

# REPLICA METALLOGRAPHY

## COURSE INFORMATION

Metallographic inspections play a key role in determining the remaining life assessment, creep life of pressure vessels, pipelines, power plants and in verifying the material and heat treatment of fabricated equipment.

**In those instances, destructive metallographic tests are unsuitable as further usability of the component is required. Replica metallographic technique is an in-situ, non-destructive technique to reveal the microstructure of components.**

The usual method of metallographic investigation involves cutting pieces from the component so that laboratory preparation and examination can be performed. However, in replica metallography, after proper surface preparation through the use of cellulose acetate sheets, the technician makes a copy (for this reason it is called "replica") of the microstructure of the metal surface, which will be examined

using an optical microscope. The four day course on replica metallography will give an insight into the different types of materials, importance of metallography, and how to do lab metallography and replica metallography. On successful completion of the course, the candidate will be a competent replica technician. Evaluation of the metallographs is undertaken by a qualified metallurgist.

### Course Duration

3 days + 1 day exam

### Pricing (Including VAT)

Corporate Member R 11 365  
Non-Member R 12 287

JOHANNESBURG			
	HOURS	JHB 1	JHB 2
<ul style="list-style-type: none"> <li>Principles of metallography</li> <li>Similarities and differences between on-site and laboratory surface preparation</li> <li>Etching of samples/surfaces and importance of time and temperature</li> <li>Placement of acetate film and final transfer to optical slide</li> <li>Importance of proper identification of replicated area</li> </ul>	24	27 - 29 Aug	12 -14 Nov
Examination	Theory - 2 hrs + Prac - 4 hrs	30 Aug	15 Nov

Please note that any comments, compliments or complaints related to:

1. Training can be forwarded to [quality@saiw.co.za](mailto:quality@saiw.co.za) 2. Examination and Certification can be forwarded to [quality@saiwcertification.co.za](mailto:quality@saiwcertification.co.za)