Making & Fitting of spectacle

THE MAKING AND FITTING OF SPECTACLES FROM THE OPTICIAN'S STANDPOINT.

What spectacle means?

Spectacles are eyeglasses. People wear spectacles because their vision is flawed. Spectacles is an old-fashioned word, but it means something you probably see — and maybe even use — every day: eyeglasses. People who have defective vision need spectacles to see properly.

Making spectacle step by step

1- firstly understand the prescription for spectacle.

2- help the patient to choose a good frame according to patient's prescription, patient's face shape and patient's occupation

3- help the patient's to choose a good lens according to the frame and patient's occupation

4- drawing the lenses on the frame according to the prescription and there's two way to cut the lens on the frame by manual way or by Auto machine (lens Edger)
How glasses are made step by step?

The float glass production process can be divided into five universal steps:

1. Batching of raw materials: ...
2. Melting of raw materials in the furnace: ...
3. Drawing the molten glass onto the tin bath: ...
4. Cooling of the molten glass in the annealing lehr: ...

Quality checks, automatic cutting, and storage:

How do opticians make glasses fit?

Your optician will use specific tools to measure and adjust the length and curvature of the sides so that they fit comfortably to the shape and size of your head and ears. Again, it's best to leave this part to a professional as you could end up bending your frames out of shape

What is spectacle fitting?

Ensuring the correct fitting of spectacles involves assessing not only the use of the glasses but also the way in which the fit to your face. Different daily activities require different ranges of movement and thus fields of vision

HOW TO MAKE SURE YOUR GLASSES FIT PROPERLY

Properly fit glasses are not only essential for comfort, but also play an important role in the quality of your vision. Glasses that do not fit correctly may affect the placement of your lenses and ultimately how you see out of them. Your Shopko Optical optician will use a combination of measurements including frame width, arm length, bridge placement and lens size to ensure your glasses fit properly.

1. Pick the Right Frame Width for Your Face
The width of your frame is the entire horizontal measurement of the front face of your frames. A correct frame width will ensure your eyes are properly aligned in the center of your lenses for optimal vision. The frame width should be slightly wider than your face but with the space between your temple and frame no larger than a finger's width.

2. Ensure the Arm Length is Right for You
The arm length is the measurement of the long frame piece that runs along your temple and wraps around your

ears. Commonly, this measurement is the third number displayed on the inside of the temple. Your frame arm should run horizontally and sit comfortably around your ears only touching your head right before your ears. With properly fit frames, there should be no pain around your ear or temple area.

3. Check the Placement of the Bridge
The bridge is the small middle piece on the front of your frames that sits on your nose. This measurement is usually the middle number displayed on the inside of your temple. The bridge should rest comfortably on your nose without pinching or sliding off. A correctly fit bridge will also ensure your glasses sit properly on your face and your eyes are aligned appropriately within your lenses.

4. Evaluate the Lens Size

The size of your lenses is essential to the proper function of your prescription, especially with progressive lenses, because it ensures that there is enough space for the near, intermediate and distance zone powers of your prescription. A proper lens height and width ensures that your eyes are correctly and comfortably aligned within your lenses. The only lens measurement that is displayed on your glasses is the frame width, which is generally the first number displayed on the inside of the temple and usually accompanied by a square.

5. Make Sure Your Pupils Align Correctly

The combination of frame, arm, bridge, and lens measurements can affect the placement of your pupils within your lenses, which is essential to the proper function and comfort of your prescription. Your pupils should align horizontally in the center of your lenses. Vertically, imagine your lenses are divided into three sections. Your pupils should align where the mid and top-third section meet.

6.Consider Your Face Shape

Keeping the shape of your face in mind will help you find a pair of glasses that complement your features. Generally, you want to find frames that contrast your face shape to provide a balanced look. For more information on which frames will work best with your face shape,

Which glass is used to make spectacles?

flint glass
Optical glass used in the construction of spectacles is made by flint glass. It is because flint glass has relatively high refractive index and high dispersion. As it absorbs most of the UV light but comparatively little visible light, it is also used for telescope lenses. Was this answer helpful?

Why are they called spectacles?

The word spectacles seems to have been adopted in the 18th century and comes from the Latin 'spectare', to observe or to look at. So it would seem that the word 'glasses' was once the old-fashioned term while the word 'spectacles' was the ne

How can you tell the quality of spectacles?

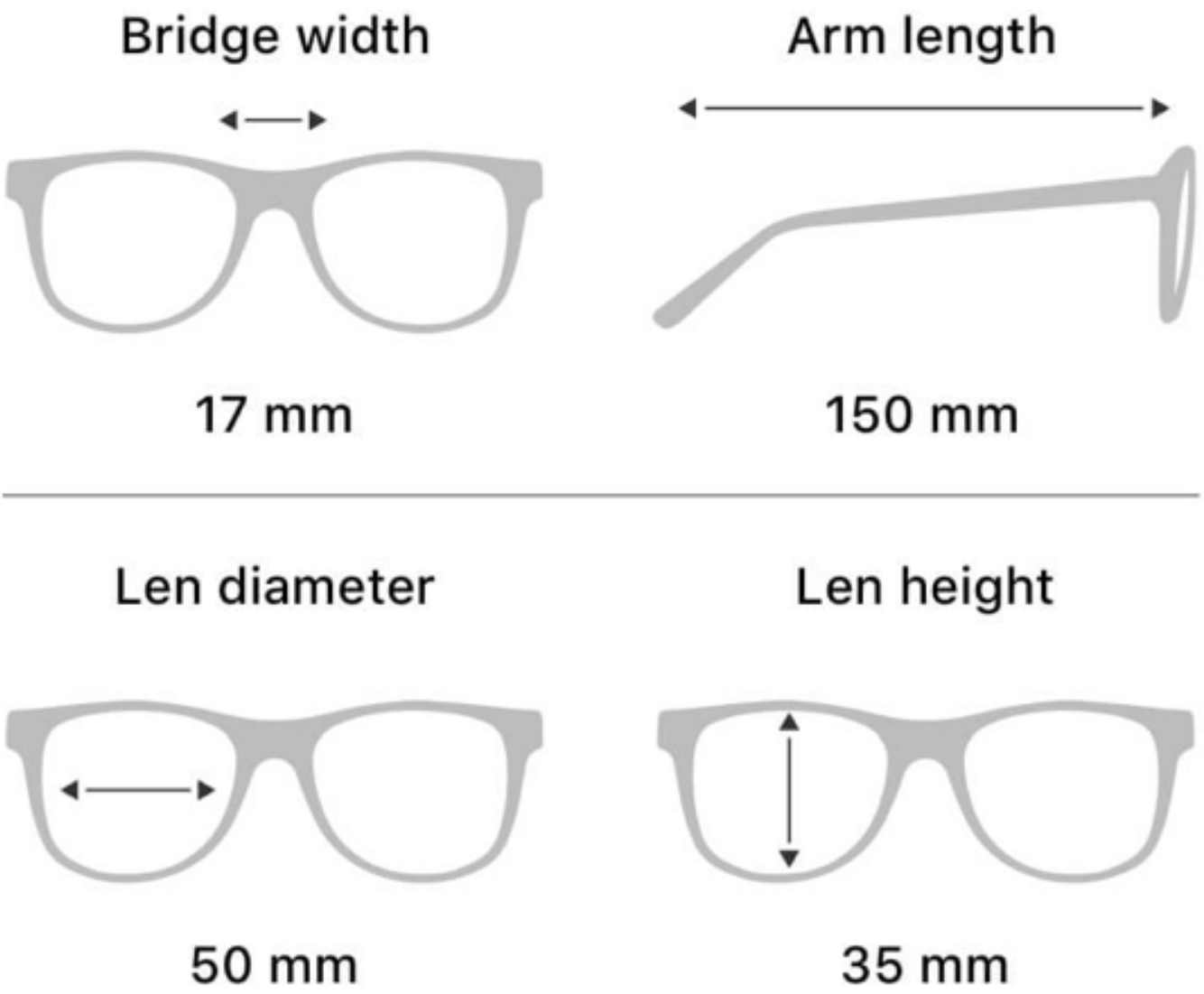
1-Point Quality Check
2- Your Prescription. We check the prescription is correct to the values that have been provided by you. ...
3- Pupillary Distance (PD) and Heights. ...
4- Lens Thickness. ...
5- Front Curvature. ...
6- Fitting Bevel & Groove. ...
7- Lens Safety. ...
8- Lens Surface Quality & Anti-Reflection Coating. ...
9- Frame Alignment.

What is the best material for glasses lenses?

Polycarbonate - Polycarbonate was the first "thinner, lighter" lens material. Polycarbonate is 10 times more impact resistant than glass and CR-39. Polycarbonate lenses are the preferred choice for safety eyeglasses and children's eyeglasses. The lens material also provides UV protection.

How do I know my spectacle frame size?

All glasses frames have information printed on them about various frame measurements. You can usually find these measurements on the inside of the



The production of glass lenses typically involves several stages. Here is a general overview of the process:

1. **Lens Design: The first stage involves the design of the lens. This includes determining the prescription power and curvature required to correct the specific vision needs of an individual. Advanced computer software is used to create the lens design, taking into account factors such as the individual's prescription, frame selection, and any special requirements.**

2. Lens Material Selection: Once the lens design is finalized, the appropriate lens material is selected. Glass lenses were commonly used in the past but have been largely replaced by other materials due to their weight and fragility. However, some specialty lenses, such as high-index or safety lenses, may still be made from glass.

3. Lens Blank Preparation: The lens blank, which is a semi-finished lens, is prepared by cutting it into a rough shape according to the lens design. This step involves using specialized cutting tools or machinery to shape the lens blank to the desired size and thickness.

4. Lens Surfacing: The lens surfacing stage involves grinding and polishing the lens to achieve the desired curvature and prescription power. Computer-controlled machines are used to precisely shape the lens surface according to the lens design. This process removes excess material and refines the lens to the required specifications.

5. Lens Finishing: After surfacing, the lens goes through several additional processes to refine its shape, smooth the edges, and apply any necessary coatings or treatments. This may include processes such as beveling, edge polishing, and lens tinting.

6. Lens Coating: Optional coatings can be applied to the lens surface to enhance its performance and durability. These include anti-reflective coatings, scratch-resistant coatings, and UV protection coatings. Each coating is applied through specific processes such as vacuum deposition or dip coating.

7. Inspection and Quality Control: Once the lens is finished, it undergoes a thorough inspection to ensure it meets the required specifications and quality standards. This includes checking for optical clarity, prescription accuracy, surface finish, and any specific requirements set by the lens design or customer.

8. Lens Fitting: The final stage involves fitting the lens into the selected eyeglass frame. The lens is carefully mounted and secured within the frame, ensuring proper alignment and positioning for optimal vision correction.

It's worth noting that the specific processes and technologies used in lens manufacturing may vary depending on the lens material, manufacturing facility, and technological advancements. The above steps provide a general overview of the lens production process.

make a great option for thick lenses.

- Semi-rimless frame: Semi-rimless frames only outline the top part of your lenses. They are considerably lighter and more comfortable to wear. However, they also expose the bottom portion of the lenses to chipping and cracking risks.
- Rimless frame: More delicate than the other frames, rimless frames provide the largest field of vision. They are also the most lightweight option.

Since glasses have become a modern accessory right along with purses and belts, glasses frames can be found in a wide range of selections to help you express your personal style. Even influential fashion icons such as Marc Jacobs and Kate Spade have created stylish frames.

Your Guide To Understanding Your Eyeglasses Prescription