



FUTURE TECHNOLOGY SYSTEMS A.E

CAD/CAM/CAE/CMM/CIM/PI/RE - Products & Services

TURNING CONCEPTS INTO REALITY

www.fts.gr

CONCEPTUAL DESIGN – PROTOTYPING – REVERSE ENGINEERING

FTS S.A was founded in 1996 in the city of Volos (prefecture of Magnesia), Greece.

The company engages in Engineering design, prototyping, reverse engineering, CAD/CAM/CIM software applications, geometric tolerance inspection and analysis & small scale custom made component and product productions.

The founders of the company and members of staff are professional engineers, educated and trained to BSc, MSc, Phd levels, with a considerable industrial & academic experience.



FTS SA - Owns a Purpose Built Industrial and Office Building located in the A' Industrial area of Volos

WWW.FTS.GR



FUTURE TECHNOLOGY SYSTEMS A.E

CAD/CAM/CAE/CMM/CIM/FP/RE - Products & Services

TURNING CONCEPTS INTO REALITY

www.fts.gr

**ENGINEERING – INDUSTRIAL DESIGN – PROTOTYPING – REVERSE
ENGINEERING - PRODUCTION**

WWW.FTS.GR

FTS has hardware and software laboratory infrastructure which consists of:

- High speed precision 3D Laser 7 axes Scanners
- Precision-portable CMM systems.
- Robotic - Digital Sculpturing Arms- SENSABLE for modelling complex geometries.
- Rapid prototyping Machines (building envelopes up to 350mmx350mmx200mm & and slice thickness 0.016mm.
- CNC systems 3-5 axes
- Vacuum Casting Machines .
- Rotational Casting Machine
- Laboratory Instrumentation
- Production lab facilities
- Design Office facilities using high spec computers and other peripheral devices.



FUTURE TECHNOLOGY SYSTEMS A.E

CAD/CAM/CAE/CMM/CIM/FP/RE - Products & Services

TURNING CONCEPTS INTO REALITY

www.fts.gr

**ENGINEERING – INDUSTRIAL DESIGN – PROTOTYPING – REVERSE
ENGINEERING - PRODUCTION**

WWW.FTS.GR

**TYPES OF ENGINEERING ANALYSIS
WE CAN CARRY OUT IN COLLABORATION WITH
OUR COMPANY'S SCIENTIFIC PARTNERS
(SPECIALIZED COMPANIES, UNIVERSITY DEPT'S AND
INDIVIDUALS)**

- Fluid-Structure Interaction CFD-FEA coupling (COMSOL, XFlow, ABAQUS)
- Direct Numerical Simulations (In-house & Xflow)
- Turbulence & Aerodynamics Modelling (FLUENT- ANSYS)
- Combustion (FLUENT-ANSYS)
- Surface reactions (In-house,COMSOL)
- 2 Phase flows with moving objects 6 Degrees Of Freedom (6 DOF) (FLOW3D-Xflow)
- Discrete Phase modelling (In-House & FLUENT)
- Numerical Heat Transfer (In-house, Fluent, COMSOL)
- Constraint modelling of kinematics, velocity and acceleration analysis



FUTURE TECHNOLOGY SYSTEMS A.E

CAD/CAM/CAE/CMM/CIM/RF/RE - Products & Services

TURNING CONCEPTS INTO REALITY

www.fts.gr

**ENGINEERING – INDUSTRIAL DESIGN – PROTOTYPING – REVERSE
ENGINEERING - PRODUCTION**

EXAMPLES OF PRODUCT DEVELOPMENT PROJECTS UNDERTAKEN BY FTS

EXAMPLE 1

Conceptual – Engineering Design-
Prototyping and Manufacture of Innovative
metal thermal spraying device, suitable for
coating the interior of moulds and
production machinery cavities



Fully functional metal prototype

WWW.FTS.GR



FUTURE TECHNOLOGY SYSTEMS A.E

CAD/CAM/CAE/CMM/CIM/RF/RE - Products & Services

TURNING CONCEPTS INTO REALITY

www.fts.gr

**ENGINEERING – INDUSTRIAL DESIGN – PROTOTYPING – REVERSE
ENGINEERING - PRODUCTION**

WWW.FTS.GR

EXAMPLES OF PROJECTS UNDERTAKEN BY FTS

EXAMPLE 2

Conceptual – Engineering Design-
Prototyping and Manufacture of a
laparoscopic surgical tool



Prototype assembly of the new laparoscopic
tools



FUTURE TECHNOLOGY SYSTEMS A.E

CAD/CAM/CAE/CMM/CIM/FP/RE - Products & Services

TURNING CONCEPTS INTO REALITY

www.fts.gr

**ENGINEERING – INDUSTRIAL DESIGN – PROTOTYPING – REVERSE
ENGINEERING - PRODUCTION**

WWW.FTS.GR

EXAMPLES OF PROJECTS UNDERTAKEN BY FTS

EXAMPLE 3

Conceptual – Engineering Design- Prototyping
and Manufacture of a novel promotional
device for a large food company



Final product produced by FTS



FUTURE TECHNOLOGY SYSTEMS A.E

CAD/CAM/CAE/CMM/CIM/FP/RE - Products & Services

TURNING CONCEPTS INTO REALITY

www.fts.gr

**ENGINEERING – INDUSTRIAL DESIGN – PROTOTYPING – REVERSE
ENGINEERING - PRODUCTION**

WWW.FTS.GR

EXAMPLES OF PROJECTS UNDERTAKEN BY FTS

EXAMPLE 4

Conceptual – Engineering Design- Prototyping
and Manufacture of a solar street lighting
system



Final product produced by FTS
These Solar street lights are installed in public
spaces and in industrial open spaces.



FUTURE TECHNOLOGY SYSTEMS A.E

CAD/CAM/CAE/CMM/CIM/ RP/RE - Products & Services

TURNING CONCEPTS INTO REALITY

www.fts.gr

**ENGINEERING – INDUSTRIAL DESIGN – PROTOTYPING – REVERSE
ENGINEERING - PRODUCTION**

WWW.FTS.GR

EXAMPLES OF PROJECTS UNDERTAKEN BY FTS

EXAMPLE 5

Conceptual – Engineering Design- Prototyping
and Manufacture of outdoor and indoor
infokiosk - information systems



Final Infokiosk (only 18cm thick) product
produced by FTS
are installed in public spaces.



FUTURE TECHNOLOGY SYSTEMS A.E

CAD/CAM/CAE/CMM/CIM/FP/RE - Products & Services

TURNING CONCEPTS INTO REALITY

www.fts.gr

**ENGINEERING – INDUSTRIAL DESIGN – PROTOTYPING – REVERSE
ENGINEERING - PRODUCTION**

WWW.FTS.GR

EXAMPLES OF PROJECTS UNDERTAKEN BY FTS

EXAMPLE 6

Manufacture of specialist components



CNC milling of a wide range of precision components using metals, plastics, wood and composites



FUTURE TECHNOLOGY SYSTEMS A.E

CAD/CAM/CAE/CMM/CIM/FP/RE - Products & Services

TURNING CONCEPTS INTO REALITY

www.fts.gr

CONCEPTUAL DESIGN – PROTOTYPING – REVERSE ENGINEERING

WWW.FTS.GR



PROTOTYPE CONSUMER DEVICES AND ARTISTIC PRODUCTS



DESIGN AND CONSTRUCTION OF PROTOTYPE MEDICAL COMPLEX COMPONENTS

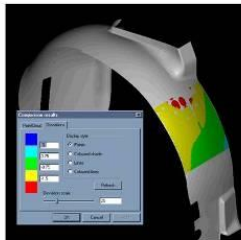
RAPID PROTOTYPING OF MECHANICAL & ARTISTIC ITEMS



PREPRODUCTION PARTS USING VACUUM AND ROTATIONAL CASTING TECHNIQUES



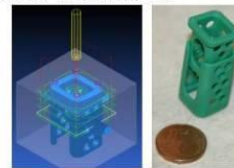
GEOMETRIC TOLERANCE ANALYSIS AND CERTIFICATION USING STATE OF THE ART SOFTWARE AND HARDWARE TOOLS



REVERSE ENGINEERING OF COMPLEX & DAMAGED ENGINEERING COMPONENTS FOR IMPROVEMENT AND REPRODUCTION



CAM SIMULATION UP TO FIVES AXES AND EXECUTION OF PRECISION MACHINING ON VARIOUS CNC MACHINES





DESIGN AND PRODCUTION OF PROTOTYPE & INNOVATIVE BUSINESS GIFTS

WWW.FTS.GR



Design and production of prototype silver coins with applied patina



Design and production of sculptured gifts with ancient and modern forms.



Creation of decorative and utility artistic gifts with embedded cultural forms and figures from each geographic region

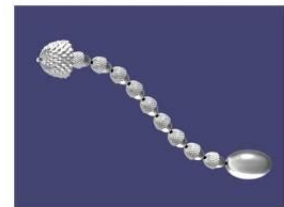


Creation of business gifts for special occasions and events



Design and construction of complex jewellery items with embedded sculptured symbols

Creation of jewelry items inspired from elements of the natural environment (e.g. design of a worry be using oak tree seed shape)



Creation of miniatures of real products with embedded company logos for advertising purposes - with intricate details.

