

# LaserNet 200 Series

## Particle Counter & Wear Debris Analyzer

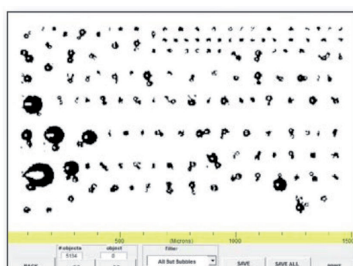
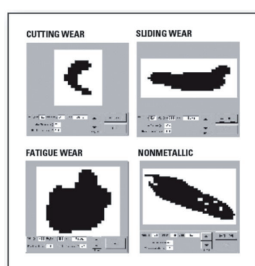
ASTM D6786, ASTM D8120, ASTM D7596  
ISO 4406, NAS 1638, NAVAIR 01-1A-17, SAE 4059

The Spectro LNF Q200 series applies the world's best oil particle counter technology. With an intuitive, configurable GUI and no calibration required, the Q200 series is fast, accurate and easy to use. Sample preparation is efficient with the LNF. Viscosities up to 320 cSt can be processed without dilution due to the wide dynamic range. And unlike conventional light blockage particle counters, there are no flow control valves that need adjusting when testing different sample viscosities.



NSN  
6635015101712

Models	210	215	220	230
Applications	Mineral and synthetic lubricants including gear, engine, hydraulic, turbine and distillate fuels			
Output	Particle count: ISO 4406, NAS 1638, NAVAIR 01-1A-17, SAE AS 4059, GOST, ASTM D6786, HAL and user defined. Total ferrous, ppm - Large ferrous, ppm - Ferrous particle count and distribution percentage large ferrous particles, %ferrous wear severity index free water, ppm; Soot wt. %; particle shape per LaserNet 200 Series method			
Standard Analytical Range	Particles 4 µm - 100 µm			
Sample Volume	5 - 30 ml, varies with viscosity			
Environmental Operating Req.	5°C to 40°C ambient temperature, 10 - 80% relative humidity, non condensing, 2000 m maximum altitude			
Software / Operating System	Windows®7, Windows 10 Pro, 32 or 64 bit, US english version			



## Operating Principles

The LaserNet 200 Series system employs an innovative, patented approach to testing the fluid directly from the sample bottle. The core of the device combines a direct imaging particle analyzer with a sensitive magnetometer together to generate both particle counts, images and ferrous concentration in ppm. Oil and fluid samples are passed through a flow cell, illuminated by a laser, and a CCD video camera counts and classifies the particles from the image data. This technique provides the user with a very reliable and accurate particle counter that can tolerate a wide range of dirty and clean samples, with varying viscosities.

LaserNet Comparison	210	215	220	230
Total particle count & codes	✓	✓	✓	✓
Non-metallic particles (sand/dirt)	✓	✓	✓	✓
Free water measurements	✓	✓	✓	✓
Air bubble/water droplet correction	✓	✓	✓	✓
Wear particle classification	✗	✗	✓	✓
Total ferrous concentration	✗	✓	✗	✓
Ferrous particle count & size distribution	✗	✓	✗	✓
Large ferrous concentration	✗	✓	✗	✓
Autosampler option	✓	✓	✓	✓



## ASP Autosampler

The ASP autosampler is a low cost solution for automatic and unattended processing of a batch of up to 24 samples. The ASP may be added to existing LaserNet 200 installations with minimal setup.

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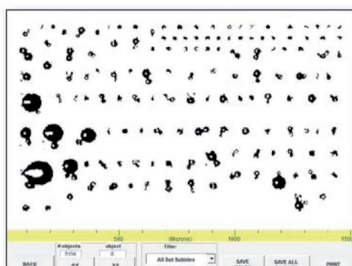
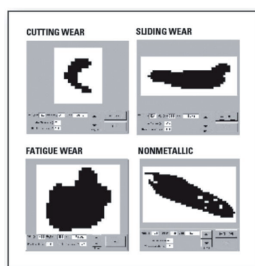
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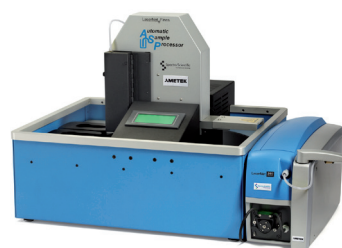
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