

# Microscope

Examines wellbore cuttings to help identify properties

## Applications

- Examining wellbore cuttings to help identify properties such as size, color, shape, and lithology type

## Features and Benefits

- A zoom magnification of 7.5x provides a detailed view of samples.
- The trinocular optical head enables using a digital camera to photograph samples.
- Any Nikon DS Series digital camera, as well as other digital camera models with the correct aperture size, can be mounted directly onto the microscope via the built-in camera port and 0.55x C-mount adapter.
- The 4.53-in. (115-mm) working distance allows for easy manipulation of samples.
- A zooming knob, which is equipped with a click stop for each magnification level, enables changing magnification levels easily.
- Integral electrostatic discharge protection prevents damage to the microscope, which could otherwise delay lithology identification.
- The interior zoom body has a mold-resistant design that makes the microscope well suited for high-temperature, high-humidity environments.

## Tool Description

The microscope examines wellbore cuttings to identify properties such as size, color, shape, and lithology type. With a zoom magnification of 7.5x and a total magnification of 3.35 to 300x (when the eyepiece lens and auxiliary objective lens are combined), the microscope provides a highly detailed view of samples. It also has a trinocular optical head that enables mounting a digital camera and capturing high-quality photographs of samples. The 4.53-in. (115-mm) working distance enables users to manipulate samples and to easily change magnification levels. The mold-resistant interior zoom body enables the microscope to perform reliably even in hot, humid environments.

## Specifications

|                      |   |
|----------------------|---|
| Brand                | Nikon   |
| Model                | SMZ745T   |
| Optical system       | Greenough   |
| Total magnification  | 3.35 to 300x (depending on the eyepiece lens and auxiliary objective lens used) |
| Eyepiece tubes       | Fixed type  |
| Eyepiece inclination | 45°   |
| Zooming range        | 0.67 to 5x  |
| Working distance     | 4.53 in. (115 mm)   |
| Weight               | 3.97 lb (1.8 kg)  |



With a zoom magnification of 7.5x and a total maximum magnification of 300x, the microscope provides a highly detailed view of wellbore cuttings.



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