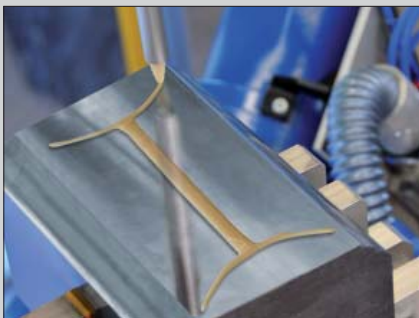
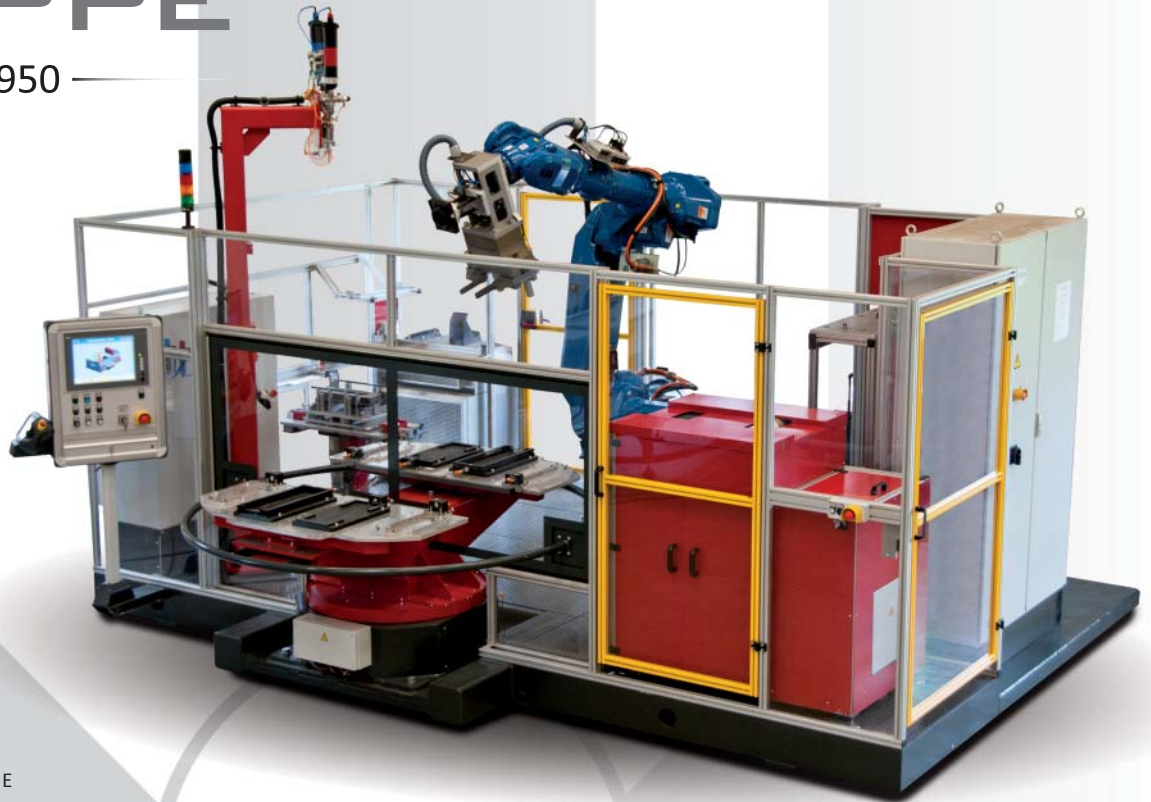




ARNOLD GLUEING CENTER

OUR AMBITION IS: THE PERFECT LINE

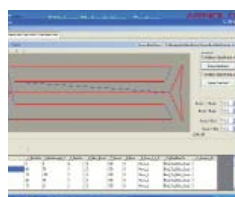


Exact glueing of bricks on the wire-saw beam as pre-stage to subsequent wafer processing is of high significance. High yield at wafer cutting can only be achieved through a continuous repeatable and stable adhesive joint. Nowadays still about 90% of glueing work in industry is still carried out manually and is therefore, to a great extent, dependant to the machine operator.

Reduction of Costs by Process Automation and Yield Optimization

ARNOLD offers a complete production line of automated glueing systems tailored to your requirements. Regardless whether it is your goal just to automate the adhesive application process or whether you seek handling of the entire process starting from cleaning of the brick also covering glueing up to assembling of brick pieces: We provide an adequate solution to you. It is up to your choice to decide for integration of the glueing station into our automated brick processing line (in-line-system) or for a stand-alone system – operating independently from the prior mechanic brick processing. Your advantage: Automated adhesive application leads to substantial reduction of processing costs resulting in a surplus of yield → up to 3%.

Our Ambition is: The Perfect Line



System components of high quality in combination with optimized adaptation are the basis of a stable production process. The dosing system, a volumetric dosing unit working on the principle of endless-screw as well as adhesive application and brick handling via industrial robot are common standard for all system options.

Your Advantages:

- extremely low material irritation by dosing – no shearing of adhesive
- high precision dosing system reduces adhesive consumption
- continuous monitoring of all necessary process parameters (e.g. dosing pressure, application volume) for continuous quality control
- exact positioning of bricks and glass plates via robot

Compared to manual dosing this enables a reduction of adhesive of about 50%. Our **AEPS – ARNOLD Easy Panel System** - is a unique software tool to configure application of adhesive beadings in a completely free and individual manner – irrespective of any programming knowledge. In addition **ARPAT – the ARNOLD Remote Production Analysis Tool** – collects, visualizes and analyses production and process data in real time. Thus any process related production parameter will be at your disposal and even the operator is able to optimize his work systematically and continuously in the so-called „close loop process“ leading to further reduction of production costs and moving you ahead in competitiveness.

Arnold Automation Technology: Experience for Profitability

As automation experts for automobile and photovoltaic business ARNOLD has been a reliable partner in industry for over 20 years now. Thanks to the expertise in intelligent monitoring and process control systems ARNOLD is in a position to optimize the entire wafer production process in a step spanning manner. With respect to the adhesive process e.g. an intelligent choice and positioning of the cropped brick pieces - produced in the prior process step - on the wire saw beam is the basis for optimized utilisation of wafer saws in the subsequent wafer cutting process.