Applied Scientific Instrumentation

Stage Inserts

160 x 110 mm SILVER FINGER SLIDE Inserts

Slide Insert with Finger — I-4012

The I-4012 slide insert accepts most slides with a standard width of 75 mm (3"). The unit has a silver spring-loaded finger that holds the slide in place and is common to most standard microscope stages. The finger can easily be pulled back to install the slides which rest on surface of the insert and are recessed about 6.8 mm below the top of the insert. The I-4012 offers the advantage of versatility and ease of loading slides for screening large numbers of samples.

Depth from Top of Insert: 6.8 mm
Overall Thickness: 8.0 mm

High-Rise Version — I-4013

This is a special version of the I-4012 with a much shallower recession that places the bottom of a slide about 3.8 mm below the top of the insert. Available for upright microscopes that cannot move close enough to achieve correct focusing, although a condenser extender may be needed to obtain Kohler illumination.

Depth from Top of Insert: 3.8 mm
Overall Thickness: 5.3 mm

Medium-Rise Version — I-4014

This is a special version of the I-4012 with a slightly shallower recession that places the bottom of a slide about 5.7 mm below the top of the insert. This medium-rise insert offers a compromise between the closest an upright microscope's objective can approach from above versus the maximum a condenser can be extended from below and still obtain Kohler illumination.

Depth from Top of Insert: 5.7 mm
Overall Thickness: 7.2 mm

Ultra High-Rise Version — I-4015

This is a special version of the I-4012 that places the bottom of a slide approximately flush with the top of ASI's PZU-2000 stage. This allows objectives on upright microscopes to be rotated without interference; however, Kohler illumination is not possible with this insert.

Depth from Top of (Typical) Insert: -6.7 mm
Overall Thickness: 9.5 mm

Flush Version — I-4016

This is a special version of the I-4012 that places the bottom of a slide flush with the top of the insert. The insert has a milled-out bottom to allow objective clearance. Available for upright microscopes that cannot move close enough to achieve correct focusing, however, Kohler illumination may not be possible with this insert.

Depth from Top of Insert: 0.0 mm
Overall Thickness: 8.0 mm

Choosing the appropriate Insert:

Inserts are designed to place their samples at a particular depth relative to their height. Generally, inserts on inverted microscope stages try to place the specimen as low as possible, while inserts on upright microscope stages try to place the specimen as high as possible.

Some microscopes are versatile enough to use either insert, and on some stage systems only certain inserts can be used.

When their objectives cannot be lowered close enough to achieve focus, some systems require shallow or high-rise inserts (I-4013 insert, for example), however, this can be an problem with Kohler illumination if the condenser cannot be raised high enough -- in this case, a condenser extender is usually employed.

Some microscope models (e.g., Nikon E800/1000) may use large DIC condensers that cannot be extended -- in those cases (and depending on the stage) a compromise or *medium-rise* insert is chosen (an I-4014 insert, for example) to lower the specimen enough to attain Kohler illumination yet remain high enough that the objective can still be focused.

We Create Solutions

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