

2009007871

Original creative work

| Image detail:

Digifactory A3 poster

BERTO PADOLFO & RODERICK WALDEN

Digifactory

2010 | *Sydney Design 2010*

Digifactory comprised a number of different elements each producing different outcomes: a design studio developed and produced original objects, an exhibition presented the research to a wider community and a catalogue provided documentation. The focus of the project was a practice-led investigation of industrial design and advanced manufacturing technologies, specifically, Selective Laser Sintering (SLS) and Direct Metal Lasering Sintering (DMLS), technologies that enable rapid manufacture of objects in high performance materials and are predicted to challenge traditional manufacturing systems. Eight designers and artists (UTS researchers and external practitioners) participated: Douglas Nash, Stefan Lie, Shelden Vaughan, Bert Bongers, Jos Mulder, Adam Goodrum, Roderick Walden and Berto Pandolfo. The exhibition was held in collaboration with the Powerhouse Museum's design festival, Design10, at the Frasers Studios gallery, Sydney, August 5-10 2010, and was opened by Prof. Kees Dorst with guests from the design and manufacturing sectors, media and the general public.

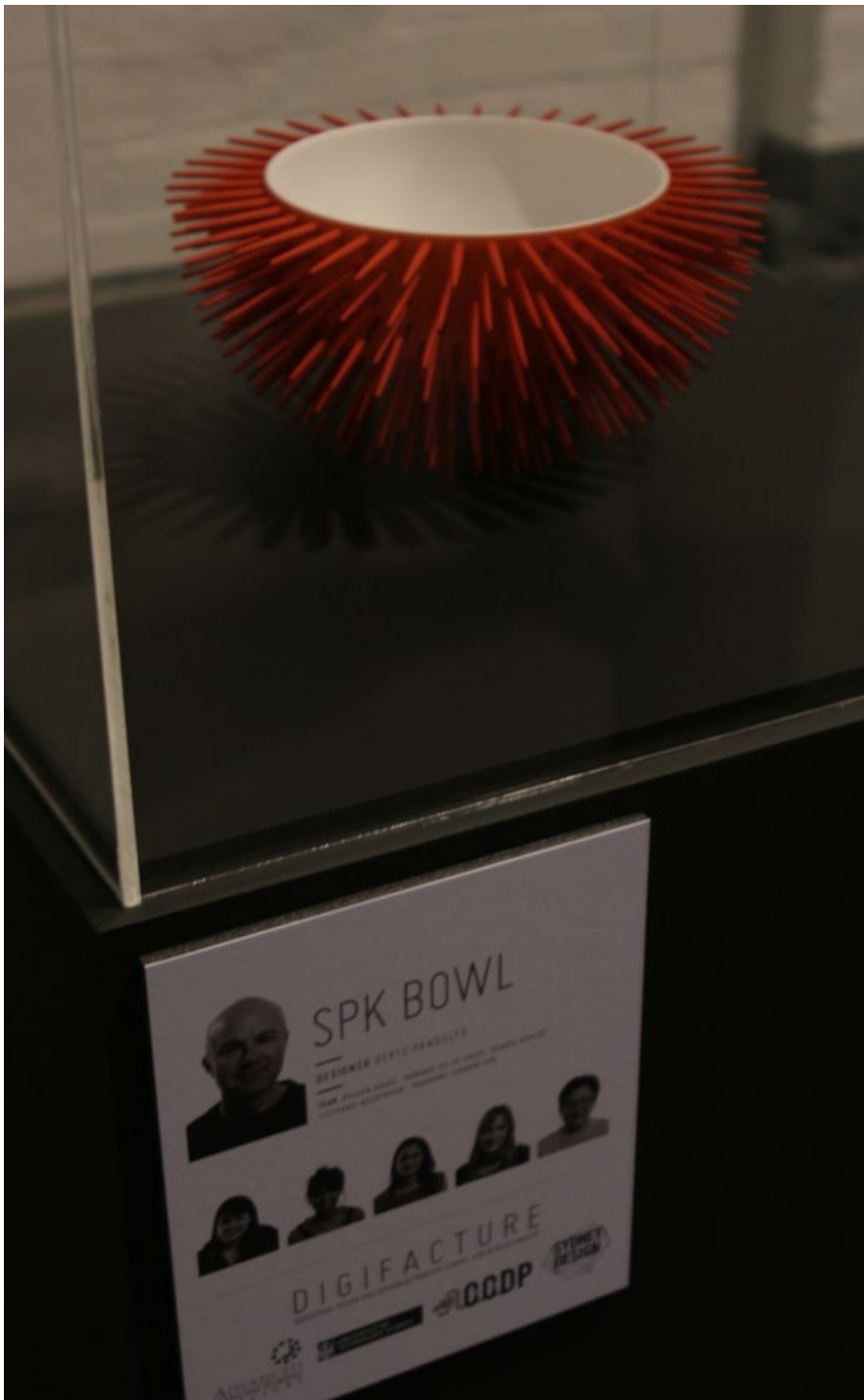
Geometric complexity, part unification and customised product variants are advantages these technologies offer over the current set of manufacturing systems that industrial designers are typically trained to develop designs for. The research investigated how these advantages might manifest in future products, necessary changes to design processes, and the impact on manufacturing methods.

The research presented demonstrated innovative applications of SLS and DMLS, along with important insights for design and design for manufacture.

Digifactory received financial and in kind support from Advanced Manufacturing Services (an industry partner), the UTS Centre for Contemporary Design Practice (CCDP) and the Industrial Design Program at UTS.

DIGIFACTURE

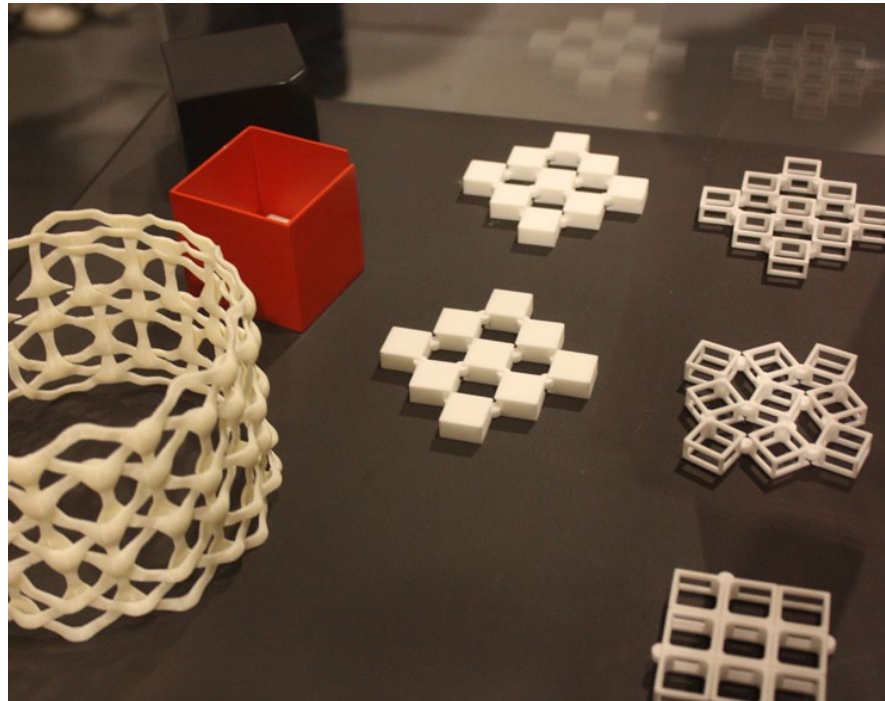
INDUSTRIAL DESIGN AND ADVANCED MANUFACTURING: A NEW RELATIONSHIP



1.



2.



3.

**BERTO PANDOLFO &
RODERICK WALDEN**
Digifactory

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Original creative work

1. SPK Bowl
SLS Prototype in Polyamide
Designed by Berto Pandolfo
2. Mountain Bike Crank Arm
DMLS Prototype in Stainless Steel
Designed by Roderick Walden
3. 3.5 Coasters
SLS Prototypes in Polyamide
Designed by Adam Goodrum



1.



2.



3.



4.

**BERTO PANDOLFO &
RODERICK WALDEN**
Digifacture

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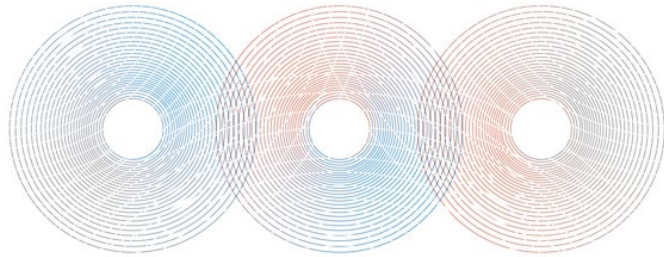
Original creative work

1. NSW Police Load Bearing
Vest: Appointment Holster
Design
SLS Prototypes in Polyamide
Designed by Shelden Vaughan

2. Individual Interfaces
FDM Prototypes in ABS
Designed by Bert Bongers and
Jos Mulder

3. Cutlery
SLS and DMLS Prototypes.
Polyamide and Stainless Steel
Designed by Douglas Nash

4. Eyewear
SLS Prototypes in Polyamide
Designed by Stefan Lie



DIGIFACTURE

INDUSTRIAL DESIGN AND ADVANCED MANUFACTURING: A NEW RELATIONSHIP

A DESIGN EXHIBITION CURATED BY BERTO PANDOLFO AND RODERICK WALDEN
5TH AUGUST – 10TH AUGUST 2010

1.

Project Design
Berto Pandolfo and Roderick Walden

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(including R. Walden, B. Pandolfo, B. Bongers and J. Mulder)

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2.

DIGIFACTURE

INDUSTRIAL DESIGN AND ADVANCED MANUFACTURING: A NEW RELATIONSHIP



OPENING NIGHT

THURSDAY AUGUST 5, 6:30 – 8:30pm

EXHIBITION OPEN DAILY 1 – 5pm UNTIL AUGUST 10

An exhibition of laser sintered (SLS) manufactured designs by the
Industrial Design program at the University of Technology, Sydney and
Advanced Manufacturing Services Pty. Ltd.

CURATED BY BERTO PANDOLFO AND RODERICK WALDEN
FRASER STUDIOS 10-14 KENSINGTON ST. CHIPPENDALE



3.



UNIVERSITY OF
TECHNOLOGY SYDNEY

BERTO PANDOLFO &
RODERICK WALDEN

Digifactory

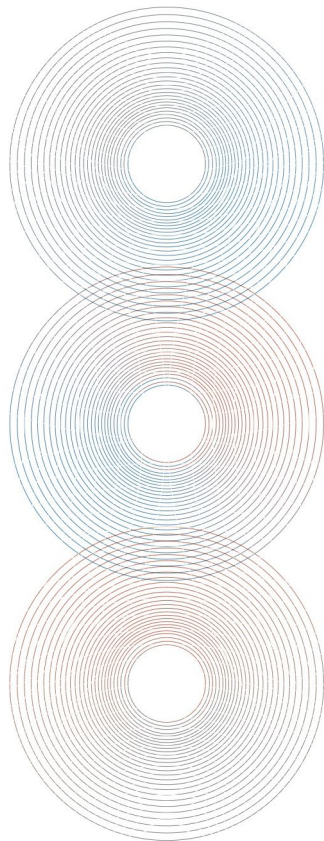
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Original creative work

1. Digifactory Catalogue
Cover and spine

2. Digifactory Catalogue
ISBN page

3. Digifactory Industry Invite



DIGIFACTURE

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SYDNEY DESIGN

DIGIFACTURE

31 July–15 August,
Monday–Friday 9am–5pm
Fraser Studio, Chippendale, free

One of the most exciting developments in manufacturing in recent times has been the process called selective laser sintering (SLS). This process allows designers to create solid complex objects quickly and with no tooling. It utilises a computer-controlled laser beam that fuses together plastic or metallic powder—one cross-sectional layer at a time.

This exhibition highlights the remarkable flexibility, complexity and joyous creativity unleashed by SLS. On display is a series of SLS design projects by the industrial design program at the UTS, Sydney, in collaboration with Advanced Manufacturing Services, Australia. The exhibition proposes future directions in industrial design and its relationship with manufacturing.

OpenHAUS:

Advertisements for Architecture
31 July–15 August,
Monday–Saturday
10am–4pm, daily, free
Talk: 3 August
6.30pm–8.30pm, \$10
Tusculum, 3 Manning Street,
Potts Point. Bookings 9246 4055

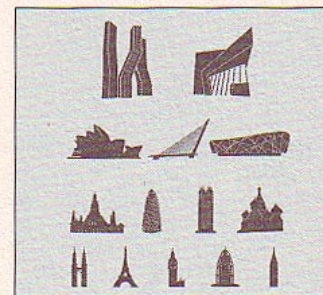
When architects, design professionals and students were invited to create *Advertisements for Architecture*, the results included an array of tongue-in-cheek ads, ranging from a cigarette pack poster saying 'Architecture is Addictive' to a heavy-metal inspired t-shirt. Even the world's most famous fictional architect, Mike from The Brady Bunch, gets a guernsey in one of the ads. The 'mad men'—and women—who have created these faux advertising gems will discuss their work at a lively talk for architects, designers and the public.

Urchin, Berto Pandolfo



E1

A Vision for Tomorrow, (detail) Adrian Lo



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BERTO PANDOLFO &
RODERICK WALDEN
Digifecture

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Original creative work

1. Digitifecture Exhibition Poster (A3)

2. Sydney Design 2010 Catalogue page 97, published by the Powerhouse Museum.

BERTO PANDOLFO
& RODERICK
WALDEN
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Supporting evidence

Sydney Design 2010 Digifactory page. Includes a description of the exhibition, dates and location.

<http://www.sydneydesign.com.au/2010/index.php/exhibitions/rapid-manufacture-a-new-relationship-between-industrial-design-and-advanced-manufacturing>

AMS is our Industry Partner for the Digifactory Project. Click on Digifactory on the right of the screen, under Downloads to open a .pdf version of the exhibition catalogue.

<http://www.advancedmanufacturing.com.au/partners.html>