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3D-Micromac receives large volume orders from leading Asian solar manufacturers for *half-cell cutting* systems totaling more than 3 GW

Enhanced module power gain by thermal laser separation for solar cell separation compared to scribe and break technology

3D-Micromac AG, the industry leader in laser micromachining and roll-to-roll laser systems for the photovoltaic, medical device and electronics markets, today announced that the total received order volume for its microCELL TLS high-throughput half-cell cutting tools tops 3 GW in 2019.

The microCELL TLS systems use Thermal Laser Separation for separation of standard silicon solar cells into half-cells. The ablation free process guarantees an outstanding edge quality. The separated cells show an approximately 30% higher mechanical strength. By using Thermal Laser Separation, module manufacturers are enabled to guarantee a lower power degradation value over lifecycle of the solar module. Furthermore, a module power gain of 1-2 W was seen with TLS compared to conventional scribe and break methods, in addition to the 5-7 W per module gain of half-cell module technology.

Media, analysts and potential customers interested in learning more about 3D-Micromac's laser systems for silicon solar cell and flexible photovoltaic, including microCELL TLS, are invited to visit the company at SNEC 2019, June 4-6 at the Shanghai New Int'l Expo Center in Hall N3, booth #111. More information on microCELL is also available on <https://3d-micromac.com/laser-micromachining/products/microcell/>.

About 3D-Micromac

Founded in 2002, 3D-Micromac AG is the industry leader in laser micromachining, delivering powerful, user-friendly and leading edge processes with superior production efficiency. We develop processes, machines and turnkey solutions at the highest technical and technological level. 3D-Micromac systems and services have been successfully implemented in various high-tech industries worldwide including photovoltaic, semiconductor, glass and display industries, micro diagnostics, and medical technology. For more information, visit the company's website at <http://www.3d-micromac.com>.

Company Contact:

Mandy Gebhardt
Manager, Marketing and Public Relations
3D-Micromac AG
Tel: +49 371 40043-26
E-Mail: gebhardt@3d-micromac.com

Agency Contact:

David Moreno
Vice President
MCA, Inc.
Tel: +1.650.968.8900, ext. 125
E-Mail: dmoreno@mcapr.com