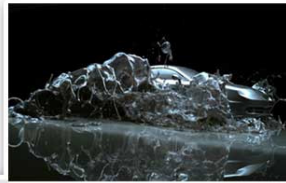




Industrial Models and Prototypes





Fully functioning models and prototype parts produced by our dedicated team of model makers and engineers.

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Introduction

Our extensive practical knowledge of mechanical and electrical engineering practices enables us to produce fully functioning electro-mechanical prototypes and models as well as the associated test rigs and tooling etc.

Our expert team of model makers and engineers utilise the latest 3D CNC machining technology and rapid prototyping techniques.

Working directly from clients 3D CAD files we are able to produce a model or prototype within the tightest of delivery schedules.

We also offer design assistance which can be an invaluable resource for those clients who do not have their own design capability. Using our Solidworks 3D CAD package our design team work closely with clients to ensure that all expectations for the model or prototype are achieved.



CAD model data generated to enable CNC machining from solid aluminium



CNC machining used to produce this 4x4 from the manufacturers 3D model data



3D model data is invaluable when producing CNC and Rapid Prototype parts

Case Study 1

Project

Hyundai TV advert models

Client

Machine Shop Special Effects

The Brief

To produce three robust and accurate scale models of the Hyundai Coupe, Getz and Santa Fe in three weeks to meet a filming deadline.

The Solution

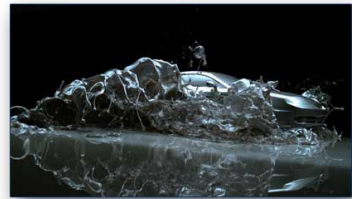
3D IGES CAD files were obtained from the manufacturer and the three models were CNC machined directly from this 3D data. The models were then painted and supplied ready for mounting to a special sledge arrangement designed by our client.



CNC machining from high density modelboard from manufacturers 3D model data



Models on film set



The final special effect that our client and Hyundai were looking for

Case Study 2

Project

Landrover Gearbox Prototype

The Brief

To manufacture 32 rapid prototype gearbox sets cast in aluminium directly from the clients 3D CAD data. The castings were then fully CNC machined ready for customer assembly and long term testing. Delivery to be completed within 5 weeks.

The Solution

The castings were produced from the customers 3D CAD data using our rapid investment casting technique. Following full inspection of all the castings on our CMM (co-ordinate measuring machine) the gearboxes were fully CNC machined to the clients 3D CAD data and drawings. The clients quality requirements and delivery schedule were met.



Rapid aluminium casting process
Direct from 3D CAD model data



The same 3D model data is utilized to
carry out the CNC machining
operations



The 3D models created were
used directly in CNC milling
machines

Case Study 3

Project

Undersea observatory model

Client

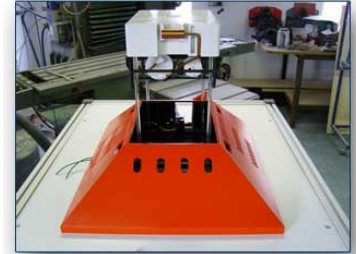
Alcatel Submarine Networks

The Brief

To produce a very detailed scale model for an important trade show in Texas to help staff explain technical detail and function. Delivery to be completed within 4 weeks.

The Solution

Using the clients 3D CAD data the model was constructed from CNC machined model board components and sla rapid prototype parts. The model was paint finished in the clients specified paint scheme and mounted on an aluminium stand with an acrylic dust cover.



CNC machining from the clients 3D model data was used to create most of the models components



Very detailed parts like internal pressure tanks were manufactured as SLA Rapid Prototype parts



Following assembly of the machined and Rapid Prototype component parts the model was painted to the clients colour scheme