MX3D

ThinkRevolutionist

A BRIDGE BETWEEN THE PAST AND TOMORROW

Industry

AEC
- Metal 3D Printing
- Art Design
- High Tech

Systems
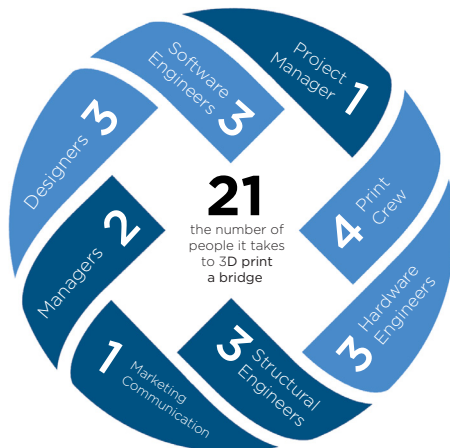
ThinkStation P910

ThinkPad P40 Yoga

Challenges

MX3D needs to compute large data sets and render multiple design iterations quickly

Key Facts

Amsterdam

1,281 Bridges

165 Canals

8 Wooden Drawbridges

1 Skinny bridge

Project Manager 1
Software Engineers 3
Designers 3
Managers 2
Print Crew 4
Hardware Engineers 3
Structural Engineers 3
Marketing Communication 1

21 the number of people it takes to 3D print a bridge

5 robots are currently in operation, each working on either production work or testing for the bridge

3.5 tons of steel has been used

1500C how hot metal gets when 3D printing

Overall Development

> THE WORK THAT WE DO, CONSISTS OF BOTH DESIGN WORK AND CREATING FILES THAT THE ROBOTS CAN PRINT. ONE OF THE BIGGEST ADVANTAGES OF OUR TECHNIQUE, THE FACT THAT WE CAN PRINT VERY COMPLEX GEOMETRIES, ALSO PROVIDES ONE OF THE BIGGEST CHALLENGES.
>
> **- MX3D**

I STRONGLY BELIEVE IN THE FUTURE OF DIGITAL PRODUCTION AND LOCAL PRODUCTION, IN 'THE NEW CRAFT.' THIS BRIDGE WILL SHOW HOW 3D PRINTING FINALLY ENTERS THE WORLD OF LARGE-SCALE, FUNCTIONAL OBJECTS AND SUSTAINABLE MATERIALS WHILE ALLOWING UNPRECEDENTED FREEDOM OF FORM.

- JORIS LAARMAN, Designer @MX3D

HOW LENOVO WORKSTATION TRANSFORMED OUR PROCESS

"We use Autodesk software to carryout structure optimizations, there is a lot of data we have to compute and manage. ThinkStation workstations are really powerful systems which allow us handle all the data we use and to ensure crucial calculations are done smoothly."

- Tim Geurtjens
Co-Founder at CTO, MX3D

Workstations used for Workflow and Software

ThinkStation P500
Advanced design work and print file generation

AUTODESK®
3DS MAX®

ThinkPad P50
This is main system that all our engineers use. They use it for anything from design work to coding, file generating and surfing

Rhinoceros

ThinkStation P910
Raw computing, generating complex print files and running simulations

ThinkPad P40 Yoga
In charge of robotics control and sketching bridge iterations

MAYA

AUTODESK®
FUSION 360™

AUTODESK®
SKETCHBOOK®

Find out more about Lenovo Workstation, please visit
www.thinkworkstations.com

ThinkStation
ThinkPad

THINKREVOLUTION

nVIDIA.
QUADRO®

Lenovo.