

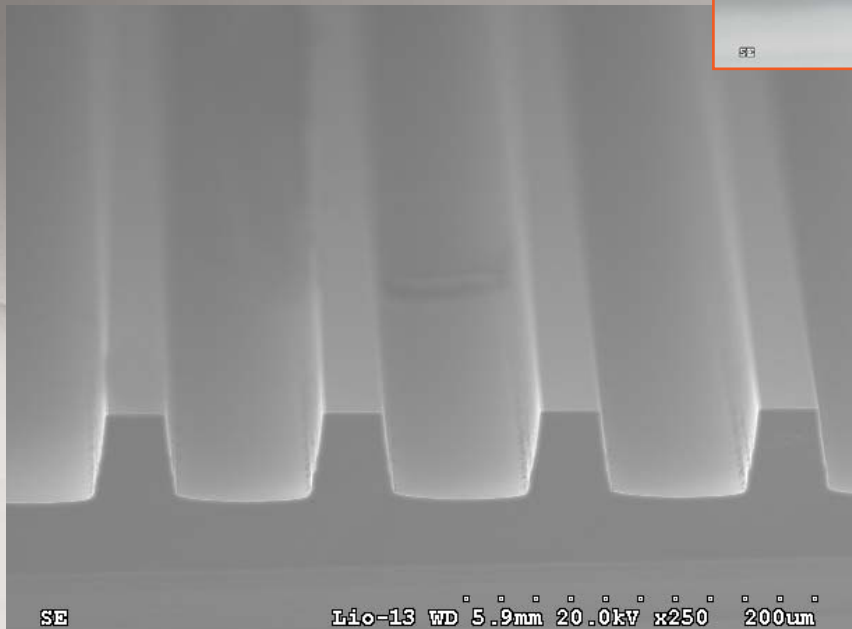
DEEP RIE *of* BOROSILICATE GLASS

for Microfluidic Channels

AMS "I-Speeder" series
Advanced Deep Plasma Etching Tools



Courtesy of **LioniX**



Wafer size : 100 mm
Feature width : 75 μm
Etch depth : 47 μm
Etch rate : 0.39 $\mu\text{m}/\text{min}$
Profile : 85 degrees
Selectivity Glass/Si : 18

Etching of **47 μm DEEP** Microfluidic Channels
with Positive Taper Profile and
VERY SMOOTH Trench Bottom

adixen

by Alcatel Vacuum Technology

Adixen* Micro Machining Systems (MMS) is a business unit within Alcatel Vacuum Technology headquartered in Annecy, France. Adixen MMS is a world-class supplier of deep plasma etching systems to manufacturers of MEMS (micro electro mechanical systems) and devices related to microelectronics and micro packaging applications. With their very high aspect ratio trench etch, superior etch rate and profile control capabilities, the Adixen AMS "I-Speeder" DRIE ICP systems offer the key technology to meet the most challenging deep plasma etching requirements.

The AMS "I-Speeder" tool range includes process and hardware platforms developed for superior deep plasma etching of Silicon, SOI and Glass-like materials. The tools can be configured to meet the specific requirements of various manufacturing configurations, from R&D to high volume production environments.

*"Adixen" is the new brand name launched by Alcatel Vacuum Technology in February 2004 to emphasize its long-term experience and growth in the semiconductor and microsystems markets.

For more information please contact :

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LioniX

LioniX is a leading provider in development and small to high volume production of leveraging and innovative products based on microsystem technology and MEMS. Our core technologies are integrated optics and microfluidics.

LioniX' customers operate in telecom, industrial process control, life sciences and space markets and include OEM's, multinationals, VC start-up companies as well as research institutions from around the world.

LioniX offers design for manufacturing and horizontal integration by partnering with MEMS/MST foundries and suppliers of complementary technologies. Cooperations are based on subcontracting, licensing of IP or joint ventures.

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