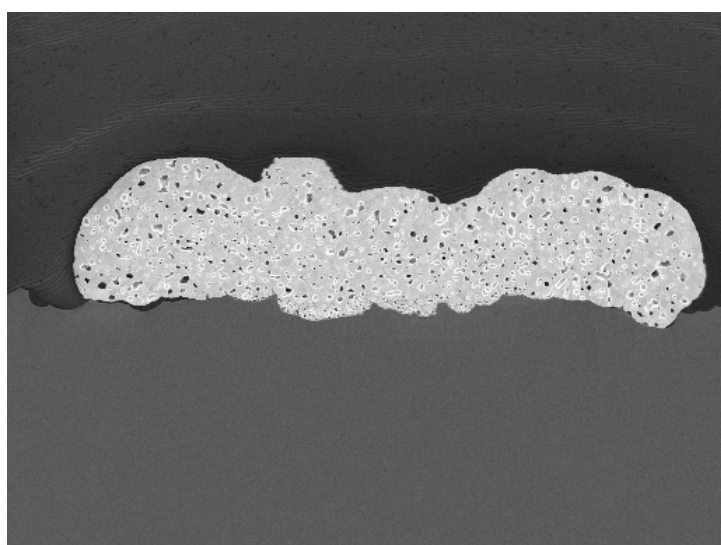
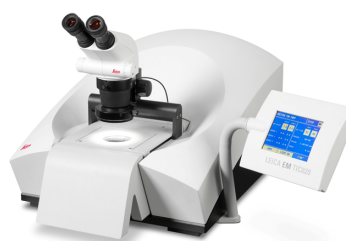


SEM MAG: 477 x DET: SE
HV: 5.0 kV DATE: 07/24/08 100 um Vega ©Tescan
WD: 6.6830 mm Device: RES120 BAL-TEC

Cross section of the solar cell consisting of contact finger, cell and metal contact



SEM MAG: 1.69 kx DET: SE
HV: 5.0 kV DATE: 07/24/08 50 um Vega ©Tescan
WD: 6.6830 mm Device: RES120 BAL-TEC



Leica EM TIC020 –

Cross Section of Solar Cells

Market: Solar energy companies, material research Institutes

Companies (e.g.): ISC Freiburg, Sun Carrier, ASP, Fronius, Fotovoltaica, Oerlicon Solar, Philips, etc.

Living up to Life

Leica EM TIC020 Application No. 1/6

Cross Section of Solar Cells

Goal:

- Cross section of a complete solar cell

Process description (benchmark values for this particular sample):

Mechanical pre-preparation: Protection of the solar cell top

Parameter	Step 1
Acceleration voltage	7 kV
Gun current	2.6mA
Milling time	5 h
Cut depth	620 μm
Complete process time	6 h

Results:

- Perfect cross section of the solar cell
- Information about the metal finger and its interface to the cell

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