

Measurements

Production

Step 1: Odoo/Files

- With your Order Label, navigate to the Sales order
- Download the photos inside the Loupes Profile.
- Save them to a new Cx profile (we use a google drive file explorer)

The screenshot displays two windows side-by-side. On the left is a Google Drive file explorer window titled 'CxProfile'. The main pane shows a list of files and folders, including 'Thu Doan', 'Thu Pham 59mm', 'Thuy Anh Lou (Teresa Lou) 59.53mm', and many others. The right window is the Odoo CRM interface. The top navigation bar includes 'Sales', 'Orders', 'Payments', 'To Invoice', and 'Products'. The main content area shows details for a quotation 'S148715'. A red arrow points to the 'Loupes Profile' tab in the 'Other info' section. Below this, there are fields for 'Name Plate', 'Order Notes', and 'PD Photo'. A second red arrow points to a photo in the 'PD Photo' field. The right sidebar shows a chat window with messages from 'Yaoyue Wang' and 'Gladys Cleofas'.

Step 2: Manufacturing Timer

- Inside the Sales order, we have a Manufacturing Order.
- Within the Manufacturing Order, we have Work Orders.
- Please use the Measurements Timer to track when you start, and when you are complete.

Quotations / S148715 / WH/MO/06358

EDIT CREATE Print Download Action 1 / 1 < >

VALIDATE UNPLAN CHECK AVAILABILITY SCRAP CANCEL DRAFT CONFIRMED **IN PROGRESS** DONE Send message Log note Schedule activity 0 Follow 1

☆ WH/MO/06358

Product: ErgoPrism TTL Loupes (5.0x EP, Carbon 3, Black, Petite) Scheduled Date: 01/19/2023 20:11:09

Custom Description: ErgoPrism Working Distance: 22" What eyeglasses are you wearing?: None. I have perfect 20/20 vision For peripheral vision through the Carrier lens, I need to have: Please select one of the options below Carrier Lens Upgrade (Optional, non-refundable): No Name Plate Name?: Title?: Reader/Cheater Power, if applicable: Enter the ADD power below OR click to select.

Quantity: 1.00 / 1.00 To Produce

Bill of Material: 2022Jun07: ErgoPrism TTL Loupes

Components Work Orders Miscellaneous

Operation	Work Center	Product	Expected Duration	Real Duration	Status	
Verification	Verification	ErgoPrism TTL Loupes (5.0x EP, Carbon 3, Black, Petite)	96:00	00:03	Finished	Block
Print	Print	ErgoPrism TTL Loupes (5.0x EP, Carbon 3, Black, Petite)	93:20	413:54	Finished	Block
Measuremen...	Measurements	ErgoPrism TTL Loupes (5.0x EP, Carbon 3, Black, Petite)	96:00	13:16	Finished	Block
CNC	CNC 2	ErgoPrism TTL Loupes (5.0x EP, Carbon 3, Black, Petite)	96:00	00:02	In Progress	Pause Done Block
Assembly	Assembly	ErgoPrism TTL Loupes (5.0x EP, Carbon 3, Black, Pett...	96:00	00:00	Waiting for another WO	Start Block
QC Station	QC Station	ErgoPrism TTL Loupes (5.0x EP, Carbon 3, Black, Pett...	96:00	00:00	Waiting for another WO	Start Block
Add a line						
			4893:20	427:13		

January 23, 2023

Jacob Soto - 2 days ago

- MO Readiness: Ready → Waiting

January 19, 2023

Gladys Cleofas - 6 days ago

- State: Confirmed → In Progress

Gladys Cleofas - 6 days ago

- Cx Using: → None
- Carrier Rx: → None
- Carrier Rx: → None

January 18, 2023

Odoobot - 7 days ago

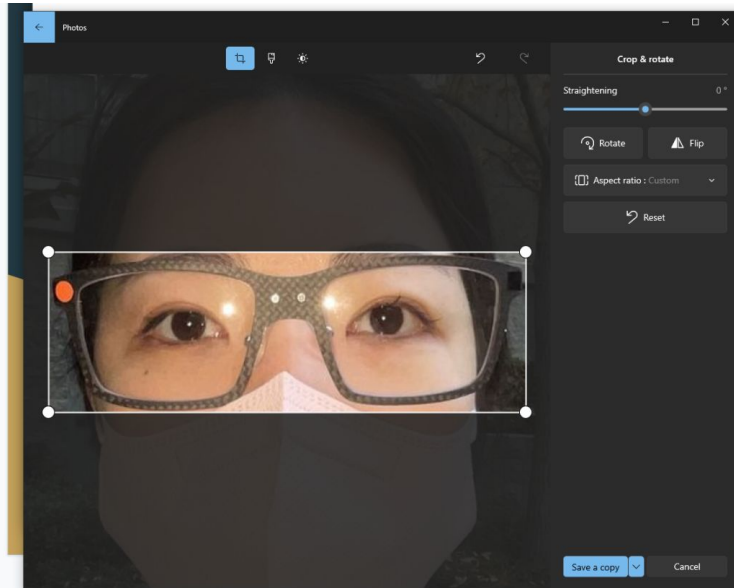
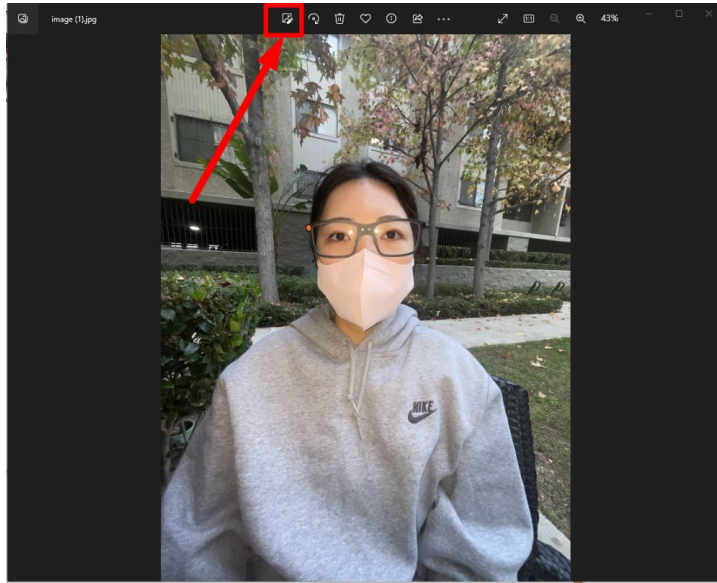
- State: Draft → Confirmed
- MO Readiness: → Ready

Odoobot - 7 days ago

Production Order created

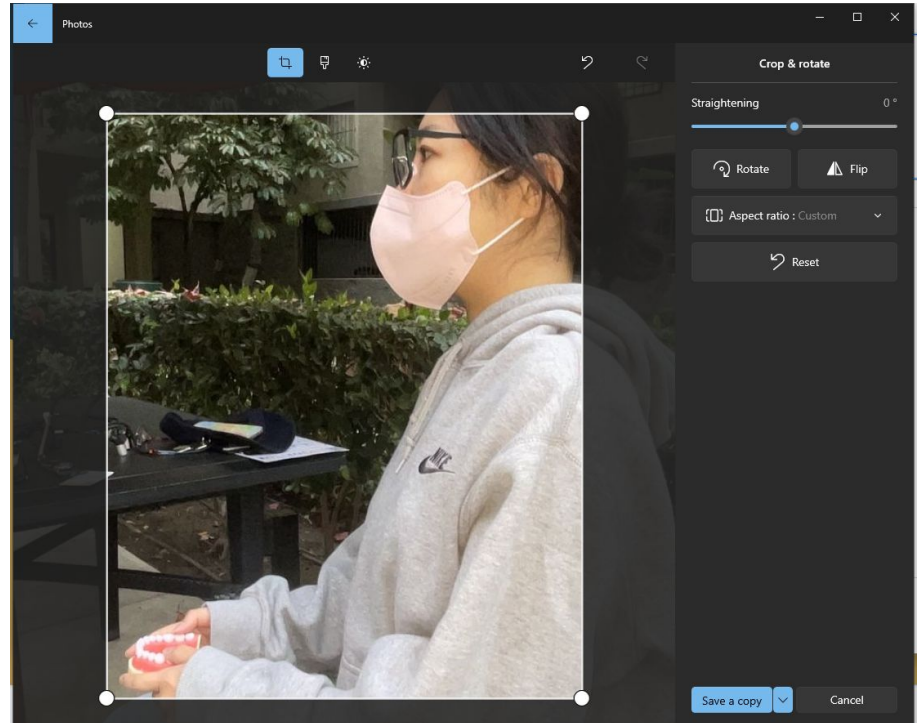
Step 3: Edit the Photos

- With each photo we edit them to get a closer IPD and EP ANGLE
- Double click and use the Photo application to crop them.



EP Angle Example

The main components needed are the customers target, and the temple arm



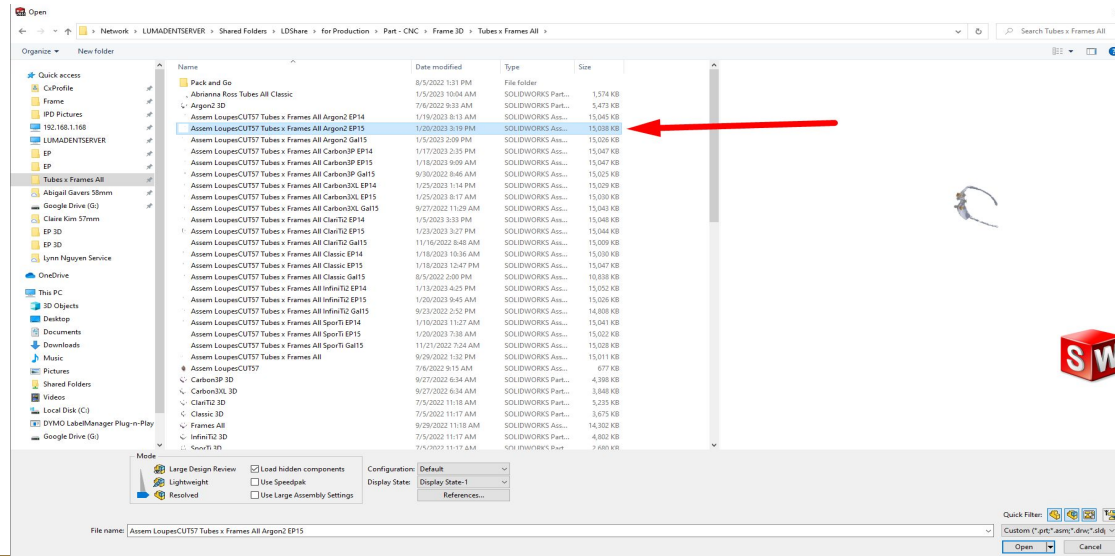
Step 4: Prepping Solid works

- We are going to use Solid Works to Save three different Files.
 - 1 - Frame Cut
 - 2- Tubes x Frame
 - 3- Tubes All
- Working from the bottom up is the best way to think of this. We are going to open each part, then Save it as a custom file for the customer.
- Example, start with the Tubes All.
- Save as Jerry Carter Tubes All
- Then Replace it, and do the same for Tubes x Frame, next Frame Cut.

Step 4: Examples

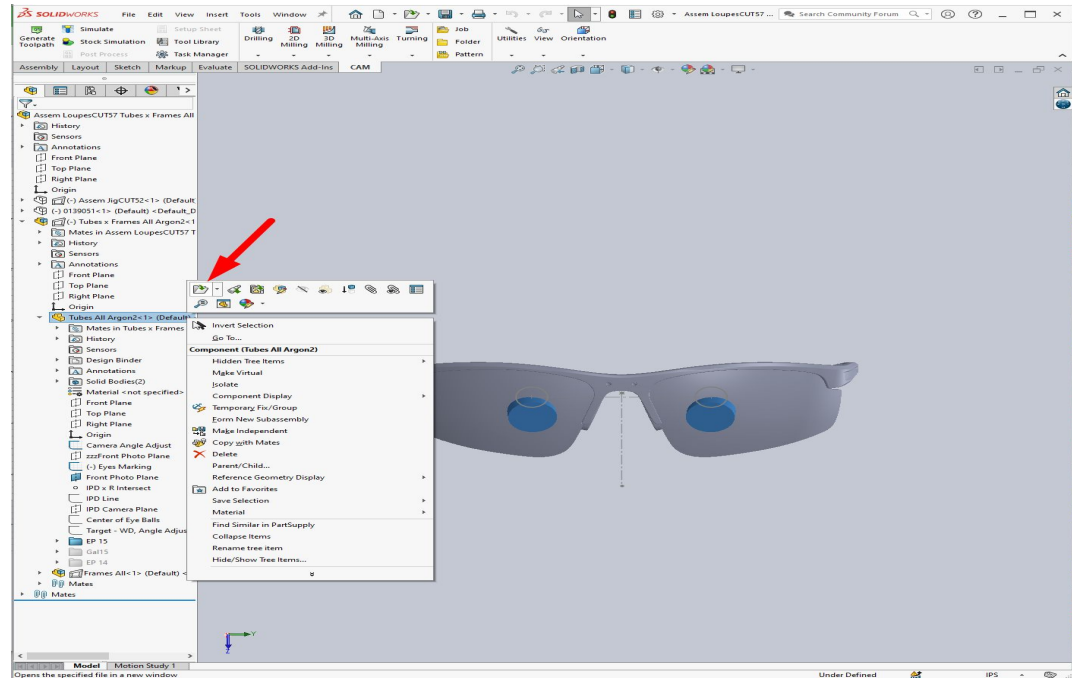
- Start by opening the template assembly of the frame and magnification you need.
 - EP15 = 15mm oculars. Or the 3.3x, 4.3x, 5.0x
 - EP14 = 14mm oculars. 6.0x

File, Open, Tubes x Frames All is the file explorer path



Step 5: Saving Files

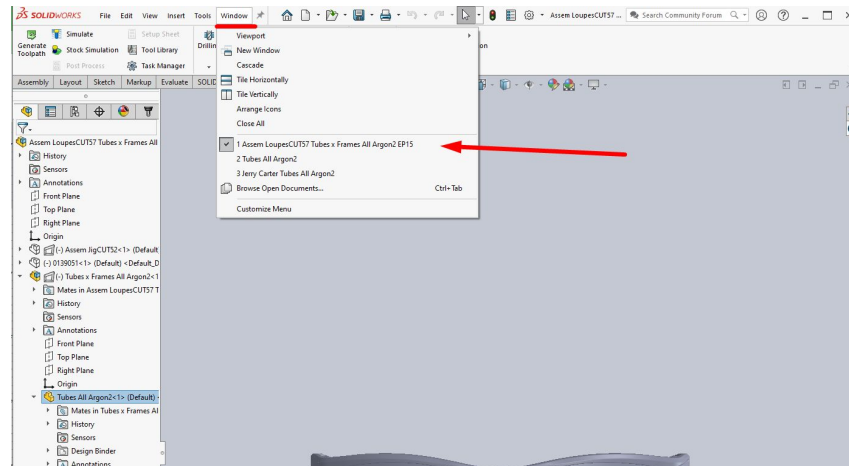
- First, Right click on the Tubes All.
- Select Open Part



Step 5: Continued

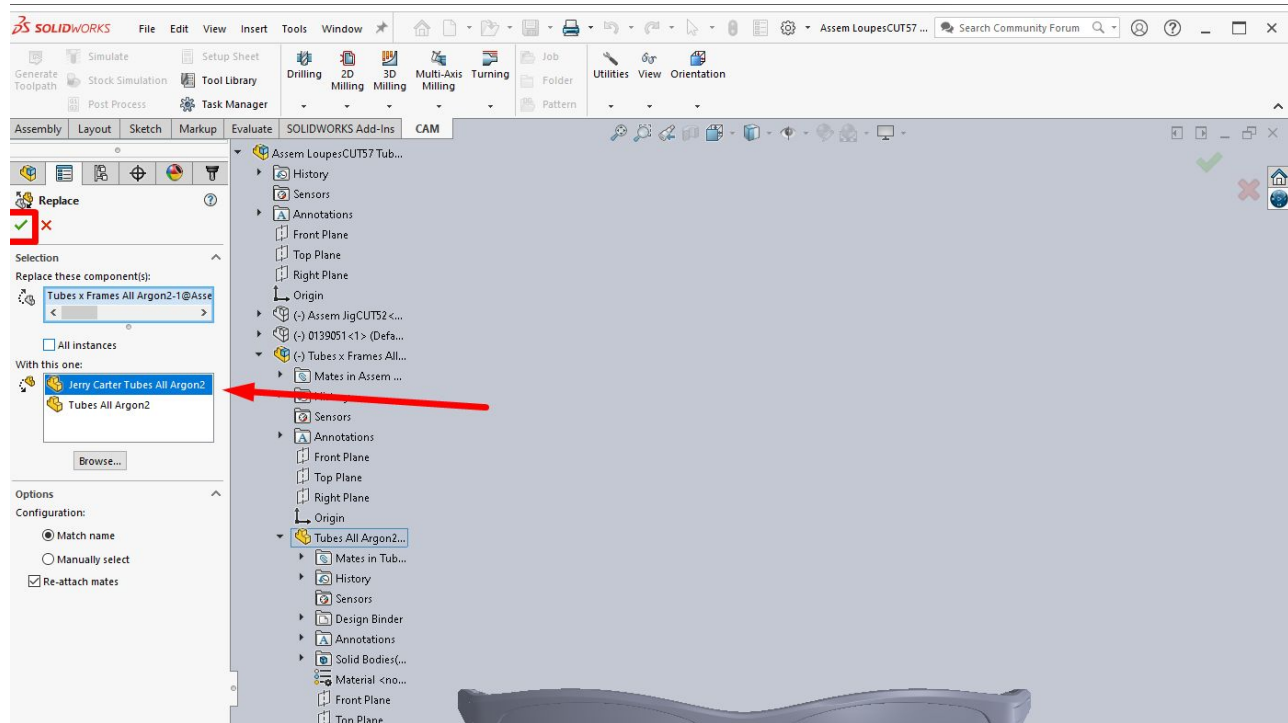
- Select, File, Save As.
- Save it as a “Save as copy and open”

Use the Windows tab to go back to the Original Assembly file with the entire component.



Step 5: Cont.

- Replace the component with your Customers File!
- Right click, then replace components.



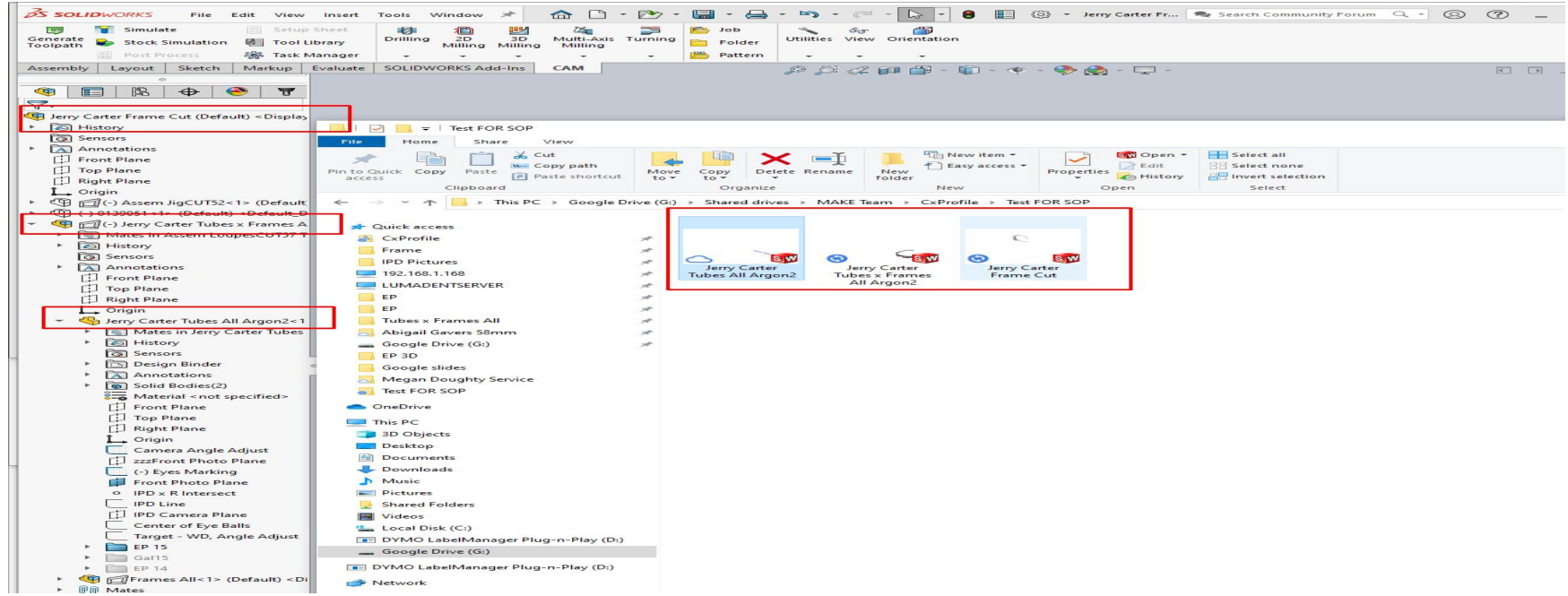
Step 6 : Tubes x Frames

- Repeat Steps 5 but for the Tubes x Frames
 - Open Part
 - Save as “Cx Name” + “Tubes x Frames”
 - Replace components

Tip : Using the Window tab at the top allows you to see multiple files you have open

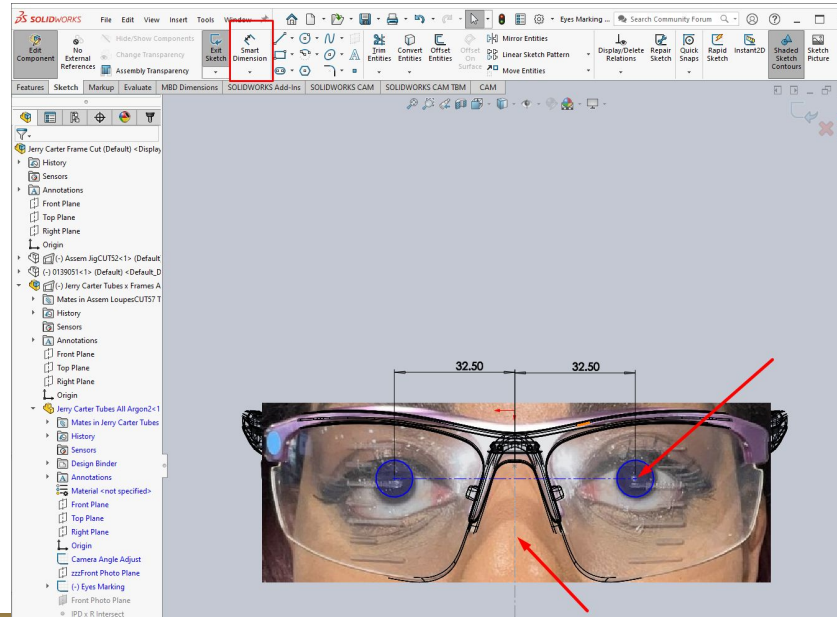
Step 7: Save the Assembly as the Cx name

- Now that the Tubes x Frame, and the Tubes all is saved as the customers name.
- Please Use the Save as, then name it the Customers “Name” + Frame Cut
- When you are all complete, the customer profile folder will look like this below!



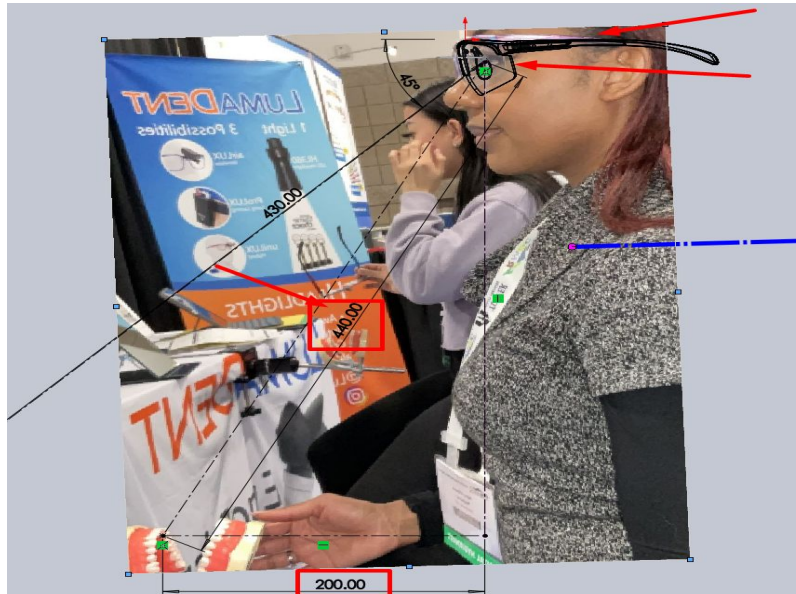
Step 8: Using Photos, IPD

- Right click the **Eye marking**, and the **Target- WD, Angle Adjust**, “Edit Sketch” to start moving the photos to the correct position.
- With the Eye Marking, please make sure the top of the frame and the temple arms are aligned.
- Drag and click the middle dot on each eye marking to get your IPD.
- Use the Smart Dimension to measure from the middle dot, to the middle grey line.



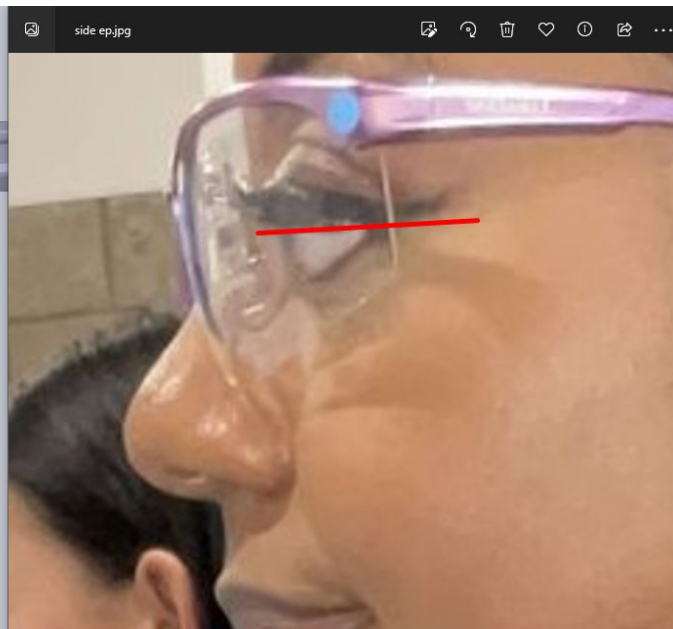
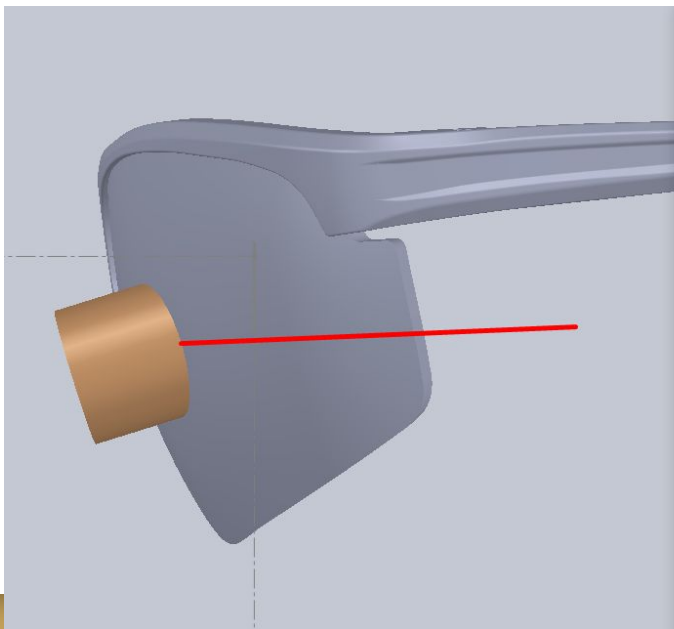
Step 9: EP angle Photo

- We want the temple arm to be parallel to the temple arm in the solidworks template.
- Next make sure the center of the eye is where the green dot is.
- Change the “440” to reflect the customers working distance in millimeters
- Finally, change the “200” number, to reflect where the customer is targeting



Step 10: Height

- Our last step is to verify that the height looks accurate.
 - The height meaning where the oculars will cut through the lens to match where the customer eyes are with the frame.
- If you need to, raise the eye markings to raise the height of the oculars.
 - Customers may be looking up in the IPD photo, but level in the EP angle. This can throw the Height off.



Step 10: Generate toolpath/Post Process

- In order for our CNC to cut the frame it needs instructions. Think of the next part as the machine code.
- With the CAMManager tab, highlight both contours and Frame cut name.
- Once highlighted, click on the Generate Toolpath button.
- Then, click on the Post Process.
- Post Process is how we save the machine code to the machine.
- Use the Program Comment to Name the File.
- The file name system is “Name” + “Frame” + “3D”
- We save the post process in two locations
 - 1 - Server Files
 - 2- Machine Folder

Jerry Carter Frame Cut Operation

Job

- 2D Contour4
- 2D Contour5

Post Process

Configuration Folder
C:\Program Files\Autodesk\HSMWorks 2022\posts Setup

Post Configuration
Enter search text All All vendors
HAAS - Next Generation Control / haas next generation Open config

Output folder
\\LUMADENTSERVER\Shared Folders\LDSHare\for Production\Part - .nc Open folder

Program Settings

Program name or number
2159

Program comment
Jerry Carter Argon2 3D

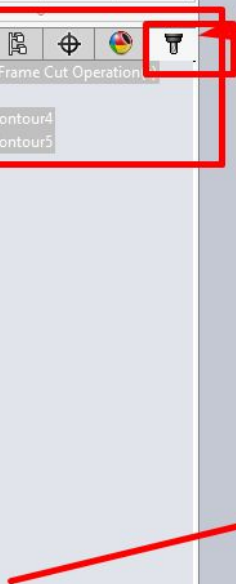
Unit
Document unit

Reorder to minimize tool changes
 Open NC file in editor

Property	Value
(Built-in) Allow helical moves	Yes
(Built-in) High feedrate mapping	Preserve rapi...
(Built-in) High feedrate	650
(Built-in) Maximum circular radius	1000
(Built-in) Minimum chord length	0.25
(Built-in) Minimum circular radius	0.01
(Built-in) Tolerance	0.002
Use chip transport	No
Coolant pressure	Default
Fast tool change	No

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Post Cancel



UMC500 Programs = Server Files

The screenshot shows the SolidWorks CAM interface with a Post Process dialog box open. The dialog box is navigating to a network folder: Network > LUMADENTSERVER > Shared Folders > LDSHare > for Production > Part - CNC > UMC 500 Programs > EP 3D. A context menu is open over the 'EP 3D' folder, showing options: 3D, EP, EP 3D, Loupes Cut, Prism, Rx button, and V2. Red arrows point from the 'EP 3D' folder in the main list to the 'EP 3D' option in the context menu, and another red arrow points from the 'EP 3D' folder in the main list to the 'EP 3D' folder in the context menu. The file name field at the bottom is set to 'Jerry Carter Argon2 3D' and the save as type is 'All (*.*)'. The file list contains the following data:

Name	Date	Size
Ben Vanek InfiniTi2 3D	1/26/2023 12:15 PM	NC File
Karri Bausch Carbon 3P 3D	1/26/2023 12:02 PM	NC File
Kirsten Kennedy Argon2 3D	1/26/2023 10:07 AM	NC File
Karla Rios Argon2 3D	1/26/2023 9:53 AM	NC File
Eric Chatterley Argon2 3D	1/26/2023 9:51 AM	NC File
Megan Jacobsen SporTi 3D	1/26/2023 9:40 AM	NC File
Mychal Chandler Carbon 3P 3D	1/26/2023 9:14 AM	NC File
Megan Doughty Service 3D	1/26/2023 9:02 AM	NC File
Myra Gaucin Argon2 3D	1/25/2023 4:25 PM	NC File
Sarah Bahn Argon2 3D	1/25/2023 4:14 PM	NC File
Alicia Gillespie Argon2 3D	1/25/2023 4:03 PM	NC File
Thuy Le Argon2 3D	1/25/2023 3:45 PM	NC File
Alexis Holt Classic 3D	1/25/2023 3:33 PM	NC File
Shelbi Robinett ClariTi2 3D	1/25/2023 3:07 PM	NC File
Allegra Guerretaz ClariTi2 3D	1/25/2023 2:54 PM	NC File
Abigail hacker ClariTi2 3D	1/25/2023 2:48 PM	NC File
Fiona Nguyen Argon2 3D		
Linh Nguyen SporTi 3D		
Michelle Leon Argon2 3D		
Gerald Favre SporTi 3D		

192.168.1.168 = I.P. Address for CNC

- Drag and drop from the UMC500 Server folder, to the CNC machine's Folder!

The image displays two Windows File Explorer windows side-by-side, illustrating a file transfer process. The left window shows the source location: **Shared Folders > LDShare > for Production > Part - CNC > UMC 500 Programs > EP 3D**. The right window shows the destination location: **Network > 192.168.1.168 > User Data > Loupes > EP 3D**. A red arrow points from the **Carter Argon2 3D** file in the left window to the **EP 3D** folder in the right window.

Name	Date modified	Type	Size
vanek InfiTi2 3D	1/26/2023 2:18 PM	NC File	24 KB
Bausch Carbon 3P 3D	1/26/2023 2:07 PM	NC File	40 KB
Carter Argon2 3D	1/26/2023 1:26 PM	NC File	52 KB
an Kennedy Argon2 3D	1/26/2023 1:12 PM	NC File	52 KB
Ricos Argon2 3D	1/26/2023 1:01 PM	NC File	51 KB
Chatterley Argon2 3D	1/26/2023 12:15 PM	NC File	54 KB
an Jacobsen Sportfi 3D	1/26/2023 12:02 PM	NC File	39 KB
tal Chandler Carbon 3P 3D	1/26/2023 10:07 AM	NC File	39 KB
an Doughty Service 3D	1/26/2023 9:53 AM	NC File	47 KB
Gauscin Argon2 3D	1/26/2023 9:51 AM	NC File	52 KB
s Bahn Argon2 3D	1/26/2023 9:40 AM	NC File	52 KB
s Gillespie Argon2 3D	1/26/2023 9:14 AM	NC File	53 KB
Le Argon2 3D	1/26/2023 9:02 AM	NC File	54 KB
s Holt Classic 3D	1/25/2023 4:25 PM	NC File	37 KB
s Robinett ClanTi2 3D	1/25/2023 4:14 PM	NC File	25 KB
rs Guerretaz ClanTi2 3D	1/25/2023 4:03 PM	NC File	25 KB
al hacker ClanTi2 3D	1/25/2023 3:45 PM	NC File	24 KB
s Nguyen Argon2 3D	1/25/2023 3:33 PM	NC File	53 KB
Nguyen Sportfi 3D	1/25/2023 3:07 PM	NC File	40 KB
selle Leon Argon2 3D	1/25/2023 2:54 PM	NC File	54 KB
Id Favre Sportfi 3D	1/25/2023 2:40 PM	NC File	44 KB
Gatach Argon2 3D	1/25/2023 2:36 PM	NC File	54 KB
s Hadi Argon2 3D	1/25/2023 2:19 PM	NC File	52 KB
te Hellman Argon2 3D	1/25/2023 2:07 PM	NC File	52 KB
Morency Argon2 3D	1/25/2023 1:55 PM	NC File	51 KB
ony Baird Argon2 3D	1/25/2023 12:39 PM	NC File	47 KB
hpreet Kaila InfiTi2 3D	1/25/2023 12:26 PM	NC File	25 KB
s Mitchell ClanTi2 3D	1/25/2023 11:12 AM	NC File	24 KB
ucopia Innovation Corporation (San...	1/25/2023 10:14 AM	NC File	25 KB
m E Wyatt Jr TEST 15	1/25/2023 9:15 AM	NC File	49 KB
m E Wyatt Jr TEST 18	1/25/2023 9:12 AM	NC File	48 KB
m E Wyatt Jr TEST 22	1/25/2023 9:05 AM	NC File	50 KB

Name	Date modified	Type
Frame		
IPD Pictures		
192.168.1.168		
LUMADENTSERVER		
EP		
EP		
Tubes x Frames All		
Abigail Gavers 50mm		
Google Drive (G)		
EP 3D		
Google slides		
Megan Doughty Service		
Test FOR SOP		
OneDrive		
This PC		
3D Objects		
Desktop		
Documents		
Downloads		
Music		
Pictures		
Shared Folders		
Videos		
Local Disk (C:)		
DYMO LabelManager Plug-n-Play (D:)		
Google Drive (G)		
DYMO LabelManager Plug-n-Play (D:)		
Network		
Agness Kutsenko Argon2 3D	1/10/2023 8:31 AM	NC File
Adrienne Hedrick Classic 3D	1/10/2023 10:34 AM	NC File
Adriana Bollinger Argon2 3D	1/20/2023 2:49 PM	NC File
Abrianna Ross Classic 3D	1/5/2023 10:03 AM	NC File
Abby Larsen Argon2 3D	12/27/2022 10:26 AM	NC File
Abagayle McCarson Carbon 3P 3D	11/14/2022 10:20 AM	NC File
Aaron Sanders Classic 3D	8/22/2022 11:39 AM	NC File
Aaron Sanders Classic 3D ROBO1	8/23/2022 9:39 AM	NC File
17 William E Wyatt Jr TEST 22	12/27/2022 8:48 AM	NC File
15 Eileen Myre Argon2 Service (carbon3 XL 3D)	12/23/2022 11:37 AM	NC File
(SAMUEL) InfiTi2 3D	1/13/2023 3:00 PM	NC File
(Chun Fang) Classic 3D	1/12/2023 3:19 PM	NC File
Prabhpreet Kaila InfiTi2 3D	1/25/2023 12:26 PM	NC File
Anthony Baird Argon2 3D	1/25/2023 12:39 PM	NC File
Gerald Favre Sportfi 3D	1/25/2023 2:48 PM	NC File
Ava Morency Argon2 3D	1/25/2023 1:55 PM	NC File
Moshe Hellman Argon2 3D	1/25/2023 2:07 PM	NC File
Elisha Hedi Argon2 3D	1/25/2023 2:19 PM	NC File
Lisa Katch Argon2 3D	1/25/2023 2:36 PM	NC File
Michelle Leon Argon2 3D	1/25/2023 2:54 PM	NC File
Linh Nguyen Sportfi 3D	1/25/2023 3:07 PM	NC File
Fiona Nguyen Argon2 3D	1/25/2023 3:33 PM	NC File
Abigail hacker ClanTi2 3D	1/25/2023 3:45 PM	NC File
Allegra Guerretaz ClanTi2 3D	1/25/2023 4:03 PM	NC File
Shelbi Robinett ClanTi2 3D	1/25/2023 4:14 PM	NC File
Alexis Holt Classic 3D	1/25/2023 4:25 PM	NC File
Megan Doughty Service 3D	1/26/2023 9:53 AM	NC File
Megan Jacobsen Sportfi 3D	1/26/2023 12:02 PM	NC File
Eric Chatterley Argon2 3D	1/26/2023 12:15 PM	NC File
Karla Ricos Argon2 3D	1/26/2023 1:01 PM	NC File
Kisten Kennedy Argon2 3D	1/26/2023 1:12 PM	NC File
Karr Bausch Carbon 3P 3D	1/26/2023 2:07 PM	NC File
Ben Vanek InfiTi2 3D	1/26/2023 2:18 PM	NC File

COMPLETE!

- Be sure to note the IPD and any other notes needed physically on your order form!
- Plus note it on the Customer Profile!

The screenshot displays a Windows File Explorer window with the following structure:

- Quick access
 - CxProfile
 - Frame
 - IPD Pictures
 - 192.168.1.168
 - LUMADENTSERVER
 - EP
 - EP
 - Tubes x Frames All
 - Abigail Gavers 58mm
 - Google Drive (G:)
 - EP 3D
 - Google slides
 - Megan Doughty Service
 - Test FOR SOP

The main pane shows a list of folders:

- Shelbi Robinett 50mm
- Allegra Guerrettaz 53mm
- Abigail hacker 54mm
- Fiona Nguyen 54mm
- Linh Nguyen 56mm
- Michelle Leon 58mm
- Lisa Katach 60mm
- Elisha Hadi 57mm
- Moshe Hellman 58mm
- Ava Morency 64mm
- Gerald Favre 59mm** (selected)
- Gerald Favre (Leah Schultz) 58mm
- Claire Kim 57mm
- Anthony Baird 61mm
- Prabhpreet Kaila 65mm
- Lindy Mitchell 52mm
- Brooklin Byrd 57mm

The context menu for the selected folder shows:

- Date created: 1/25/2023 11:34 AM
- Size: 30.4 MB
- Files: Gerald Favre frame cut, ...

Folder Name	Date Created	Type
Shelbi Robinett 50mm	1/25/2023 3:21 PM	File folder
Allegra Guerrettaz 53mm	1/25/2023 3:21 PM	File folder
Abigail hacker 54mm	1/25/2023 3:20 PM	File folder
Fiona Nguyen 54mm	1/25/2023 3:20 PM	File folder
Linh Nguyen 56mm	1/25/2023 3:20 PM	File folder
Michelle Leon 58mm	1/25/2023 3:20 PM	File folder
Lisa Katach 60mm	1/25/2023 3:20 PM	File folder
Elisha Hadi 57mm	1/25/2023 3:20 PM	File folder
Moshe Hellman 58mm	1/25/2023 3:20 PM	File folder
Ava Morency 64mm	1/25/2023 3:19 PM	File folder
Gerald Favre 59mm	1/25/2023 2:48 PM	File folder
Gerald Favre (Leah Schultz) 58mm	1/25/2023 2:46 PM	File folder
Claire Kim 57mm	1/25/2023 2:40 PM	File folder
Anthony Baird 61mm	1/25/2023 11:49 AM	File folder
Prabhpreet Kaila 65mm	1/25/2023 11:48 AM	File folder
Lindy Mitchell 52mm	1/25/2023 11:48 AM	File folder
Brooklin Byrd 57mm	1/25/2023 11:48 AM	File folder