

DEFLEX® SPECKLING KIT

SPKI

A comprehensive set of tools and ink to easily apply an effective speckle pattern to a range of surfaces for use with the DefleX[®] DIC systems.



KEY FEATURES

- Three rollers with speckle studs of various sizes
- Five rocker stamps with speckle studs of various sizes
- Three stamp blocks
- · Sealable, airtight inking box to prevent ink drying out
- Specialised long-lasting ink and solvent cleaner
- Gives robust/clear speckle that is long lasting but can be removed from typical TecQuipment surfaces
- Guide on how to speckle a variety of surfaces and speckling requirements for successful DIC experiments
- Designed with TecQuipment products in mind

LEARNING OUTCOMES

• The DefleX® Speckling Kit is designed to help students create effective speckle patterns for DIC measurements



DEFLEX® SPECKLING KIT

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DESCRIPTION

The DefleX[®] Speckling Kit is a comprehensive set of tools designed to help students apply a speckle pattern to a variety of surfaces for DIC measurements. The kit includes a set of rocker stamps and rollers covered in flexible studs. The kit is designed to allow students to easily create patterns to cover a range of different surface profiles from flat areas, curved surfaces and small intricate areas.

WHEN A SPECKLED PATTERN IS NEEDED

A speckle pattern is required when the measured surface is too uniform or reflective, making the system unable to track the changes.

STANDARD FEATURES

- Five-year warranty
- Made in accordance with the latest European Union directives
- ISO9001 certified manufacturer

ESSENTIAL BASE UNIT

One of the following DefleX® products:

- DefleX®-2D
- DefleX[®]-3D



STAMP BLOCK

SPECKLE SIZE RECOMENDATIONS

Below is a table recommending ideal speckle sizes for various fields of view (FOV) measurements based on type of speckle pattern application.

TYPE:	SPECKLE SIZE:	LENGTH:	WIDTH:	FOR VERTICAL FOV Larger than:	FOR HORIZONTAL FOV Larger than:
Rocker	0.20 mm	45	15	72mm	108 mm
Rocker	0.35 mm	67.5	22.5	140mm	210 mm
Rocker	0.70 mm	90	30	280mm	420 mm
Rocker	1.25 mm	135	45	500mm	750 mm
Rocker	2.50 mm	180	60	1000mm	1500 mm
Base	0.20 mm	45	15	72 mm	108 mm
Base	0.35 mm	67.5	22.5	140 mm	210 mm
Base	0.70 mm	90	30	280 mm	420 mm
Roller	0.70 mm	188.5	80	280 mm	420 mm
Roller	1.25 mm	188.5	80	500 mm	750 mm
Roller	2.50 mm	188.5	80	1000 mm	1500 mm

OPERATING CONDITIONS

OPERATING ENVIRONMENT:

Laboratory

STORAGE TEMPERATURE RANGE:

5°C to +35°C (when packed for transport)

OPERATING TEMPERATURE RANGE:

+5°C to +35°C

OPERATING RELATIVE HUMIDITY RANGE:

80% at temperatures < 31°C decreasing linearly to 50% at 40°C

SPECIFICATIONS

- 1 x robust, lightweight carrying case
- 3 x roller heads with varying speckle studs sizes
- 5 x rocker stamps with speckle studs of various sizes
- 3 x stamp blocks with speckle studs of various sizes
- 1 x roller handle
- 1 x 150 ml bottle of black ink
- 1 x 150 ml bottle of cleaner
- 5 x clean ink pad
- 1 x scrubbing brush
- 1 x ink spatula
- Short guide on how to use equipment to create effective speckle pattens



ROCKER STAMP



ROLLER HEADS

TECOUIPMENT

