



COLTS | Laboratories™

Precision Testing. Definitive Results.

Catalog of Services

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Lens Processing Service

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Dyes & Tints

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Lens Processing Service

Lens Processing Service

This service is provided to customers who wish to have their lenses surfaced and/or edged in preparation for the tests that are being ordered and do not have an optical surfacing lab nearby or wish to maintain confidentiality due to a proprietary material.

Glass

| Type | Qty |
|-------------|------------|
| Glass | 1 |

Hard Resin

| Type | Qty |
|-------------|------------|
| Hard Resin | 1 |

Hi Index

| Type | Qty |
|-------------|------------|
| Hi Index | 1 |

Polycarbonate

| Type | Qty |
|---------------|------------|
| Polycarbonate | 1 |

Plastics Glass and Coatings

Abrasion

Bayer (Alundum 10)

Any Coating

| Type | Qty | |
|------|-----|-------------------|
| DQ | 3 | 4 or 6 Base/Plano |
| SQ | 10 | 4 or 6 Base/Plano |

Bayer (Kryptonite B)

Any Coating

| Type | Qty | |
|-------------|-----|-------------------|
| Single Lens | 1 | 4 or 6 Base/Plano |
| DQ | 3 | 4 or 6 Base/Plano |
| SQ | 10 | 4 or 6 Base/Plano |

Eraser

Any Coating

| Type | Qty | |
|-------------------|-----|-------------------|
| Concave Side - DQ | 3 | 4 or 6 Base/Plano |
| Concave Side - SQ | 10 | 4 or 6 Base/Plano |
| Convex Side - DQ | 3 | 4 or 6 Base/Plano |
| Convex Side - SQ | 10 | 4 or 6 Base/Plano |

Hydrophobic Durability

Any Coating

| Type | Qty | |
|------|-----|--------|
| DQ | 3 | 6 Base |
| SQ | 10 | 6 Base |

Hydrophobic Durability Extended

Any Coating

| Type | Qty | |
|------|-----|--------|
| DQ | 3 | 6 Base |
| SQ | 10 | 6 Base |

Steel Wool

Any Coating

| Type | Qty | |
|-------------------|-----|-------------------|
| Concave Side - DQ | 3 | 4 or 6 Base/Plano |
| Concave Side - SQ | 10 | 4 or 6 Base/Plano |
| Convex Side - DQ | 3 | 4 or 6 Base/Plano |
| Convex Side - SQ | 10 | 4 or 6 Base/Plano |

Taber

Any Coating

| Type | Qty | |
|------------|-----|-----------------------|
| Per Sample | 1 | Flat 4" Square Plaque |

Tumble (Concave Side)

Any Coating

| Type | Qty | |
|------|-----|-------------------|
| DQ | 6 | 4 or 6 Base/Plano |
| SQ | 12 | 4 or 6 Base/Plano |

Plastics Glass and Coatings

Abrasion

Tumble (Convex Side)

Any Coating

Type

Qty

DQ

6

4 or 6 Base/Plano

SQ

12

4 or 6 Base/Plano

Plastics Glass and Coatings

Adhesion & Simulated Exposure

AR Craze/Heal AR Coating

| Type | Qty | |
|------|-----|----------|
| DQ | 10 | Any Lens |

AR Environmental Durability (QUV) AR Coating

| Type | Qty | |
|------|-----|----------|
| SQ | 10 | Any Lens |

Boiling Salt Water Hardcoating

| Type | Qty | |
|------|-----|----------|
| DQ | 3 | Any Lens |
| SQ | 10 | Any Lens |

Boiling Salt Water (AR) AR Coating

| Type | Qty | |
|------|-----|----------|
| DQ | 3 | Any Lens |
| SQ | 10 | Any Lens |

Boiling Water Any Coating

| Type | Qty | |
|------|-----|----------|
| DQ | 3 | Any Lens |
| SQ | 10 | Any Lens |

Contact Angle Any Coating

| Type | Qty | |
|------|-----|--------|
| DQ | 3 | 6 Base |
| SQ | 10 | 6 Base |

Crosshatch Adhesion Hardcoating

| Type | Qty | |
|-------------------|-----|----------|
| Concave Side - DQ | 3 | Any Lens |
| Concave Side - SQ | 10 | Any Lens |
| Convex Side - DQ | 3 | Any Lens |
| Convex Side - SQ | 10 | Any Lens |

Crosshatch Adhesion/Boiling Water Any Coating

| Type | Qty | |
|-------------------|-----|----------|
| Concave Side - DQ | 3 | Any Lens |
| Concave Side - SQ | 10 | Any Lens |
| Convex Side - DQ | 3 | Any Lens |
| Convex Side - SQ | 10 | Any Lens |
| Both Sides - DQ | 3 | Any Lens |
| Both Sides - SQ | 10 | Any Lens |

Plastics Glass and Coatings

Adhesion & Simulated Exposure

Cycle Humidity Oven

Any Coating

| Type | Qty | |
|-------------------|------------|----------|
| Concave Side - DQ | 5 | Any Lens |
| Concave Side - SQ | 10 | Any Lens |
| Convex Side - DQ | 5 | Any Lens |
| Convex Side - SQ | 10 | Any Lens |
| Both Sides - DQ | 5 | Any Lens |
| Both Sides - SQ | 10 | Any Lens |

Cycle Humidity Oven/Crosshatch

Any Coating

| Type | Qty | |
|-------------------|------------|----------|
| Concave Side - DQ | 5 | Any Lens |
| Concave Side - SQ | 10 | Any Lens |
| Convex Side - DQ | 5 | Any Lens |
| Convex Side - SQ | 10 | Any Lens |
| Both Sides - DQ | 5 | Any Lens |
| Both Sides - SQ | 10 | Any Lens |

Cycle Humidity QUV Accelerated Weathering

Any Coating

| Type | Qty | |
|-------------|------------|----------|
| DQ | 5 | Any Lens |
| SQ | 10 | Any Lens |

Cycle Humidity QUV/Crosshatch

Any Coating

| Type | Qty | |
|-----------------------|------------|----------|
| Convex Side - DQ | 5 | Any Lens |
| Convex Side - SQ | 10 | Any Lens |
| Both Sides - DQ | 5 | Any Lens |
| Both Sides - SQ | 10 | Any Lens |
| Both Sides 5 Day - DQ | 5 | Any Lens |
| Both Sides 5 Day - SQ | 10 | Any Lens |

Dry Heat

Any Coating

| Type | Qty | |
|-------------|------------|----------|
| DQ | 3 | Any Lens |
| SQ | 10 | Any Lens |

Ease of Cleaning

Any Coating

| Type | Qty | |
|-------------|------------|------------|
| DQ | 3 | 5 - 7 Base |
| SQ | 10 | 5 - 7 Base |

Plastics Glass and Coatings

Adhesion & Simulated Exposure

Frame/Lens Strain Any Coating

| Type | Qty | |
|------|-----|-----|
| DQ | 4 | Any |
| SQ | 10 | Any |

Heat/Cold Any Coating

| Type | Qty | |
|------|-----|----------|
| DQ | 3 | Any Lens |
| SQ | 10 | Any Lens |

Lifetime Properties Any Coating

| Type | Qty | |
|------|-----|------------|
| DQ | 3 | 5 - 7 Base |
| SQ | 10 | 5 - 7 Base |

Photosensitive Activation Any Coating

| Type | Qty | |
|------|-----|-------------|
| DQ | 4 | Plano Power |

Photosensitive Deactivation Rate Any Coating

| Type | Qty | |
|------|-----|-------------|
| DQ | 4 | Plano Power |

Photosensitive Life Any Coating

| Type | Qty | |
|------|-----|-------------|
| DQ | 4 | Plano Power |

Photosensitive Temperature Dependence Any Coating

| Type | Qty | |
|------|-----|-------------|
| DQ | 4 | Plano Power |

Real Life Simulation Any Coating

| Type | Qty | |
|------|-----|------------------|
| DQ | 5 | 4 - 6 Base/Plano |
| SQ | 10 | 4 - 6 Base/Plano |

Stain Release Test Any Coating

| Type | Qty | |
|------|-----|-------------|
| DQ | 3 | Plano Power |
| SQ | 10 | Plano Power |

Plastics Glass and Coatings

Adhesion & Simulated Exposure

Thermal Shock

Any Coating

| Type | Qty | |
|-------------|------------|----------|
| DQ | 3 | Any Lens |
| SQ | 10 | Any Lens |

UV Resistance

Any Coating

| Type | Qty | |
|-------------|------------|-------------|
| DQ | 5 | Plano Power |
| SQ | 10 | Plano Power |

Work of Adhesion

AR Coating

| Type | Qty | |
|-------------|------------|----------|
| DQ | 3 | Any Lens |
| SQ | 10 | Any Lens |

Plastics Glass and Coatings

Inspection

Cosmetic & Mechanical Inspection

Any Coating

| Type | Qty | |
|---------------------------|------------|----------|
| Finished Lenses - DQ | 20 | Any Lens |
| Finished Lenses - SQ | 40 | Any Lens |
| Semi-Finished Lenses - DQ | 20 | Any Lens |
| Semi-Finished Lenses - SQ | 40 | Any Lens |

Plastics Glass and Coatings

Strength

Drilled Hole Lens Strength Test

Any Coating

| Type | Qty | |
|-------------|------------|-------------|
| DQ | 3 | Plano Power |
| SQ | 10 | Plano Power |

FDA 50 Inches

Any Coating

| Type | Qty | |
|---------------|------------|----------|
| FDA 50 Inches | 28 | Any Lens |
| Per Lens | 1 | Any Lens |

Variable Height Impact

Any Coating

| Type | Qty | |
|-------------|------------|--------------|
| DQ | 12 | Plano/-2.00D |
| SQ | 55 | Plano/-2.00D |

Plastics Glass and Coatings

Lens Tinting & Dying

Tint Consistency

Any Coating

Type

Qty

DQ

5

Plano Power

SQ

10

Plano Power

Plastics Glass and Coatings

Other Lens Treatments

Anti-Fog

Any Coating

Type

Qty

DQ

4

Plano Power

SQ

10

Plano Power

Plastics Glass and Coatings

Optical Attributes

Clarity Any Coating

| Type | Qty | |
|------|-----|-------------|
| DQ | 3 | Plano Power |
| SQ | 10 | Plano Power |

Surface Curve Mapping Any Coating

| Type | Qty | |
|----------------|-----|-----------|
| Convex Surface | 1 | Any Power |

Through Power Mapping Any Coating

| Type | Qty | |
|---------------|-----|-----------|
| Single Vision | 1 | Any Power |

Distortion - Ann Arbor Tester Any Coating

| Type | Qty | |
|------|-----|-------------|
| DQ | 3 | Plano Power |
| SQ | 10 | Plano Power |

Haze Any Coating

| Type | Qty | |
|------|-----|-------------|
| DQ | 3 | Plano Power |
| SQ | 10 | Plano Power |

Hard Coating Thickness Hardcoating

| Type | Qty | |
|------|-----|----------|
| DQ | 3 | Any Lens |
| SQ | 10 | Any Lens |

Luminous Transmittance Any Coating

| Type | Qty | |
|------|-----|-------------|
| DQ | 3 | Plano Power |
| SQ | 10 | Plano Power |

Polarized Lens 0°-180° Alignment Accuracy Any Coating

| Type | Qty | |
|------|-----|----------|
| DQ | 3 | Any Lens |
| SQ | 10 | Any Lens |

Polarized Lens Efficiency Any Coating

| Type | Qty | |
|------|-----|-------------|
| DQ | 4 | Plano Power |
| SQ | 10 | Plano Power |

Plastics Glass and Coatings

Optical Attributes

Spectral Analysis

Any Coating

| Type | Qty | |
|------|-----|-------------|
| DQ | 1 | Plano Power |
| SQ | 3 | Plano Power |

Spectral Analysis-Polarized

Any Coating

| Type | Qty | |
|------|-----|-------------|
| DQ | 1 | Plano Power |
| SQ | 3 | Plano Power |

Spectral, Luminous and Mean Reflectance

Any Coating

| Type | Qty | |
|------|-----|----------|
| DQ | 1 | Any Lens |
| SQ | 3 | Any Lens |

Surface Curve Power

Any Coating

| Type | Qty | |
|---------------|-----|----------|
| DQ | 3 | Any Lens |
| SQ | 10 | Any Lens |
| With Add - SQ | 10 | Any Lens |

UV Transmittance

Any Coating

| Type | Qty | |
|------|-----|-------------|
| DQ | 1 | Plano Power |
| SQ | 3 | Plano Power |

Yellowness Index

Any Coating

| Type | Qty | |
|------|-----|-------------|
| DQ | 1 | Plano Power |
| SQ | 3 | Plano Power |

Cleaners and Cloths

Cleaner & Cloth

AR Cleaning Solution Soak

| Type | Qty |
|-------------|------------|
| DQ | 3 |
| SQ | 10 |

Cleaner & Cloth Wet for Cleaning Oil & Dirt

| Type | Qty |
|-------------|------------|
| DQ | 4 |
| SQ | 12 |

Cleaner Lubricity

| Type | Qty |
|-------------|------------|
| DQ | 3 |
| SQ | 10 |

Cleaning Cloth Abrasion

| Type | Qty |
|-------------|------------|
| DQ | 4 |
| SQ | 12 |

Dry Cloth for Aggressive Cleaning

| Type | Qty |
|-------------|------------|
| DQ | 4 |
| SQ | 12 |

Dry Cloth for Cleaning Oil

| Type | Qty |
|-------------|------------|
| DQ | 4 |
| SQ | 12 |

Dry Cloth for Cleaning Oil & Dirt

| Type | Qty |
|-------------|------------|
| DQ | 4 |
| SQ | 12 |

Oily Cleaning

| Type | Qty |
|-------------|------------|
| DQ | 4 |
| SQ | 12 |

Dyes & Tints

Dyes & Tints

Dye & Lens Compatibility

| Type | Qty |
|-------------|------------|
| DQ | 10 |

Tint Fade

| Type | Qty |
|-------------|------------|
| DQ | 5 |
| SQ | 10 |

UV Dye Resistance to Fade

| Type | Qty |
|-------------|------------|
| DQ | 1 |
| SQ | 3 |

UV Dye Transmittance

| Type | Qty |
|-------------|------------|
| DQ | 1 |
| SQ | 3 |

Frames

Frames

Chemical Resistance

| Type | Qty |
|------|-----|
| DQ | 3 |
| SQ | 10 |

Cosmetic Inspection

| Type | Qty |
|------|-----|
| DQ | 20 |
| SQ | 40 |

Cycle Humidity QUV

| Type | Qty |
|------|-----|
| DQ | 3 |
| SQ | 10 |

Horizontal Stress

| Type | Qty |
|------|-----|
| DQ | 3 |
| SQ | 10 |

Lateral Bridge Stress

| Type | Qty |
|------|-----|
| DQ | 3 |
| SQ | 10 |

Saltwater Soak

| Type | Qty |
|------|-----|
| DQ | 3 |
| SQ | 3 |

Steel Wool Abrasion

| Type | Qty |
|------|-----|
| DQ | 3 |
| SQ | 10 |

Temple Bending

| Type | Qty |
|------|-----|
| DQ | 3 |
| SQ | 10 |

Frames

Frames

Titanium Content

| Type | Qty |
|----------------|------------|
| All Components | 1 |
| Bridge | 1 |
| Endpiece | 1 |
| Eyewire | 1 |
| Temple | 1 |

Vertical Stress

| Type | Qty |
|-------------|------------|
| DQ | 3 |
| SQ | 10 |

Frames

Frames - ISO Tests

ISO - Artificial Perspiration (Frames)

| Type | Qty |
|-------------|------------|
| DQ | 3 |
| SQ | 10 |

ISO - Bridge Deformation

| Type | Qty |
|-------------|------------|
| DQ | 3 |
| SQ | 10 |

ISO - Dimensional Stability at Elevated Temperatures

| Type | Qty |
|-------------|------------|
| DQ | 3 |
| SQ | 10 |

ISO - Endurance

| Type | Qty |
|-------------|------------|
| DQ | 3 |
| SQ | 10 |

ISO - Lens Retention Characteristics

| Type | Qty |
|-------------|------------|
| DQ | 3 |
| SQ | 10 |

ISO - Resistance to Ignition

| Type | Qty |
|-------------|------------|
| DQ | 3 |
| SQ | 10 |

ISO - Resistance to Optical Radiation

| Type | Qty |
|-------------|------------|
| DQ | 3 |
| SQ | 10 |