

## Silicone Measurements

Poor silicone coatings for injectable devices can jam them up or result in excess oil interacting with your drug. Correctly siliconized devices deliver optimal performance and drug compatibility. Our non-destructive, quantitative testing for silicone layer thickness, distribution and mass helps you determine if you've found the sweet spot for your device.

We will quantify silicone:

- Thickness
- Distribution
- Mass

So you can ensure you get top performance and compatibility.

### Applications

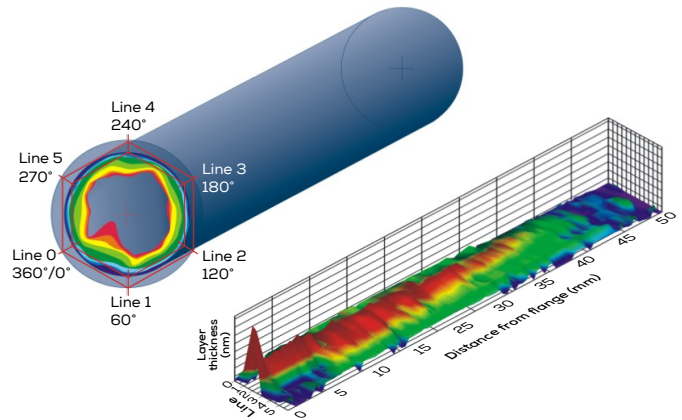
- Quality control for batches or lots
- Correlate coatings to device performance
- Device development
- Device-Drug compatibility studies
- Storage studies
- Stress studies

### Devices we measure

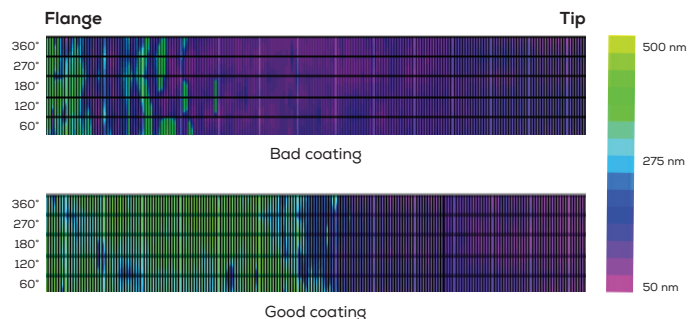
- Syringes, cartridges and vials
- Glass or plastic
- 6 – 48 mm diameter



Bouncer measures silicone thickness, distribution and mass.



See the full 360° view of silicone coatings.



We deliver 2D silicone distribution heat maps that let you know if your coating is good to go.

# About Unchained Labs Testing

## Testing includes

- Sample preparation and testing performed by trained experts
- Detailed experimental reports that document the test plan, measurement parameters and results
- Results delivered when you need them: 3 business days, 5 business days, 2 weeks or 3-4 weeks turnaround available

## Our analysis tools

Instrument	Methods
Hound	Particle imaging Raman spectroscopy Laser-induced breakdown spectroscopy (LIBS)
Bouncer	White light reflectometry Laser interferometry
Bruker LUMOS	ATR Infrared spectroscopy (ATR FT-IR)
PAMAS SVSS	Light obstruction
FlowCam VS	Dynamic imaging particle analysis
Bruker QUANTAX EDS	Scanning electron microscopy (SEM) Energy dispersive X-ray spectroscopy (EDS)

## Our Labs



• Pleasanton, California

• Berlin, Germany

- ISO 9001:2015 compliant lab
- USP<788> compliance
- Custom method development
- Custom method validation
- Full visual inspection capabilities



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