

Product Development Fact Sheet

The process of rapid development of products based on new technological methods such as 3D scanning, rapid prototyping 3D printing or tooling numerically controlled machines. Three-dimensional scanning patterns or models using optical 3D digitizer ATOS receive a high-quality measurement results, and in many cases the reconstruction surface is not required, but used directly ATOS's polygonized network.

Tools for sheet metal processing mostly hand-optimize until you achieve the required quality of manufactured parts. To begin serial production should make copies of such optimized tools, but the new form is not known. Quality and rapid digitalization using the ATOS copying is easy to implement and thus speeds up the process of preparing series production, which is why this procedure is used by many automobile companies.

Parts manufactured by casting or forging being worked fine until the final shape using a numerically controlled milling machine. If ATOS establish a precise form of raw pieces of milling process can be accelerated considerably by eliminating empty courses of the tool and prevent its collision with the material. Otherwise machining machine must be programmed with much more reserves, resulting in significantly longer duration of treatment.

Clay Modelling Studios

The development process has to harmonize the vision of perfect design with economic and functional requirements. Innovative design concepts must be quickly translated into digital data for CAD/CAM software. The ATOS 3D Digitizer is ideal for

- Quick and precise scanning of exteriors & interiors within a few hours
- Obtaining a perfect database for reverse engineering, particularly class A surfacing
- Capturing surfaces & tape lines
- Speeding up design concepts & mock-up phases



Rapid Technologies

ATOS 3D scanning data is also used in rapid technologies such as 3D printing and CNC manufacturing for:

- Functional analysis
- Virtual assembly
- Digital reproduction
- Prototype development
- Tool development
- Direct scaling and copy milling of STL data
- Optimizing CFD computations
- Fast switching to different sizes and materials

