

# Workflow diagram of 3D Modelling

## Scanning the Object (Raw Data)

**Software :** Cyclone

**Format:** IMP or ZFS or 3CD or ...  
(Dependant on scanner)

## Cleaning the Scans

**Software:** Cyclone

**Input-Format:** IMP [Import ZFS, 3CD, ...  
(individual Scans) into Cyclone]

**Output-Format :** Export scans as PTX (\_cl)

## Preperation for Registration

**Software:** ptx2ply

Convert PTX to PLY

**Input:** PTX

**Output:** PLY

## Meshing (From Points to Surface)

**Software:** ptx2ply

**Input-Format:** PTX (\_cy/\_xf)

**Output-Format :** PLY or PTX

(Reducing of quality/Resolution)

## Transformation of Scans with "xf" files

**Software:** Ptxtransform

**Input-Format:** PTX

**Output-Fromat:** PTX (\_cy/\_xf)

## Registration of Scans

**Software:** Scanalyse

**Input:** PLY

**Output:** xf (each ply get an xf file,  
Transformation files)

Breaking down  
into  
sub-blocks

**Not** breaking  
down into sub-  
blocks

## Final Meshing with: PLYMC

**Software:** PLYMC

**Input:** PLY (individual Scans)

**Output:** PLY (Blocks or whole Object)

**Highest Resolution**

**Optional:** Further reduction of Resolution:  
6 Mio-, 3 Mio-, 1 Mio- Faces

## Final Meshing with: Poisson

**Software:** Reconstructor

**Input:** PTX converting to BNPTS

**Output:** PLY (whole Object)

**Highest Resolution**

**Optional:** Further reduction of Resolution:  
6 Mio-, 3 Mio-, 1 Mio- Faces

## Final Meshing with: Geomagic (Delauny)

**Software:** Geomagic

**Input:** PTX

**Output:** PLY (whole Object)

**Highest Resolution**

**Optional:** Further reduction of Resolution:  
6 Mio-, 3 Mio-, 1 Mio- Faces

**Optional:** Combining Models together  
**Optional:** Further reduction of Resolution: 6 Mio-, 3 Mio-, 1 Mio- Faces