

VLF Demo

# Import of Bitmap file containing Microstructure Data into VirtualLab Fusion



In this demo, we illustrate the workflow of how to import data of a microstructure given in bitmap format into VirtualLab Fusion.



#### Step 1

• Use the import function to import the bitmap file as numerical data array.

#### Step 2

• Set the physical property of the data array



x-Axis		y-Axis			
Description X		Description	Y		
Physical Property	Length ~	Physical Property	Length ~		
Interpolation Method	Nearest Neighbor $~~ \lor$	Interpolation Method	Nearest Neighbor ~		
Dimensions		Dimensions			
Array Size	~ 53 μm	Array Size	~ 53 μm		
Includes complete fir	st and last interval	Includes complete first and last interval			
Positioning		Positioning			
Center Around Zero	~	Center Around Zero	~		
* * *	<del>* * * *</del> *	* * * *	* * * *		

## Step 3

• Set proper import value for grey value and dimensions during import



#### Step 4

 Check the height value of the imported data array and adapt it via Manipulation menu. (e.g. multiplication with constant).



### Step 5

 Use Microstructure or DOE component -> Channel Operator -> Stack

#### Step 6

 Load the imported data array to the sampled interface

Edit	Stack							×
	Index	z-Distance	z-Position	Interface	Subsequen	it Medium	<b>-</b> .	Com
		Umm	Umm	Sampled Interface	N-BK/_Sch	ott_2015 in	Enter your co	ommen
<								>
V.	alidity:	9		4	Add	Insert	Delete	
	Stack F	Period is	Dependent f	from the Period of Interfa	ce v	with Index	1	•
	Stack F	Period		53 µm 🛛 🗙	53 µm			
3	0	Tools 🇌	•		ОК	Cancel	Hel	p

## Step 7

• Set extension of the stack to size of the DOE

## Step 8

• Increase the sampling factor for the TEA algorithm if needed



title	Import of Bitmap file containing Microstructure Data into VirtualLab Fusion
document code	Demo.0037
version	1.0
VL version used for simulations	VirtualLab Fusion Spring Release 2020 (Build 3.4)
category	Demo
further reading	