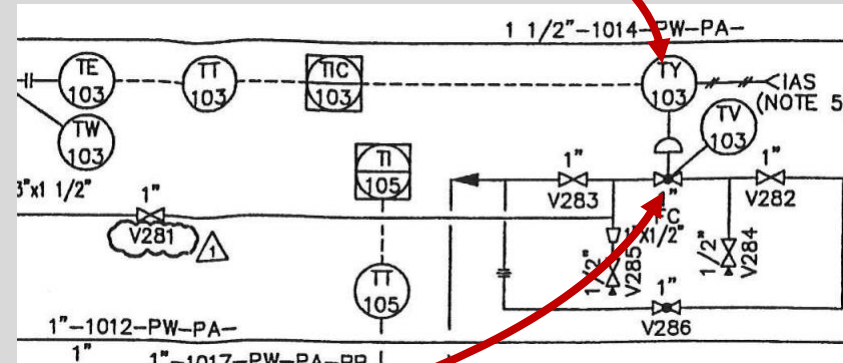
Download Embeddable Simulation with Interactive Quiz Questions:
bit.ly/1IspWI8



Interpreting a P&ID to the actual hardware:

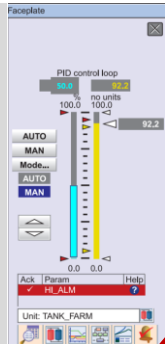


Digital Valve Controller (I/P)



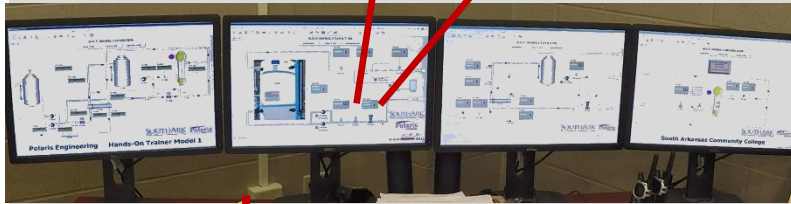
TCV-103 Control Valve

Signal Flow in a Distributed Control System:



Controller Faceplate

50%



Control Console

50%



Delta V DCS System

12 mA

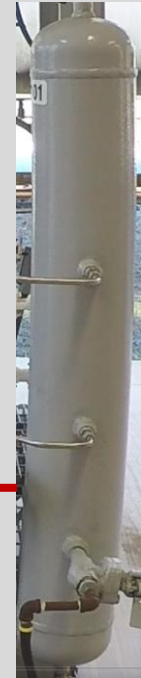


DVC6200 (I/P)



9 psi

1/2 Open



70 psi

Charge Tank



This Concludes this Instructional Document

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<https://www.skillscommons.org/handle/taaccct/17746>

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