

CIGS Production by Würth Solar

Illustration

CIGS solar cells got a big boost when one of the classical entrepreneurs from the heydays of the German *economic miracle* took an interest in the topic.

- **Reinhold Würth**, started as an apprentice in the hardware store (specialized on screws) of his father in Künzelsau (in Suebia). He took over, **19** years old, in **1953** when his father died. Then he turned the small local company into the "Würth group", nowadays present in **86** countries and grossing **8.5 · 10⁹ Euro** in **2007**
- **1994** his daughter took over the company he founded - giving **61** year old Reinhold Würth the opportunity to pursue a few hobbies like collecting art in a major way (he owns a few museums for his **> 10.000** substantial art pieces), teaching at various universities (and collecting honorary degrees in the process), riding his Harley-Davidson whenever he doesn't pilot his plane (he has a professional licence and his **CIGS** factory is next to his private airport in Schwäbisch-Hall), or furthering the cause of alternative energy.
- **1999** he founded [Würth Solar](#), being fascinated with photovoltaics and in particular with **CIGS**. Being a successful business man, his goal was to get the **CIGS** technology into industrial large-scale production
- Cooperations with the "Zentrum für Sonnenenergie- und Wasserstoffforschung Baden-Württemberg" (**ZSW**) lead to a pilot factory in Marbach (next to the town I grew up in and birthplace of Friedrich **Schiller**) and to the first major **CIGS** factory built in **2006** in Schwäbisch Hall for **55 · 10⁶ Euro**.
- Here is their Internet page with some data about the factory.

The screenshot shows a web browser window displaying the Würth Solar website. The address bar shows the URL: <http://www.wuerth-elektronik.de/website/frames.php?parLANG=EN&parKAT=392>. The website has a navigation menu with items: News, Press, Company, CISfab, Product, CIS Applications, Contact, Jobs & Career, and Miscellaneous. The main content area is titled "Facts and Figures about the new CISfab" and includes a sub-section "The CISfab in Figures" with the following data points:

- Investment: 55 mil. EUR
- Fully automated production with around 1,000 feeder bands, continuous process chain from the raw material to the finished CIS solar module in 24 individual networked steps
- Planned annual production capacity: 200,000 CIS solar modules or 14.8 Megawatts (from 2007)
- Employees: 175 at full capacity of the factory (2007) of whom 35 are from the sales partner Würth Solergy
- The land area of the CISfab is 30,000 m²
- Utilised area: around 13,700 m²
- Gross floor area in total: around 22,600 m²
- Tailored: plant technology specially developed in collaboration with plant manufacturers for the requirements of the Würth Solar CISfab
- Installation of CIS modules (of own production) on the CISfab building to produce 150 kW power. This roughly corresponds to the average annual consumption of 36 4-person households.

At the bottom of the page, there is a copyright notice: "website copyright © 2003 Würth Solar GmbH & Co. KG, Germany. All rights reserved" and links for "website contact" and "Imprint". The footer also includes language options for "Deutsch" and "Français", a "Back" button, and the company name "Würth Elektronik GmbH & Co. KG".