

# Dendritic Arm Spacing

## Scentis Image Modules

Designed for use with Struers  
Scentis Lab Management System

**Introduction:** The Dendritic Arm Spacing (DAS) Module is specifically developed with accuracy and repeatability in mind. By using the latest image analysis techniques a user can automatically determine DAS in most materials. Unlike manual methods, the module employs an interactive method for proper selection of dendritic arms. This allows the operator to quickly “teach” the system what to look for with respect to DAS patterns.

Whether you’re a seasoned image analysis professional or a novice, you will find the intuitive interface and Wizard features of this module reassuring as you greatly improve both the quality and throughput of your testing.

### DAS Measurement

- Accurately determine DAS in most materials
- Use the interactive pattern recognition function to designate arms
- Use the interactive dendrite orientation feature to properly align measurement lines over dendrites
- Measure
  - Total spacing count
  - Mean spacing
  - Minimum spacing
  - Maximum spacing
  - Standard deviation spacing

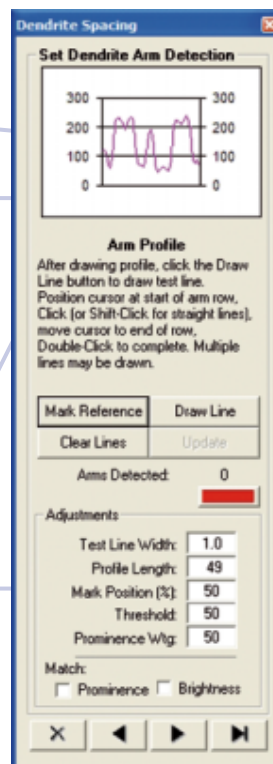
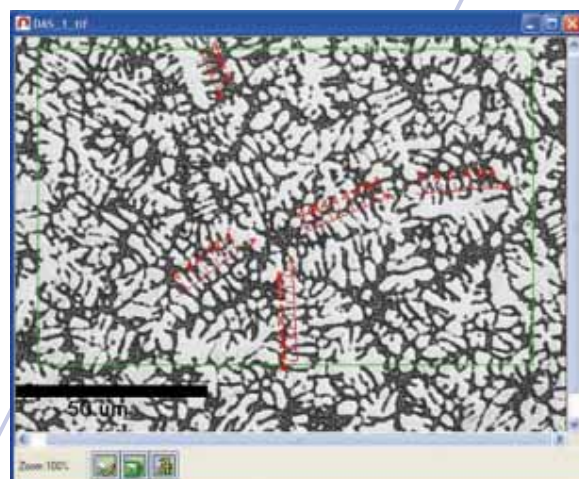
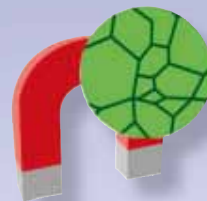
### Reporting Options

- Multiple reporting options include:
  - Raw data reporting
  - Built-in report generator using List & Label<sup>®</sup>
  - Export to Microsoft Excel<sup>®</sup>

Optional plug-in image analysis modules provide state-of-the-art evaluation methods for everything from grain sizing to inclusion rating. Employ image analysis modules for evaluations according to international standards.

Why purchase an image analysis system with features you will never use? With Scentis you only purchase the image analysis modules you need.

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.



### New to image analysis?

Try the built-in Scentis Wizard for simple step-by-step assistance through the entire process.

### A seasoned professional?

Get directly to the analysis with powerful built-in tools.

### Desire repeatability?

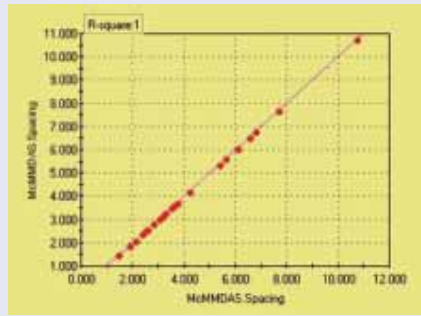
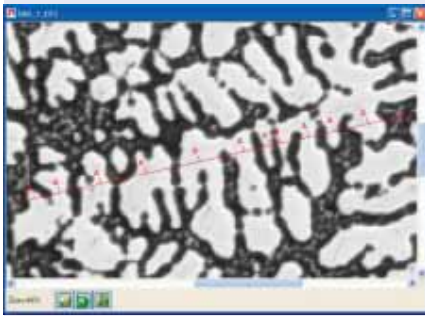
Easily establish a “best practice” by utilizing the built-in technique recorder.

### Desire reproducibility between operators or multiple laboratories?

Share your methods with other module owners using our unique “setup” filing structure.



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**DAS - 1-21-2005 Specimen-3**

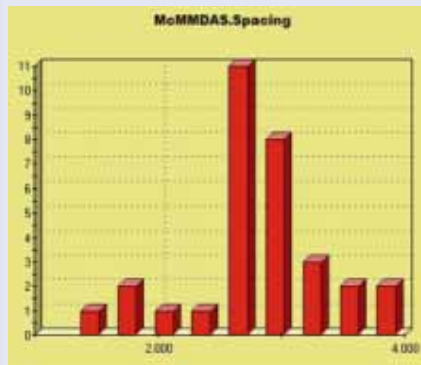
Dendrite Arm Spacing Data

Specimen	Field
Specimen Name: DAS - 1-21-2005 Specimen	Field Width: 148.43
Specimen Area: 18509.90	Field Height: 111.19
Specimen Fields: 1	Field Area: 16509.35
Number of Specimens: 1	Resulted Field Area: 18509.35
	Image per Field: 1

Entry Date: 1/21/2005  
 Number of Fields: 1.00  
 Total Spacing Count: 29.00  
 Mean Spacing: 3.34  
 Minimum Spacing: 1.63  
 Maximum Spacing: 10.26  
 Std. Dev. Spacing: 1.67

**Dendrite Spacing Summary**

Entry Date: 1/21/2005  
 Number of Fields: 1.00  
 Total Spacing Count: 29.00  
 Mean Spacing: 3.34  
 Minimum Spacing: 1.63  
 Maximum Spacing: 10.26  
 Std. Dev. Spacing: 1.67



**Scentis Image Modules**

A large number of image analysis modules are available, many of which conform to ASTM, ISO and DIN standards:

	Code:	Cat. no:
Multiple Phase Percent Area	SCIPA	36003001
Grain Sizing	SCIRA	36003002
Inclusion or 2nd-Phase Constituent Measurement	SCIND	36003003
Particle Size / Sphericity	SCIPS	36003004
ASTM E384 Microindentation / Macro Hardness Measurement	SCIMI	36003005
Brinell Hardness Measurement	SCIBI	36003006
Thickness, Layers and Coatings	SCITI	36003007
Graphite in Cast Iron	SCICI	36003008
Dendritic Arm / Cell Spacing	SCIAS	36003009

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.

For further information on these modules, contact your local dealer. You can also visit us at [www.struers.com](http://www.struers.com)

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

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