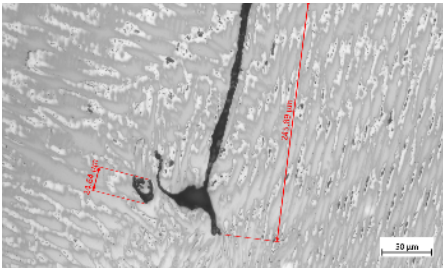


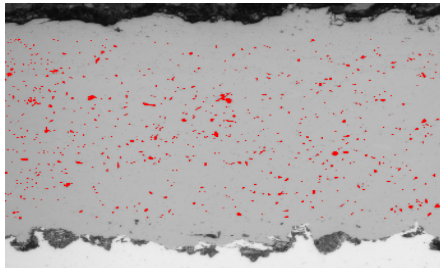


# ZEISS Optical Microscopes with ZEN core

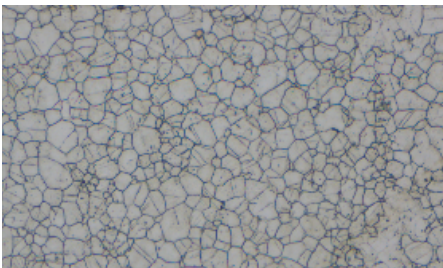
## Your Complete Digital Toolkit for Metals Characterization



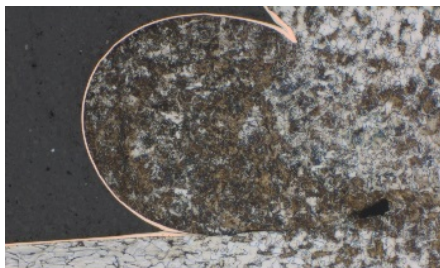
Assess features



Segment phases



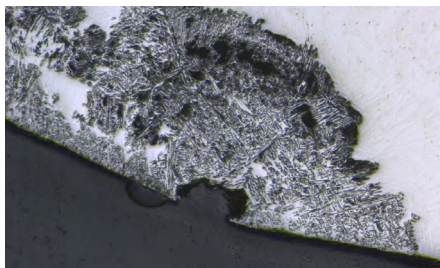
Quantify grains



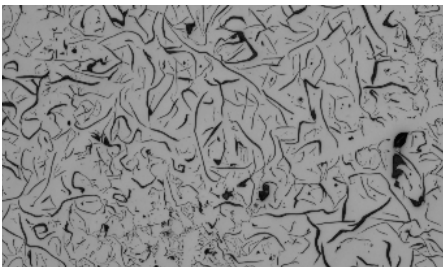
Analyze welds



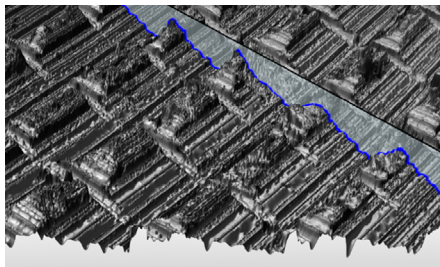
Classify inclusions



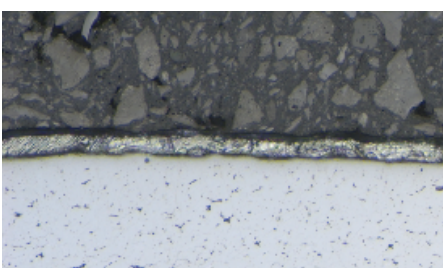
Investigate failures



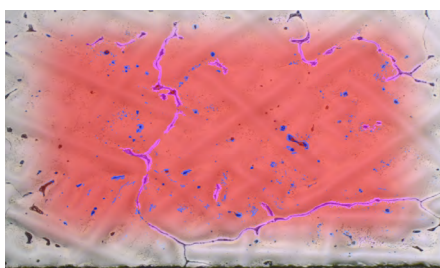
Evaluate graphite



Appraise roughness<sup>[2]</sup>



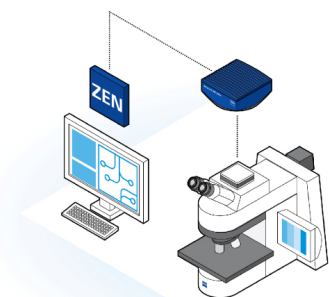
Measure layers



Machine learning

### ZEN core: A complete, intuitive metallography toolkit for fast, precise results in a multi-user software environment

- Full control of motorized ZEISS microscopes, advanced image acquisition, processing and analysis, and concise reporting
- Designed for the industrial metals research or quality laboratory, select only the modules you need in one user-friendly interface
- Easy to configure and use. Set up the adaptive user interface to control users, ensure repeatability, compliance and traceability.
- Total control of workflows, user profiles, roles, permissions, technical parameters to ensure total quality management
- Combine with ZEISS Shuttle & Find and electron microscopy for connected data in multiscale research or failure investigation.



# ZEISS Optical Microscopes with ZEN 2 core

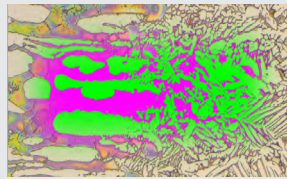
## Your Complete Digital Toolkit for Metals Characterization

### Powerful Add-on Solutions

#### Configure your motorized microscope and camera

- Modular software: ZEN Core
- Full control of the motorized microscope and image processing
- Internal file archive with optional fully functional image database
- Optional management of correlative workflows by connecting light, digital and electron microscopes

#### ZEN Intellesis



Unique, revolutionary, integrated, easy to use machine learning option for advanced segmentation of complex phases

#### ZEN GxP



Secure, traceable, auditable option for all microscopy workflows with data integrity, audit trail and disaster recovery capability

### ZEN Metallography Configurator

#### 1. Choose your microscope

Brilliant optics, advanced features as standard, touch control



*Axio Imager upright*



*Axio Observer inverted*

#### 2. Configure your system

Stage size, shape, heat  
Contrast modes  
Confocal laser module<sup>[2]</sup>  
Objectives  
Digital camera  
Correlative microscopy

Motorization & encoding  
Automation  
Particle analyzer  
Polarization  
Illumination  
Light & contrast manager

Motorized and encoded<sup>[1]</sup>, robust and powerful, cost effective



*Axioscope upright*



*Axio Vert inverted*

#### 3. Build your modular software toolkit in ZEN 2 core

Grain size  
Interactive measurement  
Multiphase  
Layer thickness

Non-metallic inclusions  
Intellesis Machine Learning  
Cast iron graphite analysis  
GxP auditability

[1] Full motorization and encoding currently available on Axio Imager, Axio Observer and Axioscope 7 models only

[2] LSM 800 MAT confocal laser scanning upgrade available on Axio Imager.Z2m with ConfoMap® surface imaging and analysis software

Some samples courtesy of TWI Ltd, UK



microscopy@zeiss.com  
www.zeiss.com/metals

