



Hiroshi Sugimoto
Dini's surface: s surface of constant negative curvature obtained by twisting a pseudosphere, 2004

....."The mathematical models are sculptural renderings of trigonometric functions; the mechanical models were teaching aids for showing the dynamics of Industrial Revolution-age machinery. Art resides even in things with no artistic intentions."

-Hiroshi Sugimoto

INTRODUCTION ASSIGNMENT

Studio Hani Rashid / Summer 2012

Part 01 - optics

5.3.2012 - 12.3.2012

Pick one of Hiroshi Sugimoto's "Conceptual Forms" and analyse and describe the mathematical process that generates them through a digital 3d model, one precise three dimensional diagram and two dimensional linedrawings

Then produce a digital model (in either scaling, multiplying, transforming or a boolean operation) that it does fit into a bounding box of 50 x 20 x 6 cm (with a tolerance of 20%)

Part 02 - phenomena

12.3.2012 - 21.3.2012

Pick three of the following words (at least one of each category)

1. deformations: fold, crimp, perforate, stretch, contract, slit, cristalise
2. optical properties: refractive, iridescent, agleam, transparent, reflective, translucent, jagged, absorbent

and build a physical model of your geometry that incorporates these words/properties.

These models will then be tested and photographed by you in one of following different atmospheric conditions: a light box, a fog box, a mirror box and a liquid box.

Part 03 - atmosphere

21.3.2012 - 28.3.2012

Incorporate the phenomena into your digital model of 50 x 20 x 6 cm. Produce high end digital renderings of the atmospheric conditions previously tested in part 02.

General:

Each part will be presented on one landscape print size 120 x 50cm (makes 3 prints and one physical model in total)