



Silhouette[®]

CUTTING and DRILLING
of
RIMLESS DRILLED FRAMES

USE of PATTERNS

CONTENT

Patterns

- 1.1. Use of Patterns
- 1.2. Notches - History
- 1.3. Disadvantages

2. Correct use of drilling coordinates files

- 2.1. Explanation and Download
- 2.2. Advantages and Use
- 2.3. Transfer drilling positions to prescription lens in color

3. Digital Lens Shape Files

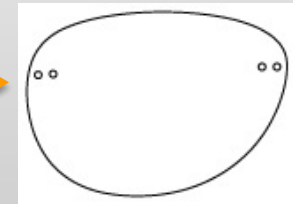
4. Footnote

3 examples for temporally different high drilling positions

1. Patterns

1.1. Use of Patterns

- for recording of lens shapes for edger
- Note: *no* notches on patterns are necessary



Pattern is scanned by the tracer and the shape is transferred to the cutting- and drilling automatically.

1. Formers

1.2. Notches - History

Notches on patterns were used for the very first drilled rimless frames to establish the drill positions.



1.3. Disadvantages

- Difficult and inaccurate to transfer the drilling positions from the pattern to the lens
- Problems with alignment to the drilling template
- Not a perfect fit for the frame, as it was not possible to compensate the measurements for the offset drills, which are required for the temple slant by 3°
- The notches can be obstructive during the milling of the lenses

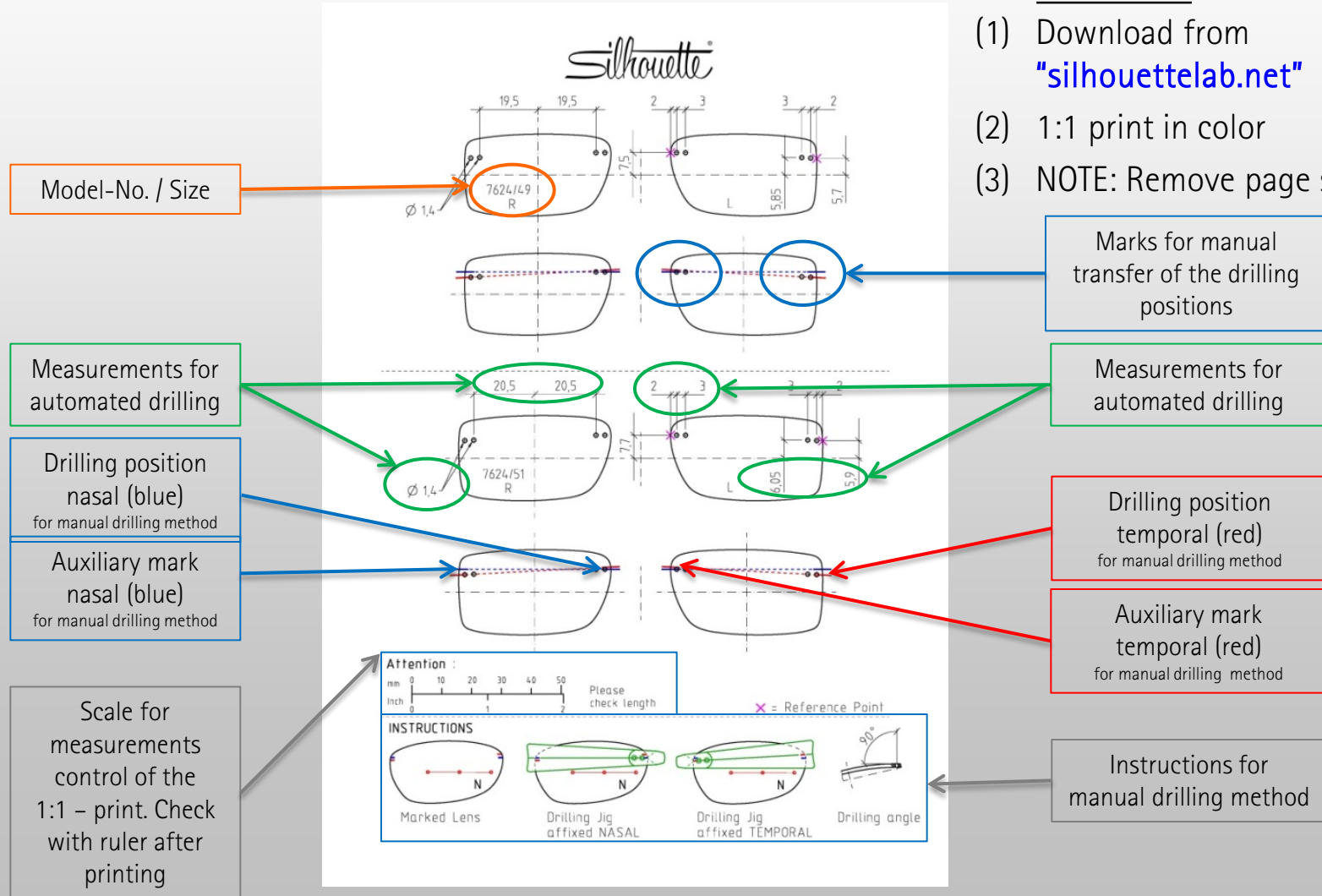
To make the manual transfer of the drilling positions easier, our technicians have developed the drilling coordinates files in the year 2004.

2. Correct Use of Drilling Coordinates Files

2.1. Explanation and Download

Procedure:

- (1) Download from ["silhouettelab.net"](http://silhouettelab.net)
- (2) 1:1 print in color
- (3) NOTE: Remove page scaling!



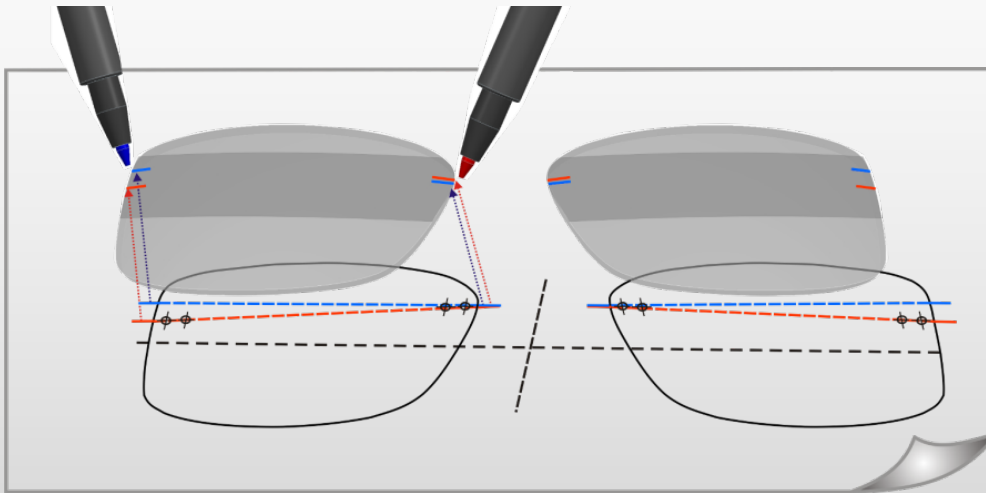
2. Correct Use of Drilling Coordinates Files

2.2. Advantages and Use

- Accurate in the the **transfer of drilling positions**
- For the **automatic** drilling method - with edgers and drilling coordinates machines by entering the drilling positions
- For **manual** drilling- easy to align the holes with the drill template.
- For an **optimum fit** of the frame - This provides the vertical offset of the temporal drills. These measurements cannot be taken from a pattern, only from the drilling coordinates file. (See Footnote, section 4: examples for temporally different high drilling positions)

2. Correct Use of Drilling Coordinates Files

2.3. Transfer drilling positions to prescription lens in colour



NOTE: No page scaling for the print !

Procedure:

- Place cut lens congruently on drilling coordinates file .
- Transfer marks for drilling and auxiliary marks from the lens edge to the lens front point by point.
- Use different color pens for marking bridge and temples. Connect punctual marks according to color (Nasal = blue / Temporal = red).

Advantages:

- The manual marking of the drilling positions is significantly easier and more exact than from the pattern notches, as the lens can be placed on the file printout exactly to the contour.
- The auxiliary marks for aligning the drilling template have different colors and can consequently be transferred clearly, without confusion.
- The extended auxiliary marks enable an exact aligning of the drilling template.




3. Digital Lens Shape Files

As a support service Silhouette offers direct download option of OMA files including all relevant data for edging and drilling

Procedure:

- (1) Website: silhouettelab.net
- (2) Files can be accessed by model or collection
- (3) There is an option to download all files at once.

®

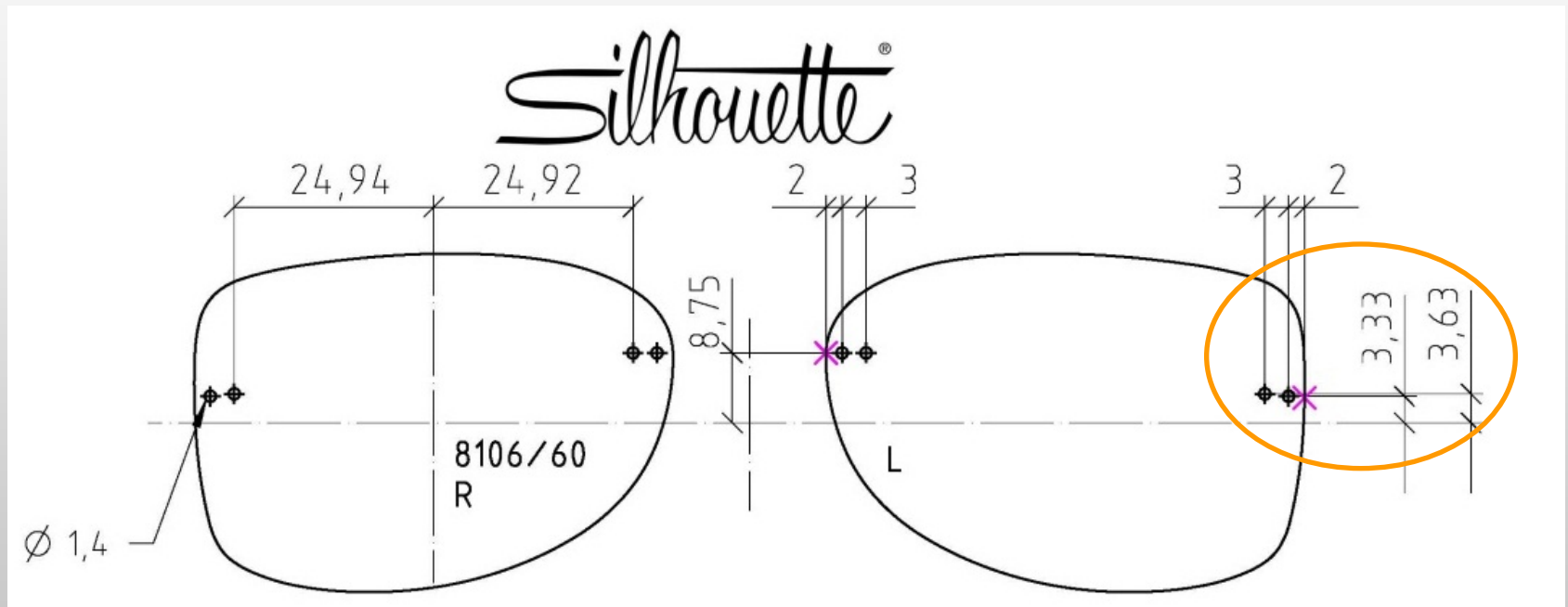
Technical Information
for Silhouette Optical, Ltd.

[Questions Contact](#)

[Drill Charts By Collection --> Click Here](#)
[Drill Charts Individual --> Click Here](#)
[OMA By Collection --> Click Here](#)
[OMA Individual --> Click Here](#)
[Silhouette Small Parts and Tools Guide](#)
[Silhouette Rimless Drilling & Adjusting Guide 2010](#)
[Silhouette Sunglass Lens Glazing Instructions](#)
[Ordering Silhouette Rimless](#)

4. Annex

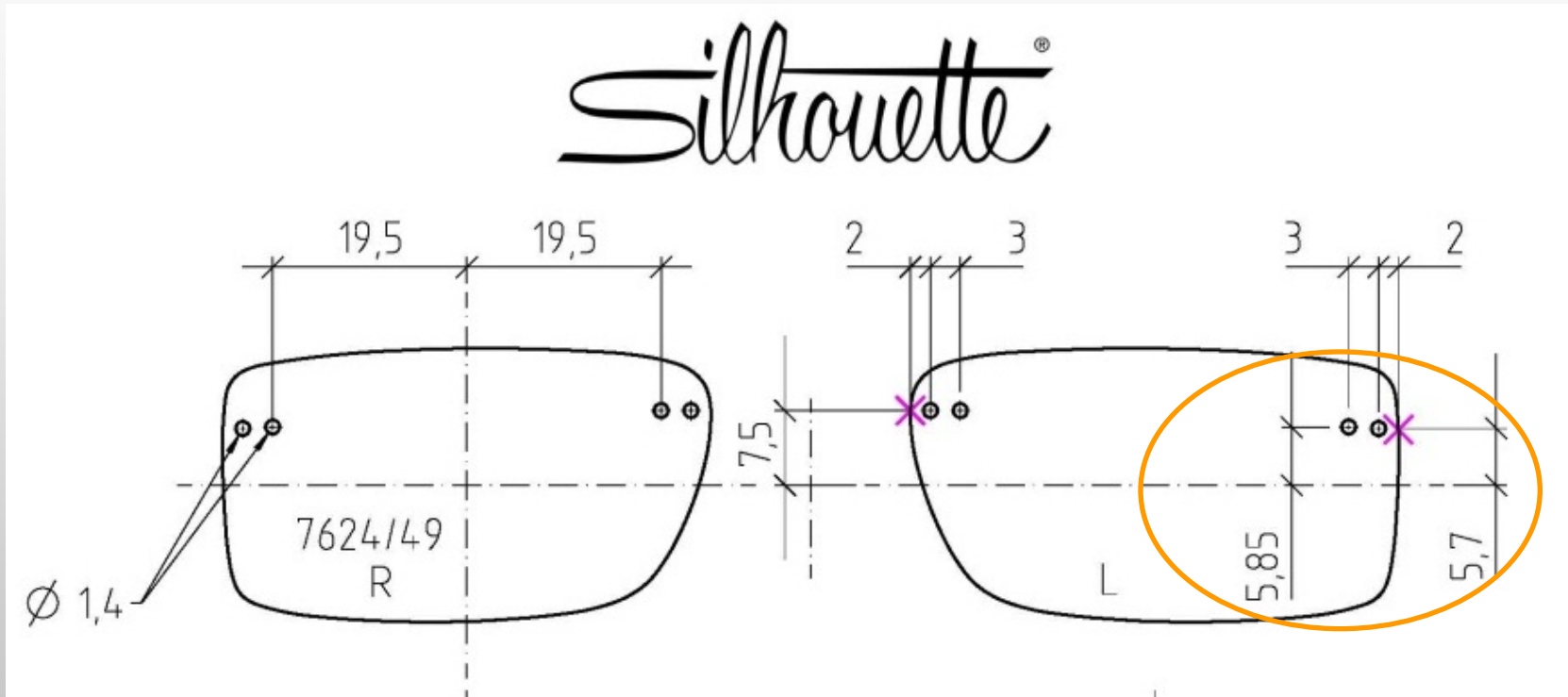
4.1. Example for temporally different high drilling positions



Model 8106, for example, shows a **0,30 mm** vertical offset.

4. Annex

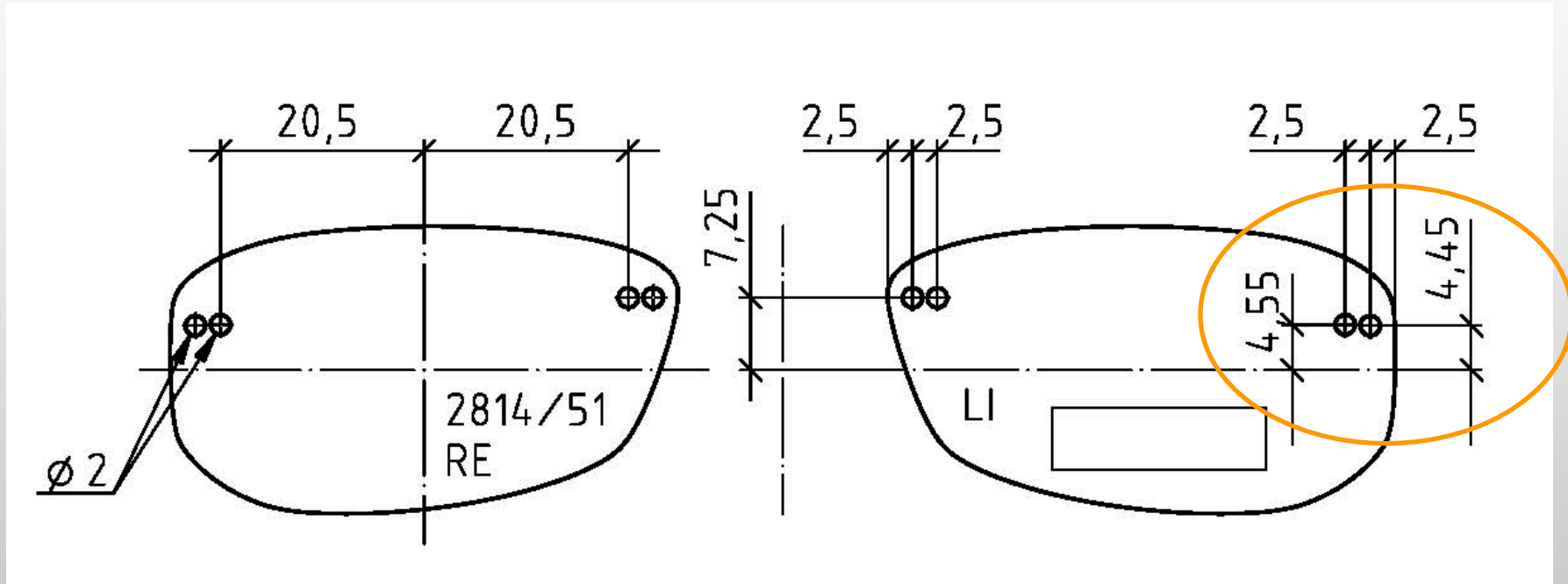
4.2. Example 2 for temporally different high drilling positions



Model 7624, for example, shows a **0,15 mm** vertical offset

4. Annex

4.3. Example 3 for temporally different high drilling positions



Model 2814, for example, shows a 0,10 mm vertical offset.