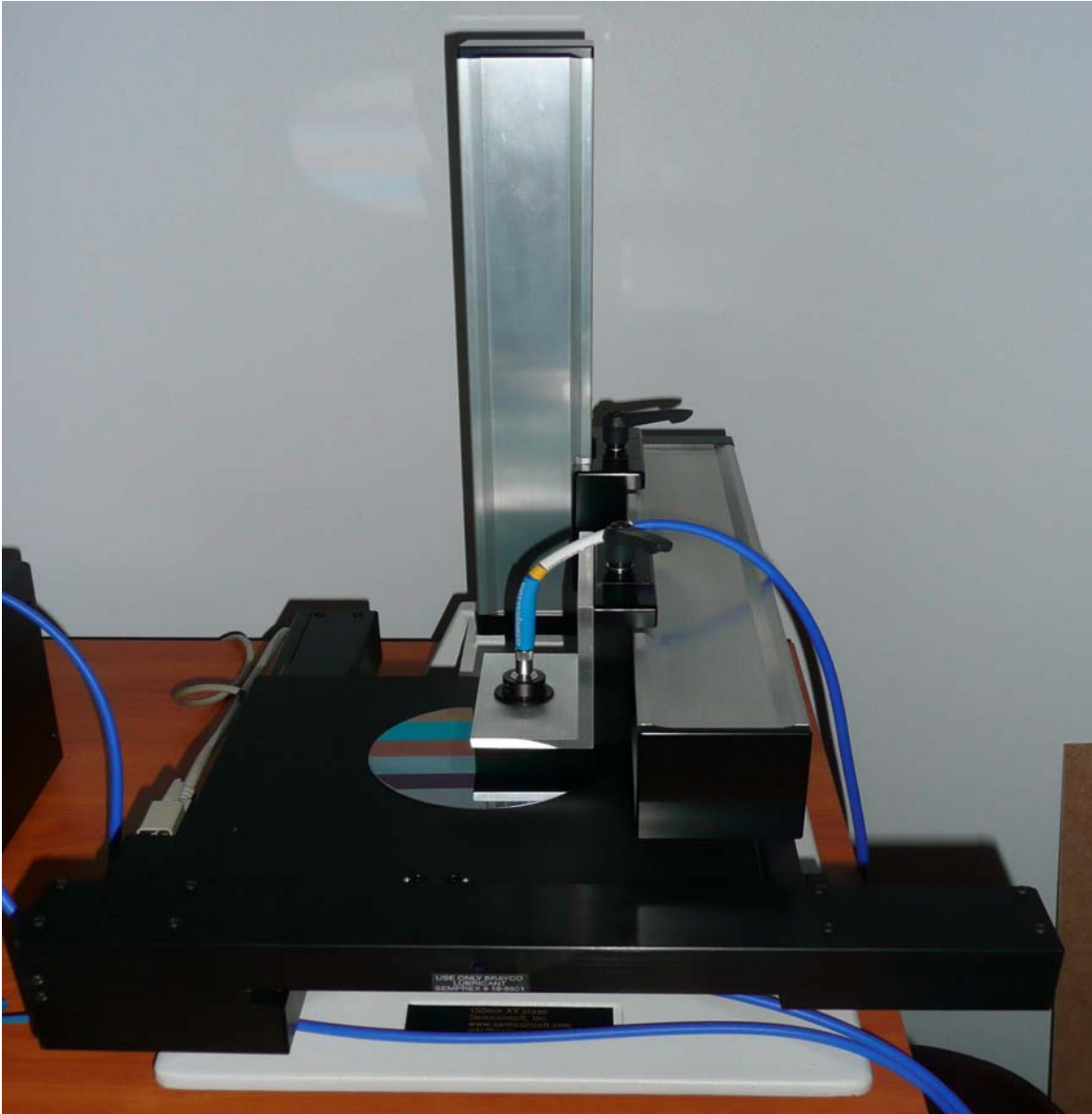


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**MProbe Spectroscopic reflectometer – Mapping option**



**Fig. 1** XY motorized mapping stage (X, Y travel up to 200mm) with 5  $\mu$ m position precision. The stage is mounted on iron-cast stand to provide stability in lab or production environment. Dovetailed crossbars allow positioning of the measurement head to accommodate samples of different size, thickness and geometry (vertical post height is 320 mm).

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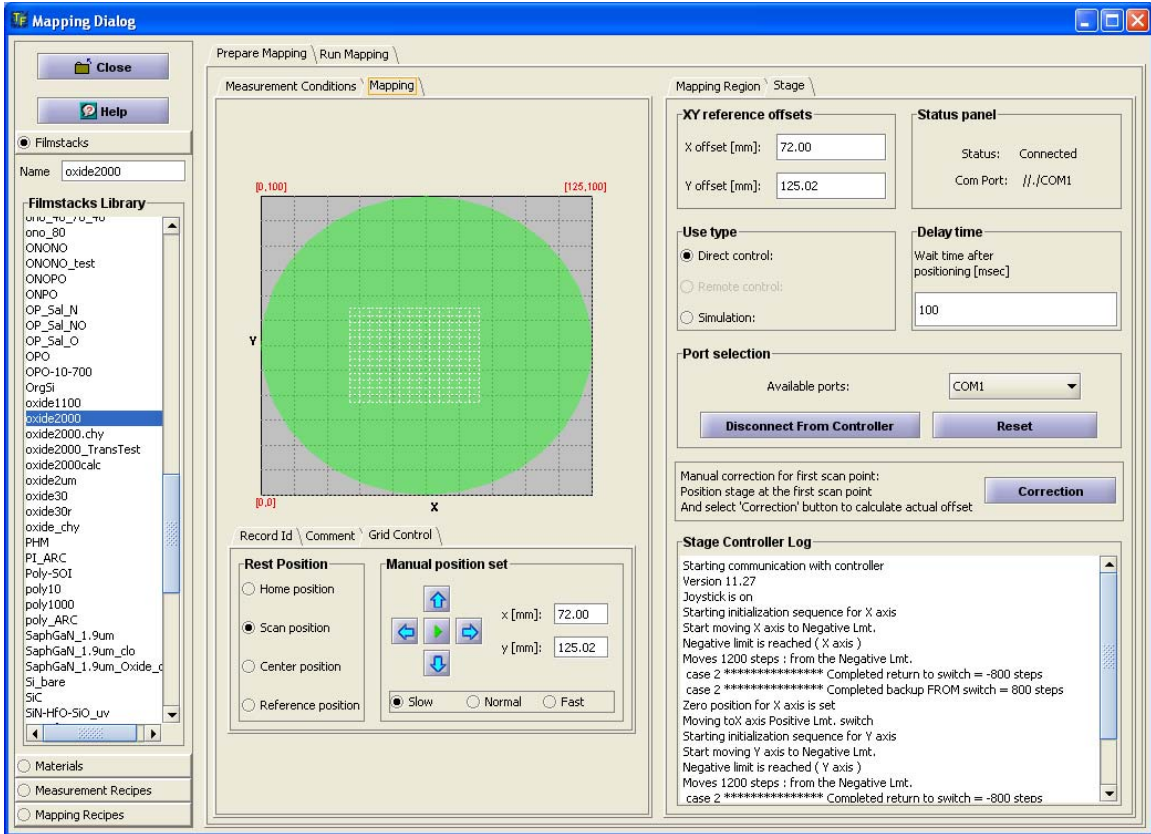
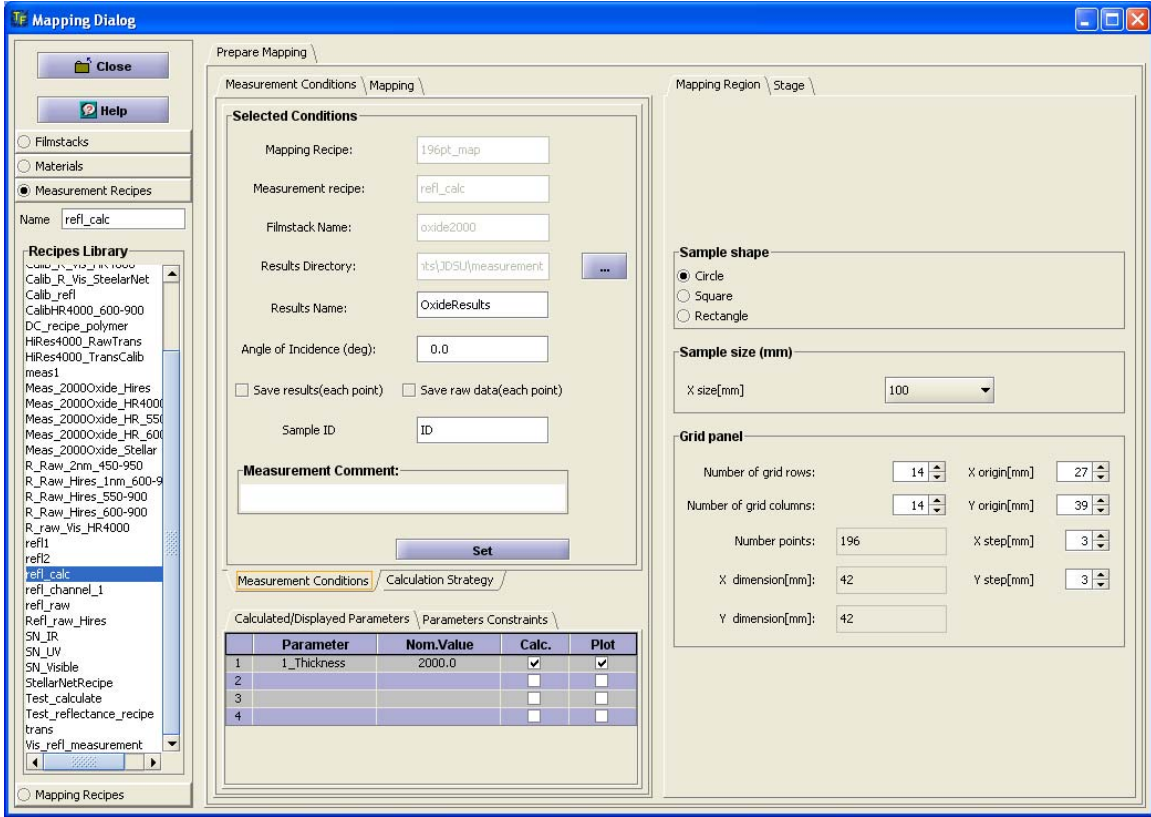


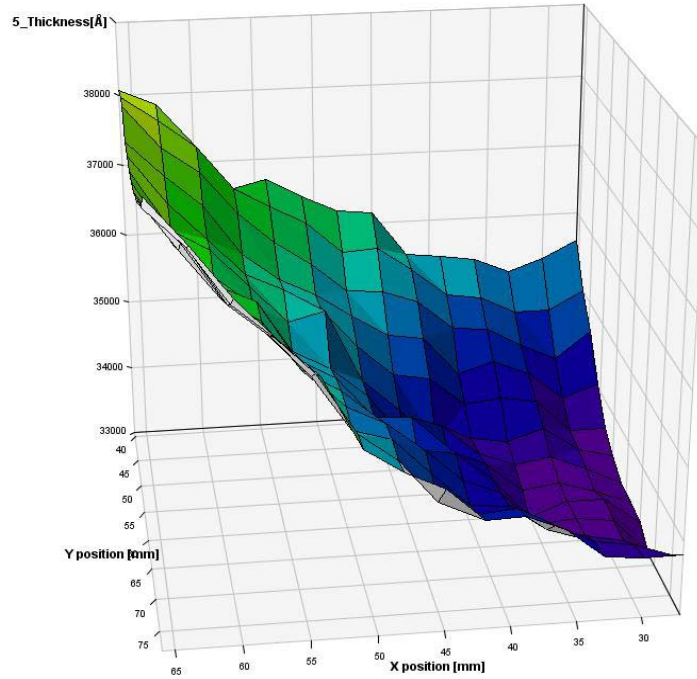
Fig. 2 TFC Companion software provides easy to use interface to setting mapping recipe

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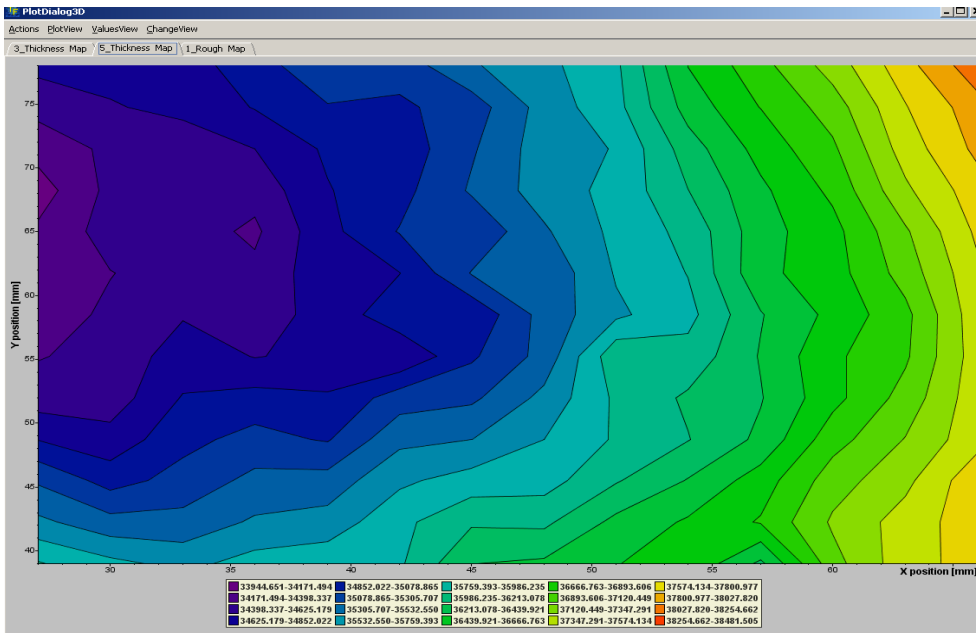


**Fig. 3** Measurement conditions, saving and calculation strategy can be easily setup

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**Fig. 4** LiNbO<sub>3</sub> (top layer) thickness map (Nominal thickness ~ 3.5um  
 Filmstack: 3 –15um LN/ 0.5um SiO<sub>2</sub>/1.2um Adhesive/0.01um SiO<sub>2</sub>/ 900 um LN  
 substrate



**Fig. 5** Contour map of LN thickness (same as Fig. 4 –rotated)

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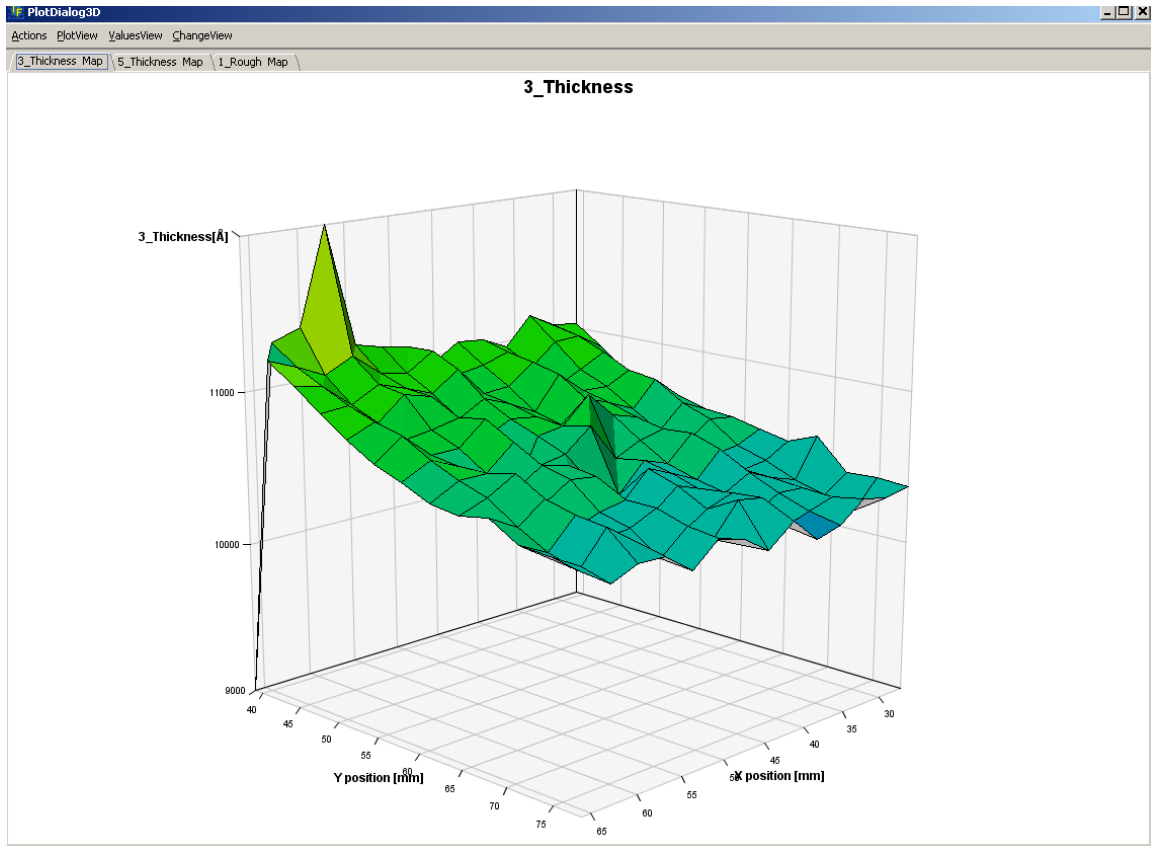


Fig. 6 Adhesive layer thickness.map (filmstack description at Fig. 4)

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**Fig. 7** MProbe VisHR with 150x150mm XY mapping stage.

**Weight:** Stand with 150x150mm XY stage stage - 8 kg.

Mapping controller (electronics) – 2 kg

**Size:** Stand with 150x150mm stage - 250x250x400mm  
(Vertical post height ~ 320mm)

Mapping controller (electronics) - 200x200x100mm

**XY stage specification:**

*XY stage options (mm):* 112x56, 150x100, 150x150, 200x 200.

Note. 300x300mm stage is available by special order.

*Repeatability:* <2 $\mu$ m

*Encoder resolution:* 0.5  $\mu$ m

**Measurement head:**

Includes focusing lens – standard measurement spot size 0.5-1mm

Measurement spot down to 10 $\mu$ m using microscope focusing block, CCD imaging integration is available

See MProbe brochure for measurement system specification

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