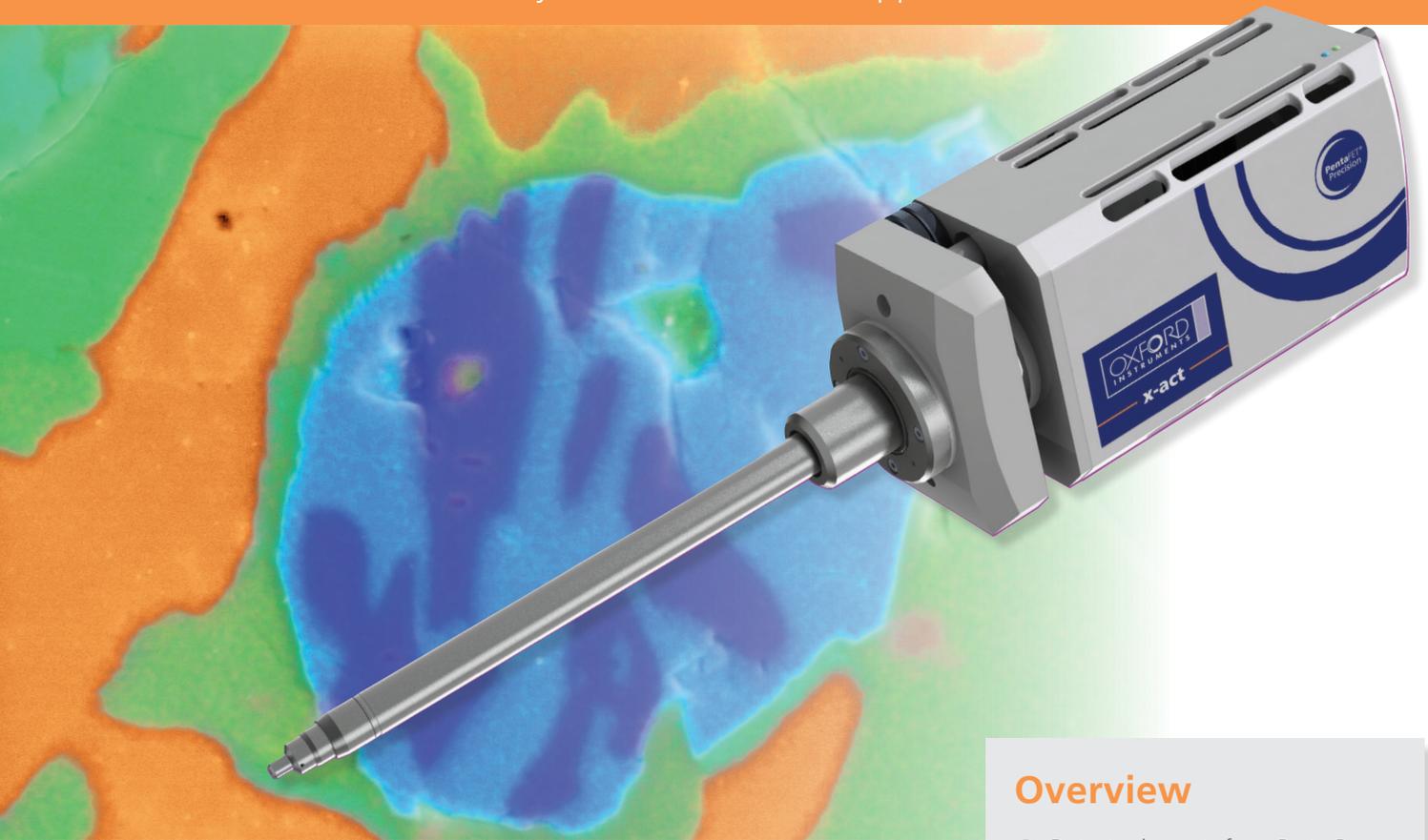


x-act

10mm² Silicon Drift Detector

Oxford Instruments' Quality, Performance and Support



An ideal solution for routine applications

The **x-act** is a fully quantitative SDD with excellent performance at low and high count rates. It provides all the benefits of Oxford Instruments' renowned technology in a package that is suitable for applications that do not demand the full performance of the large area **X-Max**[®] detectors.

x-act incorporates 40 years of Oxford Instruments' expertise, and is backed up by worldwide sales, service and customer support specialists.

Overview

- Detects elements from Be to Pu
- Premium resolution of 125 eV available, guaranteed on *your* SEM
- Resolution measured in compliance with ISO 15632:2002
- Compatible with **INCA**[®] and **AZtec**[®] EDS analysis software

OXFORD
INSTRUMENTS

The Business of Science[®]

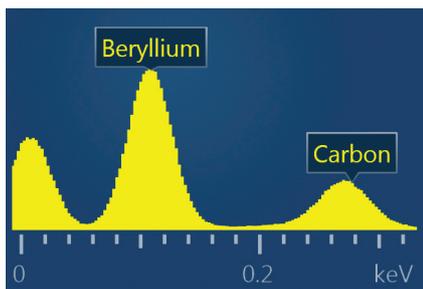
x-act: The SDD for routine applications

Features

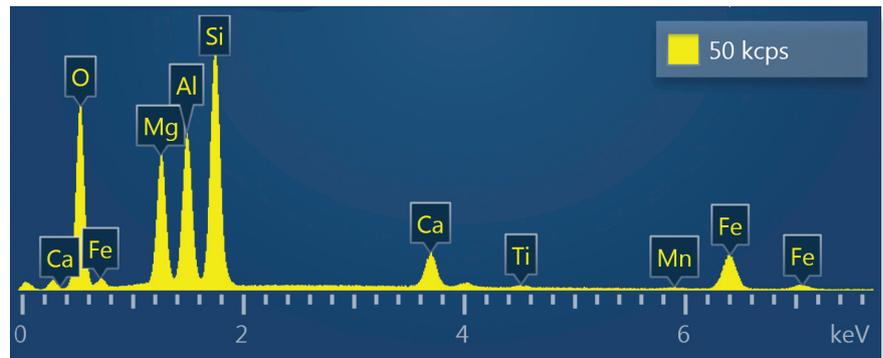
- Reliable AutoID for element identification
- Accurate quant – all count rates
- Stability guaranteed from 1,000 to 100,000 cps – peak shift and resolution change <1 eV
- Full software correction at very high count rates including pile-up correction
- Excellent low energy analysis with detection from Be to Pu
- Resolution guaranteed on SEM at MnK α , FK α , and CK α
- In compliance with ISO 15632:2002
- Fully integrated analytical hardware chain for fast, reliable analytical performance

Advantages

- Up to 10x count rates of Si(Li) detectors, for increased productivity and no loss of analytical performance
- LN2-free operation



Be spectrum showing excellent low energy resolution.



Almandine garnet spectra collected at different beam currents: resolution and peak position stay constant over a large count range.

kps	O	Mg	Al	Si	Ca	Ti	Mn	Fe	Total
150	43.91	10.46	11.92	18.99	3.92	0.32	0.29	10.19	100
100	43.93	10.44	12.10	18.89	3.91	0.34	0.31	10.08	100
50	44.02	10.69	11.94	19.08	3.67	0.32	0.25	10.02	100
20	43.90	10.57	12.19	18.75	3.89	0.33	0.27	10.09	100
10	43.96	10.56	12.17	18.86	3.77	0.38	0.22	10.08	100
2	43.89	10.68	12.23	18.67	3.84	0.28	0.28	10.12	100

Comparison of quantitative results for almandine garnet showing good data correlation over a wide range of collection parameters.

Fully integrated with market leading software

INCAEnergy

- Easy to use interface
- Excellent analytical results in 5 seconds or less
- Effective pulse pile-up correction for truly accurate quant at all count rates
- Fast spectral mapping in 60 seconds or less
- Comprehensive data reporting

AZtecEnergy, Oxford Instruments' new state-of-the-art EDS software:

- Tru-Q® the world's only standardless quant technology which approaches standards based quant accuracy
- Real-time overlap corrected mapping with TruMap™ and TruMap linescan
- True multi-tasking capabilities

www.oxford-instruments.com

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