Researchgroup Industrial Design
3D concrete printing

Concrete symposium

Ivo Vrooijink – Projectleader KONKREET
Subjects

• Lectoraat Industrial Design
• RAAK–Konkreet
• Future
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- Future
• User-centered design and research
• Sustainability in design
• Material and technology in design

15 researchers, 12 fte + students
• 3D printing ++:
• RAAK project Funcy: Functional surfaces
• EFRO Giettech–Go: Sand printing
• RAAK project Konkreet: 3D concrete printing
• TFF project: 3D metal printing
• And more …
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Inspired by experimentation in the FabLab
Market research (cases)

- Renovation VS New
- Load bearing elements VS non-load bearing elements
- One-of(s) (single use/unique)
Is single print house construction really our endgoal?
KONKREEKT
Where do we focus our research:
• Concrete recipe
• Reinforcement
• Undercut
• Adaptive slicer
• Designing differently…
  – Think trough the application, finding applications
  – Think about the advantages of the printer
  – Developing Generative Design knowledge
KONKREET Applications
Green façade (Iman Slavova)
Modular building
KONKREET Applications
KONKREET

0.01 m³

1 m³

121 m³

360 m³
KONKREET Applications

Tiny house (Louw Vischer)
KONKREET Applications

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- Generative Design
- Hybrid solutions (in construction)
- Precision
Questions?

Thank you for your attention!