WHAT IS 3D HOTBED?

A COLLABORATION | A PROJECT | An INVESTIGATION | An EXPERIMENT
TEACHING THE PUNCH MATRIX SYSTEM WITH 3D PRINTED MODELS

http://tiny.cc/3Dhotbed
3DHOTBED TEACHING TOOLKIT

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@3Dhotbed
REMOVABLE JET PIECE
ADDITIONAL TOOLS - COMPOSING STICK
WOODCUT FACSIMILE

Der Schriftgiesser (type caster) from Sach and Amman’s *Das Ständebuch*. Germany, 1568.
3Dhotbed: 3D Printed History of the Book Teaching Tools

About the Project
3Dhotbed is a collaborative project that seeks to make historical re-creations of certain tools and implements used in book history instruction more easily accessible for pedagogical purposes. Led by faculty from the University of North Texas and Texas A&M University Libraries, the year-long project sought to create, utilize, and disseminate the data necessary to reproduce teaching models of the tools used to cast moveable type during the hand-press era. Learn more at the [3dhotbed project website](https://digital.library.unt.edu/).

About the Collection
The collection includes downloadable datasets necessary to 3D print the 3Dhotbed teaching toolkit in individual pieces or as a complete model set. The toolkit includes all the pieces necessary to teach the punch matrix system in a classroom setting: a punch, a matrix, an adjustable hand mould, an individual piece of type with an attached jet, and a piece of type with a removable jet attachment.
3D Model Packaging for Upload
3D dataset model of one side of a moveable hand mould. The resulting 3D printed model will replicate the historical artifact used to cast type during the hand press period. This 3D dataset is in two parts. Each part is a separate piece of the two-sided mould. You will need to print both files to have a complete model for a hand mould. For printing ease, the spring (used by typecasters to hold the matrix into place on the mould) has been excised. These models are for teaching purposes only and cannot be used to cast type using molten type metal, nor can they be used for printing.

This dataset is an individual file and is part of a complete set of teaching tools.
[Dataset: Moveable Type Hand Mould Side B]

Description

3D dataset model of one side of a moveable hand mould. The resulting 3D printed model will replicate the historical artifact used to cast type during the hand press period. This 3D dataset is in two parts. Each part is a separate piece of the two-sided mould. You will need to print both files to have a complete model for a hand mould. For printing ease, the spring (used by typcasters to hold the matrix into place on the mould) has been excised. These models are for teaching purposes only and cannot be used to cast type using molten type ... continued below

Creation Information

Jacobs, Courtney E.; McIntosh, Marcia; O'Sullivan, Kevin M. & Strait, Bob April 1, 2017.

Context

This dataset is part of the collection entitled: 3Dhotbed: 3D Printed History of the Book Teaching Tools and was provided by UNT Libraries to Digital Library, a digital repository hosted by the UNT Libraries. It has been viewed 86 times.
[Dataset: Moveable Type Hand Mould Side B] (Listing Multiple Items).

Items
This dataset has 16 items. Select a thumbnail to view a larger version.
### Dataset: Moveable Type Hand Mould Side B

**Listing Multiple Items**

<table>
<thead>
<tr>
<th>Filename</th>
<th>Size</th>
<th>Format</th>
<th>Download</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mould-Side-B.stl</td>
<td>18.6 MB</td>
<td>application/octet-stream</td>
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<tr>
<td>README.txt</td>
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<td>258.1 KB</td>
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</table>
Statistics: 3Dhotbed: 3D Printed History of the Book Teaching Tools

Overview

10 Total Items
150 Total Files
506 Total Uses

100% Visible
IN-CLASSROOM USE: UNIVERSITY OF MIAMI

Download the data: https://tinyurl.com/3dhotbedprint
IN-CLASSROOM USE: NORTHEASTERN UNIVERSITY

ryancordell · Follow
Northeastern University

ryancordell Book historians & bibliographers, my 3D printed punches, matrices, moulds, and type are here! Thanks to @3dhotbed for making it all possible.
generaldevelopment Awesome profile
ncbenedict29 AMAZING.
FUTURE COLLABORATIONS: UCLA

3D printing wood blocks to print is officially a success. A few test prints of blocks held by @UCLALSC We plan on scanning all the blocks and making them available for others! (And printing a book of two!)
POSSIBLE FUTURE TOOLS

PAPERMAKING DECKLE

PAPERMAKING MOULD
Making Book History: Engaging Maker Culture and 3D Technologies to Extend Bibliographical Pedagogy

Upcoming, 2018, *RBM A Journal of Rare Books, Manuscripts, and Cultural Heritage*
Artec Space Spider

Industrial 3D scanner of metrological accuracy

Precision at your fingertips

A new and enhanced precision instrument for CAD users and engineers, Artec Space Spider is a high-resolution 3D scanner based on blue light technology. It is perfect for capturing small objects or intricate details of large industrial objects in high resolution, with steadfast accuracy and brilliant color.

The scanner's ability to render complex geometry, sharp edges and thin ribs sets our technology apart. It is an ideal industrial 3D scanner for high resolution capturing of objects such as molding parts, PCBs, keys, coins or even a human ear, followed by the export of the final 3D model to CAD software.

Space Spider offers almost unlimited possibilities in areas such as reverse engineering, quality control, product design and manufacturing.

Originally developed to a spec for the International Space Station, this next generation industrial 3D scanner features powerful temperature stabilization and high grade electronics, which not only allow the scanner to reach maximum accuracy in three minutes but also ensures long-term repeatability in data capture, since the accuracy rate of the device is not affected by fluctuations in environmental conditions.

In this powerful 3D scanner, the technology has been honed to perfection to ensure the best possible quality of scans and a truly robust device.

US $24,800
MANY THANKS!

UNT Libraries Green Light To Greatness
UNT Libraries Digital Humanities and Collaborative Programs Unit in the Public Services Division
Bob’s Hub from 3D Hubs
Marker Tree3D
UNT Libraries Makerspace “The Factory”
UNT College of Arts and Visual Design Fab Lab

This presentation is also available at http://tiny.cc/3dhotbed-dodh18