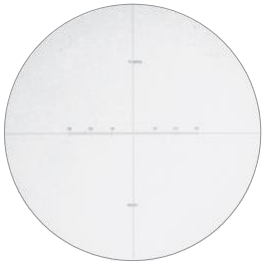
PEAK Measuring Microscope 2034-CIL Series





The 2034 series microscopes are available as a special model with coaxial illumination (Köhler illumination). This additional illumination is reflected into the light beam from the side by a system of prisms. This prevents irritating reflections particularly with highly glossy materials. This coaxial illumination is absolutely essential to check surface structures on smooth materials or for high contrast reproduction of colour pigments. The battery box included with the microscope contains two 1.5 Volt AA batteries and has a potentiometer to adjust the light intensity

The optical system is identical with the 2034 and 2054-CIL series stand microscopes. The base is aluminium and is not available as an acrylic base. The 2034-CIL microscope can be combined with the special MST tripod for stability on rollers or curved surfaces. For further accessories see following pages.

Focusing with the coaxial rotation in the microscope body on the 2034 series is simpler especially at high magnification factors. Moreover this version should always be used in combination with digital cameras, because the weight of the camera cannot change the focal point. Subsequent revamping of the body makes version 2034-CIL more expensive that the microscopes in the 2054-CIL series .



Note: It is essential to use the 2034-CIL-20 model in combination with the special MST tripod; otherwise the additional coaxial illumination prevents adjustment of the working distance. This applies only for the 2x lens in combination with coaxial illumination.



An eight megapixel, miniature USB camera with integrated lens and autofocus feature can be attached simply to the eyepiece with the aid of an adapter. This allows images to be saved quickly on a laptop or PC. It is possible to use either the original camera driver software (in English only) or combine the system with the Metric BE (image visualisation and storage), which offers significantly more convenient operation. The quality of the images obtained with this high end industrial camera are impressive.

Specification

	2034-CIL-20-MST	2034-CIL-40	2034-CIL-60	2034-CIL-100	2034-CIL-150	2034-CIL-200	2034-CIL-300
Magnification factor	20 x	40x	60x	100x	150x	200x	300x
Focusable	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Scale focusable	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Field of view	7.2 mm	3.6 mm	2.4 mm	1.45 mm	0.96 mm	0.72 mm	0.48 mm
Measuring length	6.0 mm	3.0 mm	2.0 mm	1.2 mm	0.9 mm	0.6 mm	0.4 mm
Scale	0.1 mm	0.05 mm	0.02 mm	0.01 mm	0.005 mm	0.002 mm	0.001 mm
Working distance	36.0 mm	18.7 mm	10.8 mm	5.7 mm	9.2 mm	6.7 mm	4 mm
Numerical aperture	0.06	0.12	0.15 mm	0.19 mm	0.24 mm	0.35 mm	0.4 mm
Focal length	35.0 mm	22.0 mm	16.5 mm	10.7 mm	7.3 mm	5.7 mm	3.9 mm
Dimensions mm	160 x 110 x 190	63 x 172 mm	63 x 172 mm	63 x 172 mm	63 x 172 mm	63 x 172 mm	63 x 172 mm
Weight	820 grams	241 grams	241 grams	241 grams	241 grams	241 grams	241 grams
Case	Included						
Standard scale	Included as standard feature						
Eyepiece	10 x	10 x	10 x	10 x	10 x	10 x	10 x
Lens	2 x	4x	6x	10x	15x	20 x	30 x
Display	Mirror image						

Prices

Order no.	Description	Price excl. VAT.
2034-CIL-20-MST	2034-20 Measuring microscope with scale 0,1 mm, 20x	£1105.00
2034-CIL-40	2034-40 Measuring microscope with scale 0,05 mm, 40x	£750.00
2034-CIL-60	2034-60 Measuring microscope with scale 0,02 mm, 60x	£770.00
2034-CIL-100	2034-100 Measuring microscope with scale 0,01 mm, 100x	£770.00
2034-CIL-150	2034-150 Measuring microscope with scale 0,005 mm, 150x	£830.00
2034-CIL-200	2034-200 Measuring microscope with scale 0,002 mm, 200x	£890.00
2034-CIL-300	2034-300 Measuring microscope with scale 0,001 mm, 300x	£1,000.00

PEAK accessories for measuring microscope 2034



Interchangeable Lenses

2034, 2054 and 2054-EIM series microscopes offer the possibility of changing the magnification factor by changing lenses. Four additional depressions are already present in the standard transport boxes for secure transportation of interchangeable lenses. The lenses have a screw thread for extremely simple changing. However the measuring scales require particular attention. If, for example, a microscope with a magnification factor of 100x is used with a 0.01 mm scale, the reading is incorrect when the lens is changed. For this reason, always order the additional lens you intend to use for measurement together with the associated eyepiece. It is not necessary to change the ocular for simple visual checking.

Order no.	Description	Price excl. VAT.
OJ-020	2x objective for magnification 20x	£64.00
OJ-040	4X objective for magnification 40x	£64.00
OJ-060	6x objective for magnification 60x	£82.00
OJ-100	10-x objective for magnification 100x	£82.00
OJ-150	15x objective for magnification 150x	£136.00
OJ-200	20x objective for magnification 200x	£218.00
OJ-300	30x objective for magnification 300x	£305.00



Interchangeable Eyepiece with millimetric graduation

All eyepiece have a magnification factor of 10x. The built in scale is calculated to match the lense. The scale can be focused separately in the eyepiece. The eye cup is already included with the stand microscope ordered.

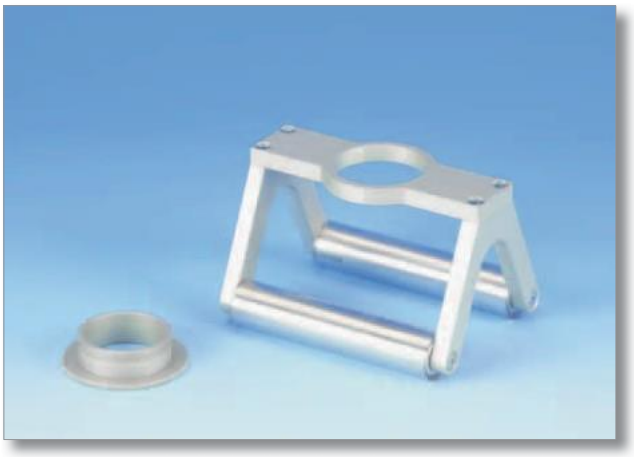
Order no.	Description	Price excl. VAT.
OKU-020	Eyepiece with scale 0,1 mm	£91.00
OKU-040	Eyepiece with scale 0,05 mm	£91.00
OKU-060	Eyepiece with scale 0,02 mm	£91.00
OKU-100	Eyepiece with scale 0,01 mm	£91.00
OKU-150	Eyepiece with scale 0,005 mm	£91.00
OKU-200	Eyepiece with scale 0,002 mm	£91.00
OKU-300	Eyepiece with scale 0,001 mm	£91.00



Interchangeable Eyepiece with inch graduation

All eyepiece have a magnification factor of 10x. The built in scale is calculated to match the lense. The scale can be focused separately in the eyepiece. The eye cup is already included with the stand microscope ordered.

Order no.	Description	Price excl. VAT.
OKU-020	Eyepiece with scale 0.005”	£91.00
OKU-040	Eyepiece with scale 0.002”	£91.00
OKU-060	Eyepiece with scale 0.001”	£91.00
OKU-100	Eyepiece with scale 0.0005”	£91.00
OKU-150	Eyepiece with scale 0.0002”	£91.00
OKU-200	Eyepiece with scale 0.0001”	£91.00



Tripod MST

Special MST tripod for 2034-CIL, 2034-EIM-CIL, 2054-CIL and 2054-EIM-CIL series microscopes. The coaxial illumination limits the focusing range of the CIL microscopes. The mounts for the support rollers are adjustable laterally to maintain the working distance for all interchangeable lenses. The MST is also available as a special mode with rolling support rollers.

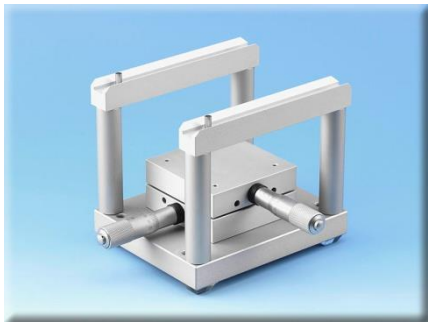
Order no.	Description	Price excl. VAT.
MST	MST Tripod for microscopes	£355.00
MST-R	MST Tripod with rotating support rollers	£625.00



MST-X Tripod

The X-adjustment in the MST tripod is a further option. The 5 mm adjustment range helps to evaluated adjacent measuring points precisely at high magnification factors. The X-adjustment is not possible in combination with rolling support rollers.

Order no.	Description	Price excl. VAT.
MST-X	MST –X Tripod for microscopes	£625.00



Tripod ST-CIL

Precision tripod with segment columns, which can be installed to obtain the required distance. An X-Y table with two 25 mm measuring spindles with graduations of .01 mm is mounted in the tripod. The ST-CIL tripod can be used for combining microscopes 2034 or 2054 with the MST tripod. The MST tripod is also available with an additional rotating table.



Order no.	Description	Price excl. VAT.
ST-CIL	Tripod with X-Y Table	£810.00
ST-CIL-RT-85	Tripod with X-Y and rotating table	£1,170.00



Tripod CV-Mini-2034

The CV-Mini 2034 tripod was designed to allow inspection and measurements without contact. The aluminium extension arm can be rotated 360° on the VA shaft. An additional micro-adjustment is integrated into the extension arm. The 20 mm aluminium bottom plates is anodised and has dimensions of 230 x 150 mm. Larger support plates can be produced as special products. The microscope with tripod is supplied together with an elegant synthetic transport case (only when ordered as set)..

Order no.	Description	Price excl. VAT.
CV-Mini-2034	Tripod for microscopes	£350.00



USB Camera

An eight megapixel, miniature USB camera with integrated lens and autofocus feature can be attached simply to the eyepiece with the aid of an adapter. This allows images to be saved quickly on a laptop or PC. It is possible to use either the original camera driver software (in English only) or combine the system with the Metric BE software (image visualisation and storage). The quality of the images obtained with this high end industrial camera are impressive.

Order no.	Description	Price excl. VAT.
1008-XS-ADP	USB 2.0 Camera with special adaptor	£680.00