mwe medical wire

www.mwe.co.uk

Microloops® Loops and needles for perfect inoculation.

Microloops®

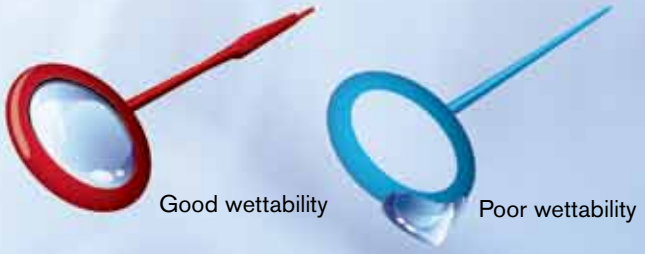
A comprehensive range of inoculating loops. Decades of experience in the manufacture of precision inoculating loops ensure you can rely on Microloops® for accurate volumetric technique every time.

Microloops® Plastic

Premium quality sterile plastic inoculating loops and needles. The precision moulded smooth edges prevent tearing of the agar surface, while good wettability ensures safe transfer of liquid samples. The Classic style features a dual sectional shaft, rigid but flexible for comfortable handling and control.

Precision moulded plastic loops and needles are available in individual peel pouches, or in convenient tamper evident resealable packs of 20.

- 3 loop sizes: 1µl, 5µl, 10µl.
- Needle version.
- Colour coded for ready selection
- Ultra smooth – no gouging
- Good wettability
- Dual profile shaft (on Classic style) for controlled handling square section for control of streaking direction round section for easy rotation
- Rigid, but not too rigid – good for sputum
- Flexible, but not too flexible – for controllable streaking
- Tamper-evident bags for guaranteed sterility



Microloops® Nichrome 5

A range of premium quality, accurately sized, twisted Nichrome 5 wire loops, available in 6 volumetric sizes. Nichrome 5 wire offers all the benefits of platinum, without the cost. With finely twisted shank for flexibility, the ultrasmooth precision formed loops glide smoothly across the agar surface without tearing, producing properly isolated colonies.

- Fully closed loops – for secure transfer of drop
- Twisted wire – reduced vibration
- Uniform length
- Nichrome 5 – stable during repeated heat/cool cycles
- Reduced oxidation
- Reduced carbonisation

C.H. Collins, MBE FIMLS MIBiol, 1976

"The Medical Wire & Equipment Company loops are about the right length and, being twisted, do not vibrate as much as single wires. We have found them entirely satisfactory." [1]

Standard or Calibrated

Standard Nichrome 5 Microloops® are packed in 25's, are carefully and accurately manufactured, and are completely suitable for consistent and precise transfer of sample materials. Each batch is carefully checked to ensure the loops meet the specification for the particular product.

Calibrated Nichrome 5 or Platinum Microloops® are individually packed, and each loop has been individually measured to ensure it meets the specification. A calibration certificate is supplied with each loop.

Microloops® made from Nichrome 5

28 Ni 56.6934 24 Cr 51.9961

Nichrome 5 is an alloy of 80% Nickel and 20% Chromium and has long been regarded as the finest alloy of its type for repeated heating. It gives outstanding performance at temperatures up to 1200°C.

The Platinum Standard

78 Pt 195.08

The method streaking out of bacteria on agar surfaces plates was devised in Robert Koch's laboratory, but the introduction of platinum wire loops is attributed to Mazyck P. Ravenel. [2,3] Although now largely superceded by nichrome, platinum is still used in some laboratories because of its faster cooling and complete resistance to oxidation and chemical degradation.

For those special applications use Medical Wire's Calibrated Platinum Microloops® available in 1µl and 10 µl sizes. A straight wire version is also available.

platinum
noun
A precious silvery-white metal, the chemical element of atomic number 78. Used in jewellery, electrical contacts, laboratory equipment, and industrial catalysts (Symbol: Pt). [4]

Context & Method of Use

While the use of wire inoculating loops and needles dates back to the earliest days of bacteriology, the use of loops as measuring devices began in the dairy industry,[5] and it was in the early 1960's that the inoculating loop began to be used as an actual diagnostic tool. O'Sullivan[6] first described the culture of a "standard loopful" of urine, and McGeachie & Kennedy[7] modified the technique to the now familiar streaking in successive planes.

The method of use has generated some debate over the years. The most current is to dip the end of the loop to just below the surface of the liquid (e.g. urine), and remove vertically, taking care not to carry over any liquid on the shank.[8]

Order Information

Single Use

Microloops® Precision Moulded Plastic

Cat No.	Size	Style	Pack Size
MW710/20	10µl	Classic	50 x 20
MW711/20	1µl	Classic	50 x 20
MW705/20	5µl	Standard	50 x 20
MW702/20	Needle	Standard	50 x 20

Nichrome 5

Microloops® Precision Nichrome 5 (Reusable)

Cat No.	Size	Internal Diameter	Pack Size
MW190	10µl	5.0mm	25
MW191	5µl	3.5mm	25
MW192	3.3µl	2.9mm	25
MW193	2.5µl	2.5mm	25
MW194	2µl	2.2mm	25
MW195	1µl	1.5mm	25
MW197	Straight Wire	-	25

Nichrome 5

Microloops® Calibrated Nichrome 5 (Reusable) Calibrated

Cat No.	Size	Internal Diameter	Pack Size
MW1901	10µl	Ø 5.0mm	1
MW1951	1µl	Ø 1.5mm	1

Platinum

Microloops® Calibrated Platinum (Reusable) Calibrated

Cat No.	Size	Internal Diameter	Pack Size
MW190PL	10µl	Ø 5.0mm	1
MW195PL	1µl	Ø 1.5mm	1
MW197PL	Straight Wire		1

Holders

Microloops® Holders

Cat No.	Size	Pack Size
MW196/6	150mm (6 Inch)	1
MW196/7	175mm (7 Inch)	1
MW196/8	205mm (8 Inch)	1

Gauges

Microloops® Calibration Gauge Calibrated

Cat No.	Size	Pack Size
MW188	10µl	1
MW189	1µl	1

Calibration Calibration of Microloops® and Microstreakers® is carried out by the Evans Blue dye method and the FDA Drill Bit Method. [9]

Precision manufacturing The manufacturing process ensures a perfectly symmetrical loop with equal dimensions, not an uneven oval. This allows the use of our gauge for future calibration once we have certified the loop.

Microloop Low cost loop

Microstreakers®

Combined twisted Nichrome 5 wire loops and light weight, insulated aluminium holders, perfectly balanced for easy manipulation. Microstreakers® glide smoothly across the surface of agar without tearing or gouging.

- Colour coded
- Flexible
- Non-gouging
- Rapid Cooling
- Consistent and reproducible results

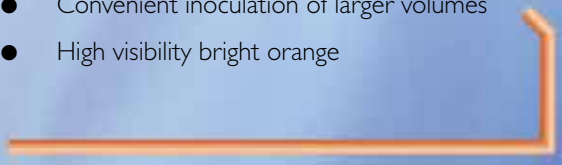
Microloops® Calibration Gauge

Calibrated loops in regular use should be checked on a monthly basis for accuracy. An easy way to comply with this requirement is to use the Microloops® Calibration Gauge (UKAS certified). This is a simple, but precision tooled Go No-Go Gauge which is used in accordance with the US FDA drill bit method[9]. Measurement is physical and there is no requirement for a spectrophotometer.

- Go No-Go gauge for guaranteed calibration
- Simple to use
- 1µl and 10µl
- Robust construction
- FDA drill bit method[9]

L-shaped Spreader

- Precision moulded plastic
- 30mm contact edge
- Convenient inoculation of larger volumes
- High visibility bright orange



CE-marking

Medical Wire's Microloops® products are CE-marked and meet the requirements for In Vitro Diagnostic Medical Devices as defined in the European In Vitro Diagnostic Devices Directive 98/79/EC. All Microloops® products are manufactured to ISO 9001:2008

Order Information

Precision

Microstreakers® Precision Nichrome 5 (Reusable)

Cat No.	Size	Pack Size
MW180	Large	5
MW182	Medium	5
MW184	Small	5
MW186	Needle	5

Calibrated

Microstreakers® Calibrated Nichrome 5 (Reusable)

Cat No.	Size	Pack Size
MW1851	10µl	1
MW1871	1µl	1

Individual

Microloops® Precision Moulded Plastic - Individually Wrapped

Cat No.	Size	Pack Size
MW700/1	10µl	1000 x 1
MW701/1	1µl	1000 x 1
MW705/1	5µl	1000 x 1
MW702/1	Needle	1000 x 1

Spreader

L Shaped Spreader

Cat No.	Size	Pack Size
MW7121	30mm contact edge	500 x 1

References

1. Collins, C.H., 1976 The bacteriologist's loop: a biohazard, The Gazette, 20:55-6
2. Poupard, J.A., 2010, A History of Microbiology in Philadelphia: 1880 – 2010, Xlibris Corporation
3. Ravenel, M. P., & J. Willoughby Irwin, 1905, Studies In Mixed Infection In Tuberculosis: A Preliminary Report in National Association For The Study And Prevention Of Tuberculosis Transactions Of The First Annual Meeting Washington, D. C. May 18th And 19th, 1905
4. Oxford Dictionaries. www.oxforddictionaries.com
5. Burri, P., 1928, The quantitative smear culture: a simple means for the bacteriological examination of milk. Report of Proceedings World's Dairy Congress p690-697
6. O'Sullivan, D.J., et al, 1960, A simplified method for the quantitative bacterial culture of urine. J. Clin. Path., 13:527-8
7. McGeachie, J., & A.C. Kennedy, 1963. Simplified quantitative methods for bacteriuria and pyuria. J. Clin. Path., 16:32-38
8. Quality Guidance Q5, 2013, Inoculation of Culture Media for Bacteriology. UK Standards for Microbiology Investigations, Standards Unit, Microbiology Services, Public Health England, www.hpa.org.uk/SMI
9. Isenberg H. (Editor in Chief) 2004 Clinical Microbiology Procedures Handbook - 2nd edition.

Corsham, Wiltshire, SN13 9RT, U.K.
Telephone: 01225 810361 Fax: 01225 810153
E-mail: info@mwe.co.uk www.mwe.co.uk