## about

# **a euromex**° TECHNICAL FACTS

## microscope basics

A compound microscope consists of a group of lenses (called objective) which focuses a real image of the object inside the microscope. A second group of lenses (called eyepiece) magnifies this image and projects it on the retina of the eye. This compound optical system (objective - eyepiece) together with other mechanical components are the basics of a modern microscope

### HEAD \_\_\_\_\_

The 30° inclined trinocular viewing head is equipped with a 23.2 mm photo port. The Siedentopf head corrects interpupillary distances to the users preference. A beam splitter inside the head divides the light between the eyepieces and the camera with diopter settings

#### THE NOSEPIECE \_\_\_\_\_

A rotatable metal turret holding four microscope objectives for precise switching of magnifications. The revolver is mounted reversed for more workspace

## STAGE \_\_\_\_

Move the specimen slide in the X or Y direction. Low positioned stage controls prevent fatigue

# COARSE AND FINE FOCUSING SYSTEM .

The full metal mechanical system moves the specimen in focus. With rack stop to prevent damage to prepared microscopy slides and objectives

## MICROSCOPE BASE AND ARM \_\_\_\_\_

A large base guarantees the necessary stability of the microscope. The arm includes an integrated carrying grip for easy and safe transportation

#### CORDED AND CORDLESS USE\_

The built-in rechargeable batteries enable the microscope to be used both corded and cordless

#### DIGITAL MICROSCOPY

Modern microscopy uses CMOS, CCD or HD cameras for digital output to computer or HDMI displays. Users can use ImageFocus analysis software to capture, edit, analyze and share microscopy images

#### TRINOCULAR TUBE

The trinocular tube connects cameras used for digital microscopy

#### \_EYEPIECES

The WF 10x/18 mm are Wide Field eyepieces with 10x magnification and 18 mm field number

#### OBJECTIVES

Microscope objectives are crucial for determining magnification and resolution of the image. International standards are used during production. Typical objective magnifications are 4x/10x/40x/100x

#### CONDENSER

The 1.25 NA condenser's diaphragm maximizes the resolution of the optical system and also allows adjustment of contrast. Color or density filters can be placed in the filter holder

# COLLECTOR LENS SYSTEM AND NEOLED™ LIGHT SOURCE

This lens system maximizes light output. The innovative NeoLED™ design increases the light output even more, while less energy is required. The total system enables higher resolutions, very close to the theoretical diffraction limit of the optics