Urilyzer® Sed

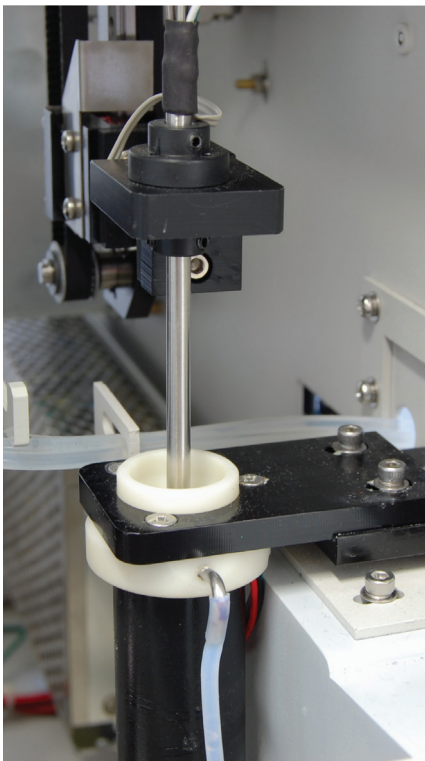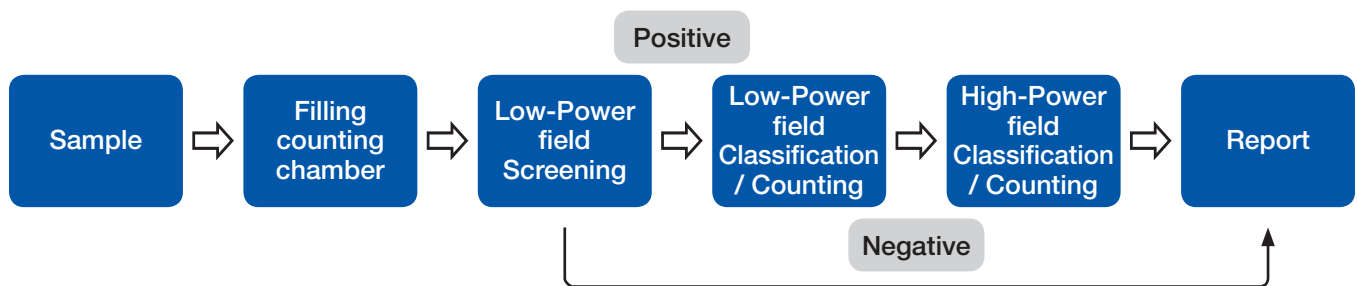## Automating the gold standard in urine sediment

The Urilyzer® Sed automates the gold standard in measuring and describing formed elements in urine: the microscopy.

The instrument is a precise and accurate analyzer which classifies particles from native urine with microscopy technology and an automated image recognition software.
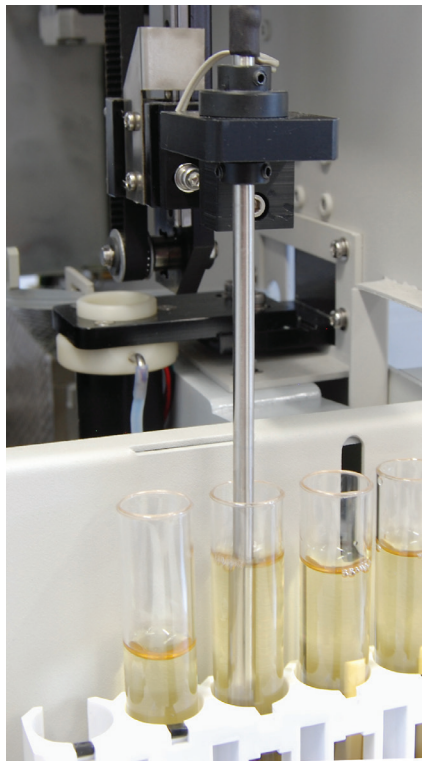
The system is an affordable solution for hospitals, laboratories and clinics. It streamlines the workflow, helps to standardize the procedure and increases the efficiency of the user.

Efficient and affordable

- Throughput of up to 90 samples per hour by sorting out negative samples via microscopic screening
- Uses one major system liquid (Cleanser A) plus two end-of-the-day cleaning solutions. All of them are delivered as concentrates, reducing required warehouse space and freight charges
- Durable sedimentation and counting chamber reduces the running costs to a minimum
- Ideal for labs with a throughput of 50-300 samples/day to screen for samples with clinically relevant particles

Positive

| Sample | ⇒ | Filling counting chamber | ⇒ | Low-Power field Screening | ⇒ | Low-Power field Classification / Counting | ⇒ | High-Power field Classification / Counting | ⇒ | Report |

Negative

The sample needle is washed automatically after each test to prevent carry-over

Throughput: up to 90 samples per hour. The miniumum sample volume is 2.0 ml of native urine
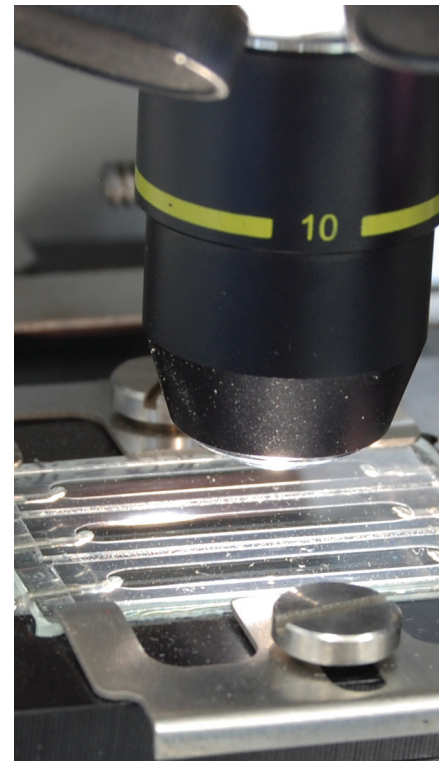
Sedimentation and microscopic measurement within the counting chamber (3 separate channels)

Easy-to-use and agile

- Particles are presented in whole viewfield images in low and high power (100x/400x), which are steadily available for on-screen verification, reducing the number of samples that require an additional manual microscopy to a minimum
- No additional training needed to interpret particle images (similar to manual microscopy)
- Whole viewfield images enable the judgement of size proportions between particles easing the particle classification during verification
- Automated daily maintenance routines (minimizing hands-on by operators)
- Urine chemistry and sediment results may be stored and reported in one integrated format

Reliable and accurate

- More than 200.000 results, including all microscopic images, are stored in the database
- Full QC management system including Levey-Jennings charts
- Durable fluidic design reduces clotting and carry-over
- Automated focusing ensures image sharpness

- Automated microscopic measurement of native, non-centrifuged urine samples ensures a standardized sample testing procedure without loss or damage of particles caused by centrifugation
- The particle recognition software allows identification and counting of particles as well as classification into 11 classes based on morphological analysis. Further sub-classification is available and may be performed during on-screen verification of images
- RBC-analysis offers additional information on size, form and chroma that helps to identify "abnormal RBC"

Red blood cells

White blood cells

Crystals

Epithelical cells
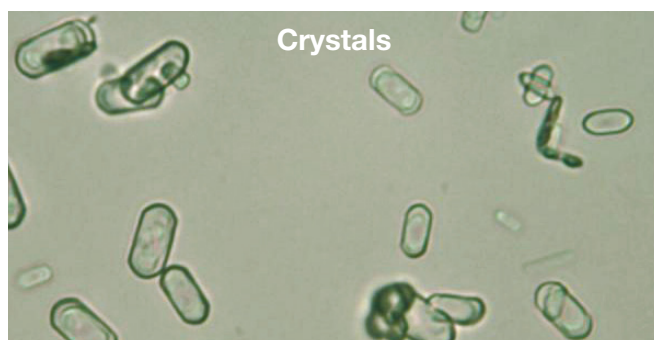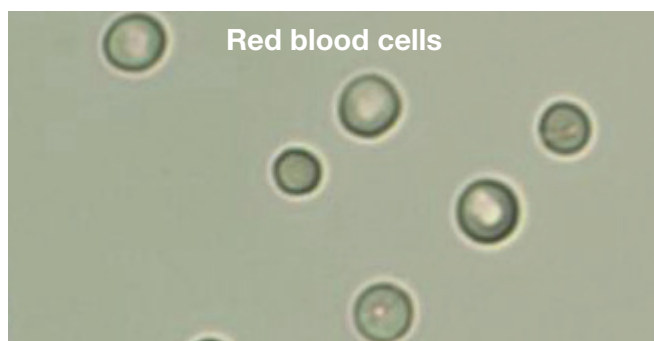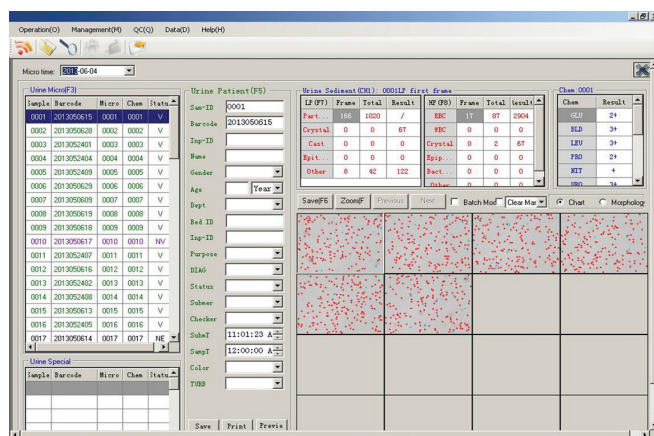
All whole viewfield images are presented on an external monitor and can be enlarged for on-screen verification and full-screen view

Specifications

Type	Automated benchtop urine sediment analyzer
Measurement technology	Automated microscopic urine sediment particle analysis in low (LP: 100x) and high power (HP: 400x). Identified and auto-classified particles are presented in whole field of view images (LP and HP) after being sedimentation in the counting chamber
Parameters	11 Auto-classified particles: Normal Red Blood Cells, Abnormal Red Blood Cells, White Blood Cells, Casts, Squamous Epithelical Cells, Small Round Epithelial Cells, Epithelial Cells, Yeast, Crystals, Mucus and Bacteria (further particles for sub-classification by user available)
	RBC morphological analysis: Histograms with information about size, form and chroma of RBC
Throughput	Up to 90 tests/hour
Data storage	Patient and QC database: > 200.000 tests (with images)
Display	External monitor
Interfaces	Serial RS232, USB, PS2, Ethernet
Dimensions	640 x 680 x 530 mm (WxDxH)
Weight	58 kg
Power supply	100–240 V AC, 50/60 Hz
Operating environment	Temperature: +15°C to +30°C; Relative humidity (non-condensing): 20% to 80%
Printer	External laser printer
Barcode reader	Built-in (optional external); Barcode type: CODE 39, CODE 128, INTERLEAVED 2/5, CODABAR
Protocols	LIS2 (ASTM+)
Features	– Counting chamber: Durable with three separate channels – Objective lenses: 10x and 40x magnification – Default no. of images: < 200 particles: 10 LP and 10 HP images > 200 particles: 6 LP and 6 HP images – Loading capacity (samples): up to 50 in one batch – Racks: 10 racks, each with 10 positions – Minimum sample volume: 2 ml (native urine) – Automatic sample mixing – STAT function – Operator Management – Automatic printout or transfer of result – QC Management (full traceability via LOT and Expiry entry) – Flexible reporting options (e.g. different unit types) – Connection to Urilyzer® Auto possible ⇨ Urilyzer Duo

Consumables

Urilyzer® Sed, Art.-No.: ULS120

Cleanser A	ULS2100	1 x 500 ml concentrate for 5 L
Cleanser B	ULS2200	4 x 40 ml concentrate for 400 ml each
Maintenance Cleanser	ULS2300	4 x 40 ml concentrate for 400 ml each
Cleanser A	ULS2101	1 x 200 ml concentrate for 2 L
Cleanser B	ULS2201	1 x 20 ml concentrate for 200 ml
Maintenance Cleanser	ULS2301	1 x 20 ml concentrate for 200 ml
Urilyzer® Sed Control Set	ULS3100	28 x 10 ml (3 Level: 14 x High, 7 x Low, 7 x Sensitivity Level)

Distributor information

Analyticon Biotechnologies AG
Am Muehlenberg 10
35104 Lichtenfels - Germany
Phone: +49 64 54 79 91-0
info@analyticon-diagnostics.com
www.analyticon-diagnostics.com

agile - affordable - accurate