

WI-2100- TTL Loupes

1. Procedure - TTL Loupes

1.1 Through the Lens Loupes describes our process of starting, measuring, assembling, and quality controlling LumaDents Loupe products. They are installed through the carrier lens of glasses with custom specifications.

2. Step/Subsection Title: Printing Orders

2.1 Go to the (ERP Website) Manufacturing tab

2.2 We will use these Manufacturing work orders Print, Print 2, Rx, and Rx 2

2.3 Click on the green "Work Orders" button for each

2.4 Filter to show, Ready, in Progress, and Waiting (Only for the Print)

2.5 Highlight all those and print them

2.6 Start work order tracker (timer)

2.7 Provide the label to the next production agent needed.

2.7.1 Example of Order label:

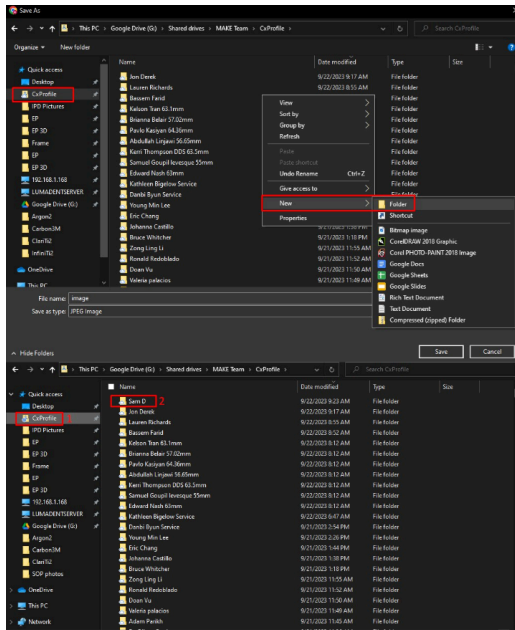


3. Step/Subsection Title: Measuring

3.1 Navigate to the order through the ERP Website

3.2 Start your order tracker (timer, stop it when complete with steps)

3.3 Save the provided photos to our production storage:



3.4 Save a customer named Solid Works file with the most up to date method.

3.5. Use pre-provided Height/Angle

3.6 Use IPD measurement provided inside sale order to enter Left and Right measurements

3.6.1 See WI-2101-IPD Measurement

3.6.2 Write IPD, buttons, and file name on the physical order label and enter in the ERP loupes profile tab of the sales order.

Customer Preview	1 Delivery	1 Manufacturing	Show Revised History	0 Repairs	0 Helpdesk
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S190815

Customer	UNISGN 359 6455 Lakeview Blvd Ste B Lake Oswego OR 97035 United States	Order Date	05/31/2024 02:00:21
Customer Email	quanglam.sto@gmail.com	Pricelist	Public Pricelist (USD)
Invoice Address	UNISGN 359, UNISGN 359 D1	Payment Terms	
Delivery Address	UNISGN 359, UNISGN 359 D1	Salesperson	
Student ID		Tags	Magento Partner LOUPESQUESTION With Loupes
Source	Direct	Event	
		Shipping Instructions	
		MO Exception	
		Tracking Number	1Z6360AX4234981381

Order Lines	Helpdesk Details	Other Info	Shipstation Shipping Charges	Loupes Profile	MPhoto
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Priority		Name Plate	Dr. Nguyen Trong Quynh
EP Angle		Ocular Buttons	+ E
EP Height		Cx Using	None - I have good vision
Std WD	16	Carrier Rx	None
EP WD		Add Power	
IPD	62.00	Lens Upg Progressive	

EP loupes no buttons required (EP V3)
Prism/Galilean loupes with Rx refer to WI-2003 Ordering Rx section 4 - to determine buttons

3.6.3 For Galilean WD buttons refer to the following chart

Galilean Loupes		
Power	Mark	WD
-5	-T	35
-4.5	-R	33
-4	-P	31
-3.5	-N	29
-3	-L	27
-2.5	-J	25
-2	-H	23
-1.5	-F	22
-1	-D	21
-0.5	-B	20
0	blank	19
0.5	+B	18
1	+D	17
1.25	+E	16
1.5	+F	15
2	+H	13
2.5	+J	11
3	+L	10
3.5	+N	9
4	+P	8
5	+R	7
6	+T	6

3.7 Generate and Post the Solid Works program into the CNC Machine.

4. Step/Subsection Title: CNC (OP-02-F04 Procedure - CNC)

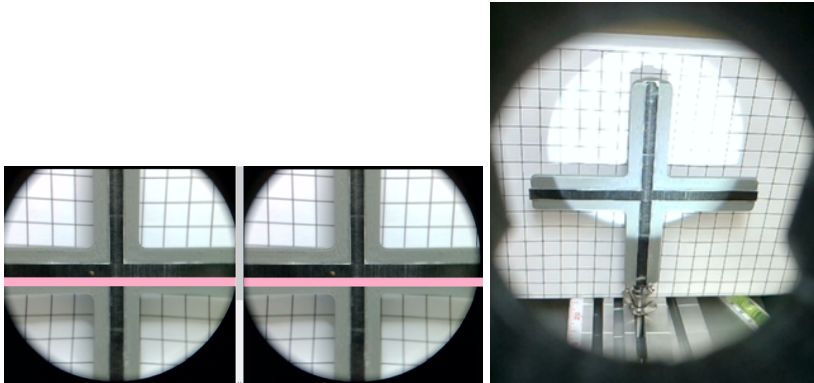
4.0 - Refer to WI-2102 - CNC for further information

- 4.1 Begin work order tracker (timer, stop it when complete with steps)
- 4.2 Align the frame into the holder
- 4.3 Hand tighten the holders to the frame
- 4.4 Probe the frame (mapping the frame)
- 4.5 Find the Customers Program inside the machines [List Program]
- 4.6 Run the program, ensure the machine completes without issues
- 4.7 Use Caliper to verify measurements are accurate
- 4.8 Put frames in next designated area

5. Step/Subsection Title: Assembly

- 5.1 Begin work order tracker (timer, stop it at the end of steps)
- 5.2 Check order that is physically handed to you (Components)
 - 5.2.1 Examine components to ensure quality
 - Use provided PPE (Gloves, Polarized Eyewear).
- 5.2 Set the loupes in the Jig
- 5.3 Use the LED Light to align the ocular outline

5.3.1 Example:



5.4 Provide a screenshot of both right and left oculars light alignment

5.5 Place the cameras on the oculars and ensure the left and right ocular are aligned properly.

5.6 Provide a screenshot through OBS software of the alignment

5.7 Use the light alignment to check the light outside of the jigs.

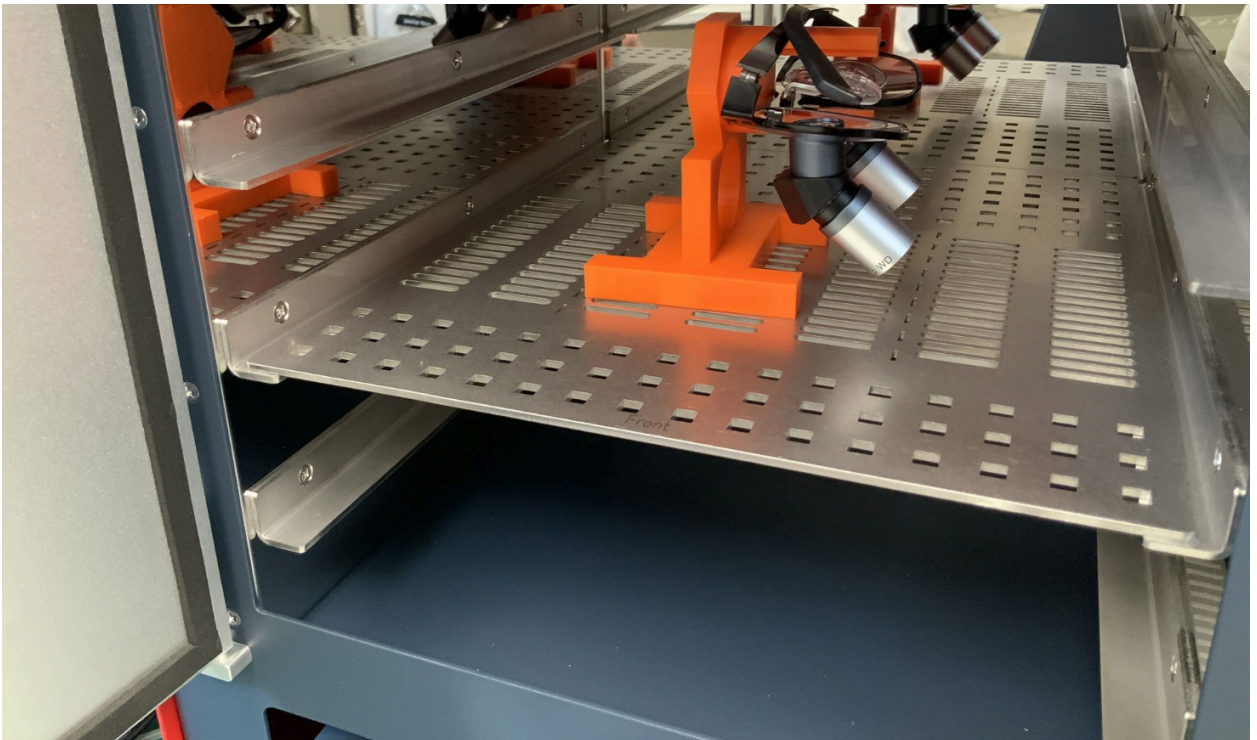
5.7.1 Use camera to

5.7.1 Example photo

5.8 Apply adhesive to the oculars/lens

5.9 Apply U.V. light to cure the adhesive

5.9.1 Use curing chamber to finish curing the adhesive



5.10 Place Loupes in designated area

6. Step/Subsection Title: Cleaning Loupes

- 6.1 Ensure PPE/tools are used properly (Gloves, Screwdrivers, Cloths)
- 6.2 Check components of order before beginning.
- 6.3 Examine components to ensure quality
- 6.4 Start order tracker (timer, stop it when complete with steps)
- 6.5 Remove dust with air nozzle
- 6.6 Use lens cleaner and cleaning cloth to clean the lens
- 6.7 Provide any additional physical items.
Buttons, Nose pads, mounts.
- 6.8 Place order in designated area for QC production agent

7. Step/Subsection: QC

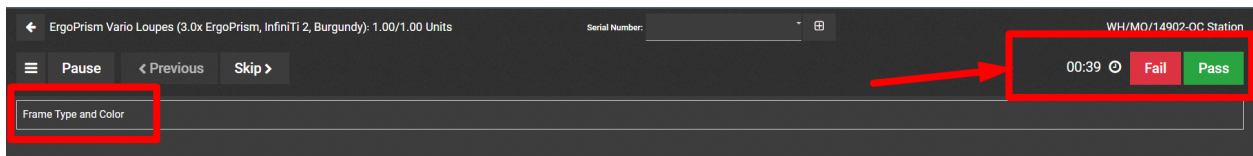
- 7.1 Use PPE while handling Loupes
- 7.2 Use order form and printed QC checklist to check components
 - 7.2.1 - Q.C. Checklist:

Operator Name _____
Date J_/J_/__

Quality Control Checklist

- 1.) Manufacturing Order _____
- 2.) Nameplate
- 3.) Ocular Type (ErgoPrism, Galilean?)
- 4.) Magnification, Frame Type, Color
- 5.) WD / Buttons
- 6.) Case Type (Large or Compact?)
- 7.) Alignment at WD (Look at the target)
- 8.) Ocular outline (U)
- 9.) Nose Pad /Mount /Cover
- 10.) Screws
- 11.) Cosmetic
 - a.) Frame
 - b.) Lens
 - c.) Glue
- 12.) Ocular Placement
- 13.) Fail Reason: _____

7.3 Any reason order does not pass QC, mark it in ERP and on printed checklist.



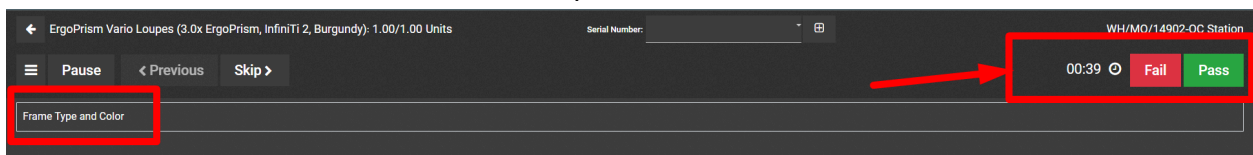
7.3.1 Example of order not passing: Light alignment, Cosmetic flaws, Horizontal line not aligned.

7.3.2 Give order to supervisor, if it does not pass.

7.4 Obtain a photo of the ocular outline, attach the photo to the order.

7.5 Apply Adjustable focus to customers working distance before completing.

7.6 Mark order as done in ERP and printed checklist.



7.7 Pack Loupes in specified case, log a photo of completed loupes.



7.8 Take orders to the shipping department.

7.9 Ensure nameplate is done if required. (See WI-2005-Nameplates)

8. Records

8.1 ERP system contains documentation of measurements, assembly alignment, qc alignment.