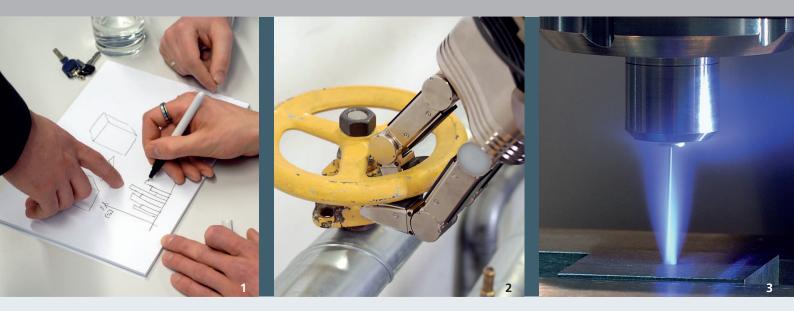


FRAUNHOFER INSTITUTE FOR MANUFACTURING ENGINEERING AND AUTOMATION IPA



SHORT PROFILE

The Fraunhofer Institute for Manufacturing Engineering and Automation IPA was founded in 1959 and incorporated in the Fraunhofer-Gesellschaft in 1971. It is one of the largest single institutes within this research organization and employs around 370 scientists. It has an annual budget of approximately 50,25 million euros, of which 19.3 million euros derive from industrial projects.

The Fraunhofer IPA is made up of 14 individual departments engaged in the fields of Production Organization, Surface Engineering, Automation, and Process Technology. Our research and development work focuses on organizational and technological issues in the manufacturing environment of advanced industries, including Automotive, Mechanical Engineering, Electronics and Microsystems Engineering, Energy, and Medical and Biological Engineering. The R&D projects aim to enhance production processes and make products more cost-effective and environmentally friendly by identifying and exploiting the potential for automation and streamlining at our customers' companies. This helps to maintain jobs and to strengthen international competitiveness.

1 Planning Example.

2 Remote-controlled inspection robot with semi-autonomous operation function.

3 Cleaning of inner geometries and other cavities with hypercritical CO₂ and CO₂-snow.