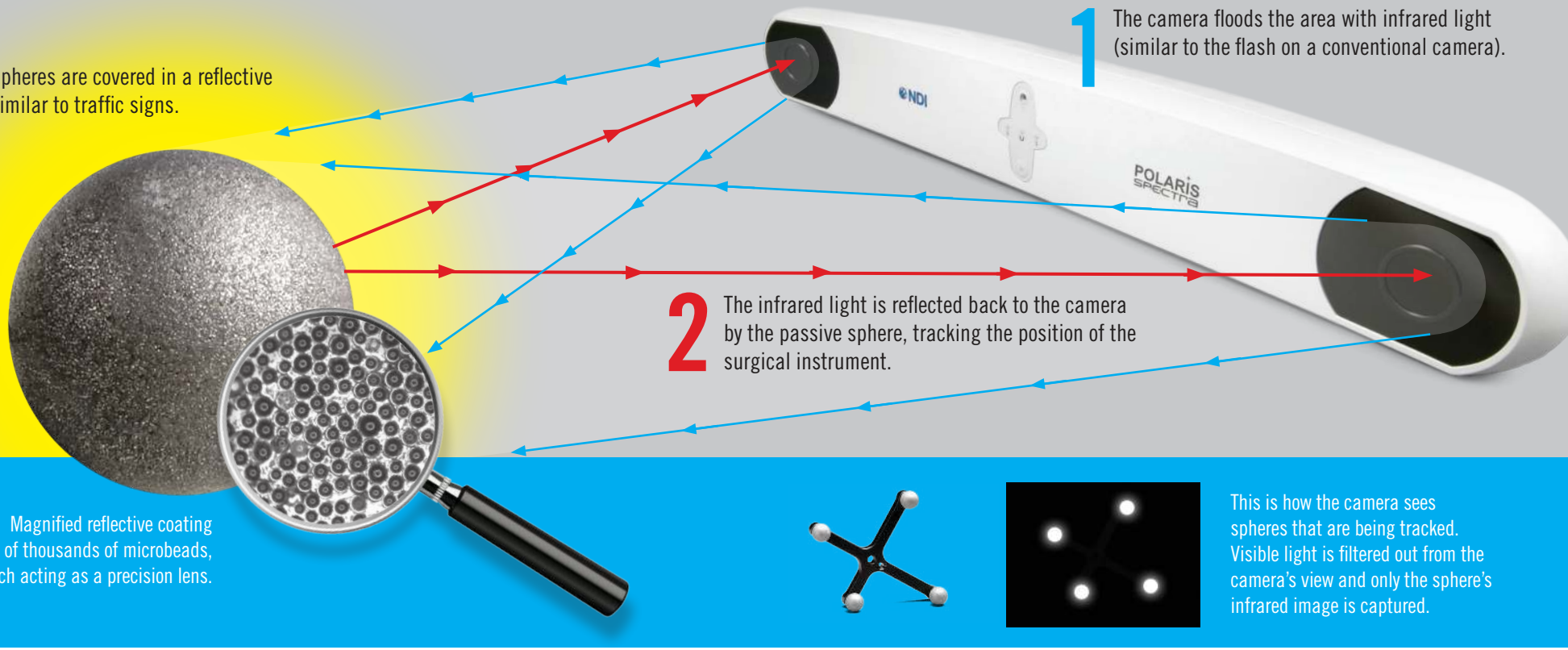
HOW DO SPHERES WORK?

Passive spheres are covered in a reflective coating similar to traffic signs.



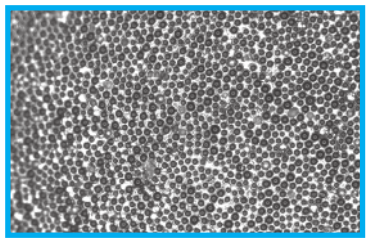
1 The camera floods the area with infrared light (similar to the flash on a conventional camera).

2 The infrared light is reflected back to the camera by the passive sphere, tracking the position of the surgical instrument.

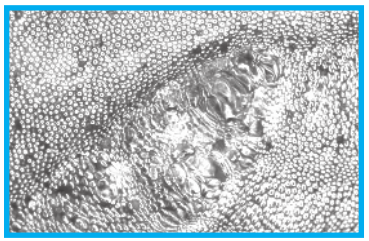
Magnified reflective coating shows tens of thousands of microbeads, each acting as a precision lens.

This is how the camera sees spheres that are being tracked. Visible light is filtered out from the camera's view and only the sphere's infrared image is captured.

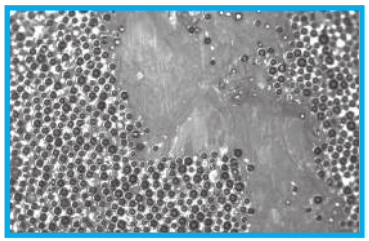
What can affect proper tracking of a sphere?



Clean:
Pristine microbeads reflect light directly back to the camera.



Contaminated:
Microbeads contaminated with blood or lipids cause distortion, preventing light from reflecting back to the camera.



Scuffed:
When the reflective coating is scuffed by reuse or improper handling, light does not reflect back properly to the camera.

To ensure accurate navigation, contaminated or scuffed spheres must be replaced before use.

Refer to the Information for Use leaflet.

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NDI P/N 8300291 (Rev 001)