Scentis **n**



Scentis is a lab management system developed specifically for materialographic laboratories. Use Scentis to acquire images, collect associated data, measure and analyze. Use Scentis to archive and manage your data and extract knowledge – from desktop to enterprise level.

The ability to connect Scentis to materialographic preparation, analytical equipment and seamlessly transfer data, sets a new milestone in the integration of laboratory data. Optional plug-in image analysis modules provide state-of-theart evaluation methods for everything from grain sizing to inclusion rating.

- Easy and intuitive user interface to match your workflow
- Acquire images and associated data in any format
- Network with preparation equipment and import preparation methods into Scentis
- Network with hardness testers and import hardness data into Scentis
- Store all your data in one place for improved overview and easy retrieval
- Gain unsurpassed database flexibility due to the state-of-the-art object-oriented database technology
- O Employ powerful search and query tools to retrieve data
- O Use data mining to gain new insights from all your stored images and data
- Perform image measurements to measure coating thickness, angles etc.
- O Employ annotations to label image features or areas of interest



The intelligent lab management software system for materialographers









- Employ image analysis modules for sophisticated evaluations according to international standards (optional)
- Document your results with easy to use List & Label[™] reporting templates and built-in report generator
- Share your reports in a variety of formats including doc, xls, pdf and html
- Scentis is available for single work stations and workgroups with the ability to upgrade gradually
- Intelligent floating license management ensures efficient utilization of the licenses

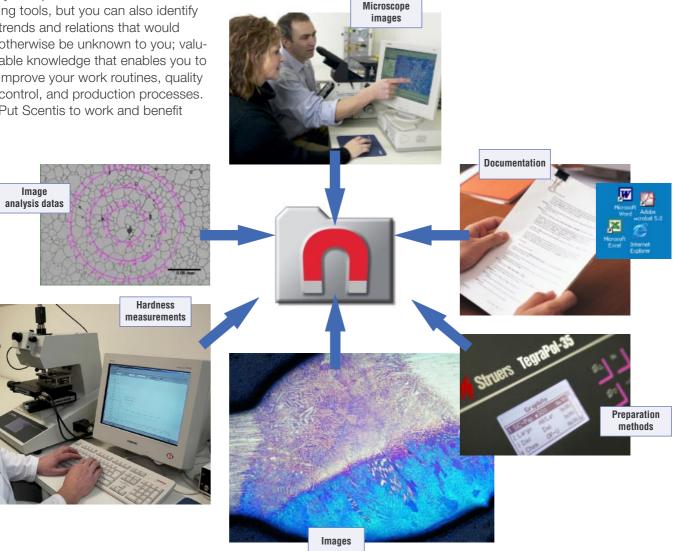
Scentis Integrates all your Lab Data

A lab management system is

truly valuable when all lab data is made accessible in one solution and Scentis is much more than image archiving and analysis. Scentis collects data from microscopes, materialographic preparation equipment and hardness testers and stores the data in one place. In addition, external data in various formats can be included.

The result is a unique lab management system offering transparency and full documentation on specimens, projects and customers. With all data stored in one place, new possibilities in data mining emerge. Not only can you retrieve data easily with powerful search and filtering tools, but you can also identify trends and relations that would otherwise be unknown to you; valuable knowledge that enables you to improve your work routines, quality control, and production processes. Put Scentis to work and benefit from improved documentation ability and increased effectiveness and competitiveness.

Ease of use has been a major focus area in the development of Scentis. When working with Scentis you intuitively follow the logical workflow in your lab. Simply save your lab data progressively during the course of each job. You can make use of numerous wizards that will assist you with your tasks and you can customize the appearance of the interface to suit your preferences, including menu bars and short cut bars. In addition, different user access levels can be employed to determine which tasks a user is allowed to perform thus simplifying the user interface and preventing unintentional altering. A journal function allows each user to view up to 60 days of working history. This makes it easy to catch up on tasks in progress and offers the administrator a fast overview in case of unforeseen absence of a technician.





Scentis Prep

The built-in Scentis Prep module enables you to access compatible preparation equipment via the local area network, import the preparation method you used to prepare your specimen directly into Scentis and save it together with all other specimen data.

Preparation methods comprise all details on preparation surface, suspension, lubricant, dosing levels, applied force and time.

Once the preparation method has been imported to Scentis, it receives a read-only status and cannot be altered, ensuring maximum safety.

The geographical location of the preparation equipment is not important as long as you can access it through your network. It can be next door or in another country for that matter.

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Scentis Indent

The built-in Scentis Indent module enables you to access Struers compatible hardness testers via the local area network, import the hardness measurements you performed on your specimen directly into Scentis and save them togeth with all other specimen data. Scentis displays the hardness measurements graphically, an several sets of data can be dis played in the same graph, ena bling easy visual comparison. The imported hardness measurements receive a read-only status and cannot be altered. As with the preparation equip ment, the hardness testers ca have any geographical locatio

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LAN connections allow the easy import and exchange of data

State-of-the-art Database Technology

Traditional image archiving software is based on relational databases, which handle alphanumeric data extremely well, but tie the user to pre-defined database field settings and offers little flexibility. Scentis however, is built on an objectoriented database. The advantages are numerous but most importantly it means that rigid field settings, relations and the number of fields available will never restrict you in your work again. You can easily add new fields and restructure your database at any stage as your requirements develop.

Another important advantage of the object-oriented database structure is the powerful search facilities that emerge. Any stored data can be employed as search criteria and you can perform searches across several databases without regard to their individual database structure.

The use of an object-oriented database results in greater speed, along with extremely flexible searching functionality, very easy creation of content, and much easier administration. In addition. Scentis database records can be linked to records in relational databases thus providing unsurpassed flexibility.

have floating licenses allowing an unlimited number of users to utilize the software but only as many at one time as licenses available.

Intelligent Archiving Scentis enables you to collect all data associated with your specimens and save them in one place. This greatly facilitates the subsequent report generation and provides powerful documentation abili-

Establishing a database is very easy using the built-in wizard. No knowledge about database applications is necessary. Scentis is based on an object-oriented database offering the ultimate flexibility in database structuring. You can build one or several databases, structured by customers, projects and specimens as you wish. Fields are easily picked from a list or new ones can be defined.

ties and transparency in relation to

quality assurance systems.

You can change a database structure at any time without affecting the data you have stored already, or even go for no structure at all. Scentis truly allows you to tailor your databases to your specific needs.

Scentis can be installed as single seat license or as workgroup licenses allowing users to share databases and data access. Workgroups

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Image Capture

Use Scentis to view the live microscope image, optimize it instantly if necessary and save it in Scentis. All the calibration values associated with the respective microscope lens are saved together with each individual image allowing for easy subsequent measuring. Scentis is compatible with both analogue and digital cameras.

Other Files and **Documents**

Any other file or document that you would like to associate with your specimens, your projects or customers can easily be imported and saved in Scentis.

Scentis was designed to interface seamlessly with all standard software packages such as Microsoft® Word® and Microsoft Excel[®]. This means that there is no need to change the way you presently work with your lab data. Scentis can acquire all data formats.

Maybe you have taken macro photos of your specimens with a digital camera, received specifications or reports from another department in your company or a mail from your customer that you want to save together with all your specimen data. With Scentis you can do this easily.





Using the perpendicular distance measurement several parallel measurements can be carried out along the same base line



- O Ellipse, to measure the area of an elliptical or circular shaped feature
- O Best fit circle, to trace a circular feature by defining a number of points
- O Perpendicular distance, to determine the distance of one or more points from a reference line.
- O Angle, to trace an angle in the image
- O Points, to mark points of interest and determine their position
- O Best fit line, to trace a line by defining points on or near the line
- O Angles of lines, to trace the angle between lines that have been traced in the image

Annotations and Area of Interest

With the annotations and area of interest tools you can easily add text and graphics to your images or isolate an area of interest from the rest of the image. These tools allow you to label image features of specific interest and add your personal comments. Annotations can be saved as overlays or be burned permanently into the image.

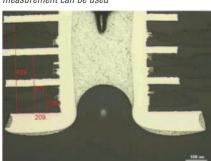


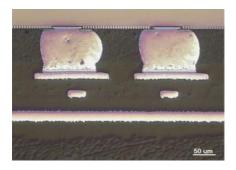
Scentis Image Modules

Perform even the most sophisticated image analysis by using one or more of the optional Scentis Image modules. Why purchase an image analysis system with features that you will never use? With Scentis you only purchase the image analysis module that you need. A large number of image analysis modules are available, many of which conform to ASTM, ISO and DIN standards:

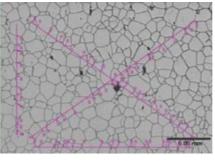
- O Multiple phase percent area
- O Grain size
- O Inclusion or second phase constituent measurement
- O Particle size / Sphericity
- O ASTM E384 micro indentation / macro hardness measurement
- O Brinell hardness measurement
- O Thickness, Layers and Coatings
- O Graphite in cast iron
- O Dendritic arm / cell spacing

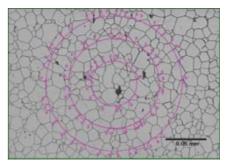
The Scentis image modules allow you to perform sophisticated analysis very easily. Simply select the appropriate analysis module and follow the intuitive guidance of the built-in wizards.





Two different ways of grain size measurement





Optimise your Images

To achieve optimal reproduction for reporting or image analysis, you can optimize your image automatically using the 'Best Fit' feature or adjust the parameters individually. The four most common parameters are available:

- O Contrast
- O Brightness
- O Gamma
- O Histogram

Manual Measuring

Scentis includes 11 measurement tools, which make it easy to perform and archive measurements directly into the database.

Manual measurements tools:

- O Line tool, to trace the length of a straight line
- O Point to point, to measure distance between two points
- O Polyline, to trace the length of irregular lines in the image
- O Polygon, to measure the area of an irregular shape

Also on PCB the perpendicular distance measurement can be used





Professional Reporting

Use Scentis to generate professional and comprehensive reports. With all your specimen images and associated data stored in one place, you have the possibility to include as few or as many images and data as you like in one single report, including measurements, image analysis results, preparation methods and hardness graphics.

Scentis comes preloaded with many List & Label[®] report templates which are easy to use and modify, or new templates can be created by the integrated report designer to meet your specific requirements.

The resulting report can be saved in a variety of formats including Microsoft Word®, Microsoft

Excel[®], Acrobat[®] Pdf or html formats allowing you to share your results with your colleagues and other professionals.

Employ the Scentis Browser to make your images, data and reports viewable and downloadable via a web page. Scentis Browser uses the security profiles created in Scentis to allow access to the web page. Up to 1000 web visitors can view and download data from the web page simultaneously.



Fast and Powerful Search Tools

My Struers

One of the key functions of an archive is the ability to retrieve data fast and efficiently. Scentis offers a number of powerful search and query tools. You can search by key words, perform queries due to filters

and logical operators, and you can search in real-time context-sensitive mode, allowing you to reveal knowledge that would otherwise be unidentified.

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Data Mining

Data mining is a discipline well known from the consumer retail business. In materialography data mining, also known as image informatics, is a process of refining knowledge from the stored data and share it with colleagues and other professionals in a comprehensive form.

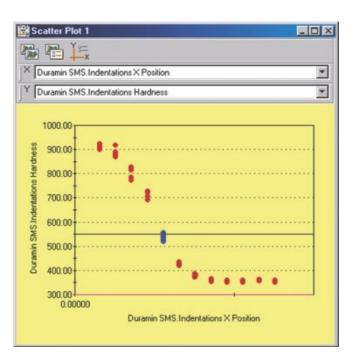
So rather than just being a location for storing research, Scentis provides the tools and the resources needed to gain valuable new insights from previously captured images and associated data.

Data mining allows you to track trends within your data that would otherwise be unidentified, simply because of the database structures traditionally used. As an example, you can select any value from a measurement and search for specimens with similar data values. No other materialographic database software offers this sophisticated level of context-sensitive data integration and searching.

The value of the data mining functionality increases greatly as the amount of data stored increases. Knowledge refined through data mining will assist you in your attempt to improve working procedures and quality and ultimately improve the competitiveness of your company.

Access Security

Maintain security with user levels, user groups and password access levels.



Advanced functions allow the graphic display of various results

Hardware

Struers recommends a QImaging digital camera for Scentis. For those that prefer to use their existing video cameras the optional Scentis frame grabber solution is available. The frame grabber accepts all standard video signal formats.

Struers Support Site

On-line support is available on the internet. As a registered Scentis user you have access to comprehensive self-help tools and online support from the Struers Scentis Team.

Floating License Management

The intelligent floating license management system allows for flexible usage of the licenses on the local area network. An unlimited number of users can utilize the Scentis software but only as many at one time as licenses available.

Single Seat or Network Access

Scentis is available for any size of laboratory. If data is collected and archived at a single workstation, consider the single seat license. If you have multiple data entry points or technicians and would like to share access to data, then a small workgroup license with up to 10 licenses will be necessary. Of course, large workgroups with up to 1024 licenses may be the answer. The large workgroup licenses include the server software required to use Scentis on a truly global scale.

A web browser solution even allows non-Scentis users to access data and reports on a view-only basis.

SPECIFICATIONS		Code:	Cat. no:	No. of users:
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Scentis 5.0 Large Workgroup License Scentis Lab Data Management System. Large workgroup license with floating licenses. Will interface with compatible equipment. PC required but not included. Does not include MP3 Camera or MV-Pro Frame Grabber. Includes 1 year of technical support.			36001007 36001008 36001009 36001010 36001011 36001012	10 users 20 users 50 users 100 users 150 users 200 users
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	Particle Size / Sphericity ASTM E384 Microindentation / Macro Hardness Measurement	SCIPS SCIMI	36003004 36003005	
Please contact your Struers representative for more information about Scentis Image modules	Brinell Hardness Measurement Thickness, Layers and Coatings Graphite in Cast Iron Dendritic Arm / Cell Spacing	SCIBI SCITI SCICI SCIAS	36003006 36003007 36003008 36003009	
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Scentis Large Workgroup Support Contract Technical support contract renewal for large workgroup for a 1 year period. Note: 1 year of technical support is included in the first year of a Large Workgroup License purchase.			36002007 36002008 36002009 36002010 36002011 36002012	10 users 20 users 50 users 100 users 150 users 200 users
equipment and software need to b IBM compatible PC Processor: Pentium 3, 1 GHz RAM: 512 MB	/indows [®] 2000 or Microsoft Windows [®] XP			

Windows[®] compatible mouse, keyboard and CD-ROM drive Scentis™ is developed in co-operation with Media Cybernetics[®].

Professional A VGA (or better) resolution 256 colour display device

Media Cybernetics[®] is a registered trademark of Media Cybernetics Inc.

Struers' products are subject to constant product development. Therefore, we reserve ourselves the right to introduce changes in our products without notice.





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07.04/ 62141600 Printed in Denmark by Richard Larsen Grafisk - 35