

Synova Reinforces Partnerships on the Basis of its Integration Package

Since 1997, Synova SA, has been pioneering the Laser MicroJet® technology exploiting the synergy of laser power with water (see Figure 1). The water-guided laser beam cuts kerfs in any shape or form with perfectly parallel and clean edges and virtually no heat impact. The same way, holes are drilled with a flawlessly smooth surface and no burrs for a vast variety of uniform or compound materials.

As the technology enables unprecedented possibilities and allows for substantial reduction of total cost of ownership, numerous machines have been successfully operating for many years. Typical application fields are high-precision processing of semi-conductors, metal parts and hard materials including diamonds.

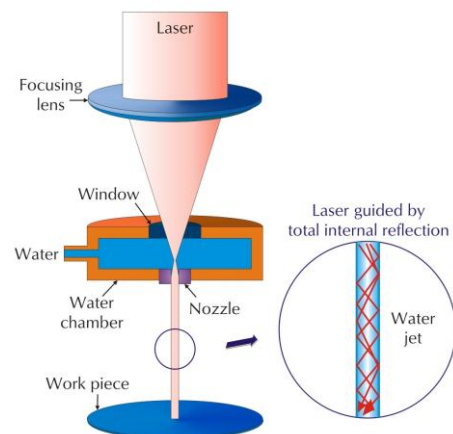


Figure 1- Laser MicroJet Process



With the ever-increasing complexity of the application fields, Synova decided to reinforce its cooperation with competent partners in order to respond to the equally growing demands. Synova supplies the patented core technology in form of the integration package consisting of laser system, water treatment & pressure system and the optical head with the coupling unit. Partners provide engineering resources and manufacturing facilities to build dedicated machines well adapted to the particular needs of a specific application. The synergy of Synova's material processing know-how combined with the application know-how of the partner company guarantee the success of the common efforts.



Several partnerships have been successfully launched such as with Posalux SA - Switzerland for the manufacturing of injection nozzles, Rena GmbH – Germany for the grooving and phosphor-doping of solar cells, or Sahajanand (P) Ltd – India for the cutting of gem diamonds. Typically, the partnership starts with the supply of a first integration package, training of the partner's personnel to operate the system and engineering collaboration for the mechanical integration. As for the software integration, Synova provides a full control system with an industrial PC, software and standard control interfaces. Available simulators for the software accelerate the integration process that can be started already before all mechanical elements are ready to be tested.

It has been very rewarding to collaborate with the highly experienced and proficient partners, says Benedikt Schwartz, Director of Business Development at Synova. Each party brings highly specialized knowledge on technology and its industrialization into the partnership. Such a deep knowledge base would be very difficult to cultivate and to maintain in a "single-company environment". Hence Synova is particularly proud about the success of the products coming out of these collaborations.

In this context Synova has geared its internal structure to develop further partnerships. Specialists from the application lab, from the engineering and from the service department work in close collaboration with their equals at existing and potential partner companies. Benedikt Schwartz is busy evaluating the various application fields and potential partnerships with the focus to create win-win situations for all parties involved. Synova is very happy about its accomplishment of the reoriented strategy and is looking into a bright future.



Synergy Innovation with Laser MicroJet® Technology