

To Stock or to Surface....That is the question!
Handout Vision Expo East 2024
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Stock lenses are a great way for an office to maximize profits and to provide our patients with spectacles quickly, however how do we know when they are the best solution? In this course we will discuss how to determine when to use stock lenses and when a surfaced lens is a better option!

Learning Objectives:

- Attendees will discuss the advantages of stock lenses
- Attendees will discuss the advantages of surfaced lenses
- Attendees will learn how to calculate minimum blank size and use it to determine if the patient will be better served with a stock lens choice or a surfaced lens choice

Key things to understand

- Blank Size
 - How do we calculate minimum blank size
 - How does the diameter of the blank effect the thickness of the lens
- Frames Selection
 - How does frame type effect whether or not you can use a stock a lens

Formulas:

- Geometric Center Distance:
 - $A + DBL$
- Horizontal Decentration using Monocular PD:
 - $GCD - \text{right PD}$ $GCD - \text{left PD}$
- Datum:
 - $B/2$
- Vertical Decentration:
 - $\text{Height} - \text{Datum}$
- Minimum Blank Size Formula:
 - $ED + 2(\text{decentration})$

Terms:

- Geometric Center Distance
- Pupil center height
- Optical Center
- Base Curve
- Ocular Curve
- Plano
- Convex
- Concave
- Radius of curvature
- Datum
- Decentration
- Characteristics of lenses
- Power in meridian
- Index of Refraction
- Aspheric lens design
- Frame shape

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Case Study # 1
OD -2.00 sphere
OS -2.00 sphere
Add + 3.00

Patient chooses: Acetate Frame

Frame Measurements:
A = 50 B = 40 ED = 55 DBL = 20

Patient Measurements:
Pupillary Distance = 65
Pupil Center Height = 22mm

- What is the blank size we would need?
- Would we order stock or surfaced if the patient wanted distance glasses?
- Would we order stock or surfaced if the patient wanted reading glasses?

Case Study # 2

OD + 2.00 sphere
OS + 2.00 sphere
Add + 2.50

Patient chooses: Metal Frame

Frame Measurements:
A = 50 B = 40 ED = 55 DBL = 20

Patient Measurements:
Pupillary Distance = 65
Pupil Center Height = 22mm

- What is the blank size we would need? MBS = ?? mm blank
- Would we order stock or surfaced if the patient wanted distance glasses?
- Would we order stock or surfaced if the patient wanted reading glasses?