ASYS Solar introduced ALIGNUS – the new Generation of High-End Metallization Lines

Atlanta, GA (June 21, 2012) – ASYS Solar is proud to announce the next generation in the evolution of high performance metallization lines. It succeeds the ULTRAline SUPER and is based on a revolutionary alignment technology that delivers the industry’s lowest breakage rates at maximum throughput. Equipped with a guideless alignment system and a take-over module from the firing furnace, the Alignus minimizes breakage rates to 0.15%.

The guideless alignment systems handle the solar cells softly with no edge contact. An optical inspection system ensures Y/Theta alignment for advanced levels of accuracy. A new take-over module after the firing furnace, the SFU 01, unloads the wafers safely from the fast firing furnace. On the outlet section of the furnace a smart camera system detects wafer position and orientation. Wafers with a position error out of tolerance or ones that are heavily damaged are sorted out. Good cells are passed on to an integrated alignment section in the SFU01, where the wafer position is detected by an image processing system that automatically corrects the wafer position in the Y and Theta directions. The SFU 01 can optionally be equipped with a breakage inspection option, which detects minor or serious mechanical damage on the wafer edges, allowing these wafers to be removed from the production process. An additional transport segment with a wafer lift is available as an option, allowing bad wafers to be lifted out by the operator while good wafers pass underneath. In case the SFU 01 or the next downstream machine is not able to accept incoming wafers, an error loop signal is sent upstream to stop further loading of the fast firing furnace. The Alignus Metallization Line also features, in addition to the common systems, a new ASYS AAA IV curve tester that provides high accuracy measurement in mass production. The STH delivers best-in-class measurement performance with enhanced pulse stability through an active power drive.
Scalable Architecture for Dynamic Production Requirements
The new Alignus does not only push the frontiers of lowest breakage rates but also provides the unprecedented high throughput of the ULTRAline Super. Alignus is available in single, dual and triple lane configurations, with throughputs ranging from 1,600 up to market leading 4,800 cells per hour. It is comprised of independent modules, allowing customers to configure the line exactly as needed. An easy field upgrade or addition of modules is possible, such as printers for Double Print applications or alignment systems for Selective Emitter and Metal Wrap-Through. Due to its flexible concept, the Alignus Metallization Line can easily be upgraded to meet the requirements for future processes and offers easy access and operation, hence reducing labor costs.

**Alignus Single Lane - up to 1600cph**

**Alignus Dual Lane - up to 3200cph**

**Alignus Triple Lane - up to 4800cph**

6σ Quality Standard in Screen Printing
ASYS screen printers provide high precision and high throughput for all production demands.

6 Sigma is the ASYS standard for maximum quality in solar production.

ASYS SOLAR is one of the leading equipment suppliers to the photovoltaic industry, specializing in the metallization process of solar cells. ASYS manufactures single, dual and triple lane production lines with throughputs of up to 4,800 cells/hour. The product portfolio includes loading/unloading units, micro crack inspection, screen printers, post print inspection, dryers, laser edge isolation as well as cell testers and sorters. With the lowest breakage rate in the industry, and more than 17 GW of installed production capacity worldwide, ASYS is the preferred partner for cell manufacturers.
For more information on ASYS products please call (+1) 770 246 9706, or contact ASYS by fax at 770 246 9866, by mail at 140 Satellite Boulevard NE, Suite B1, Suwanee, GA 30024, or at www.asys-group.com.