

The femtosecond laser at the service of society

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Surface texturing is a key enabling technology in today's and tomorrow's world. Nature has given fabulous surface functions to human, in order to survive, to perform. Human being, in constant quest for evolution, aim to replicate the surface provided by nature on all kind of materials and for various functions.

The femtosecond laser is a breakthrough technology that meets these challenges. Photons, coherent, pulsed in a time scale near to the heat relaxation time. Thus femtosecond lasers have the capability to design any kind of surface with micrometric precision.

The EIG Manutech USD works to increase technologic maturity from TRL 4 to TRL 6 and benefits skills and capabilities of its 6 members (Jean Monnet University, Ecole Centrale de Lyon, Ecole des Mines de Saint-Etienne, Hef Group, We Are Group and CETIM) and thus cover the TRL scales of the femtosecond laser from 1 to 9, from research to industrialization. As such, Manutech USD and HEF, in close collaboration, provide femtosecond laser industrialization solutions (cutting, engraving, marking, texturing, etc.) on all industrial markets, from everyday objects to high-tech industrial applications. A very good example of public-private partnership.

