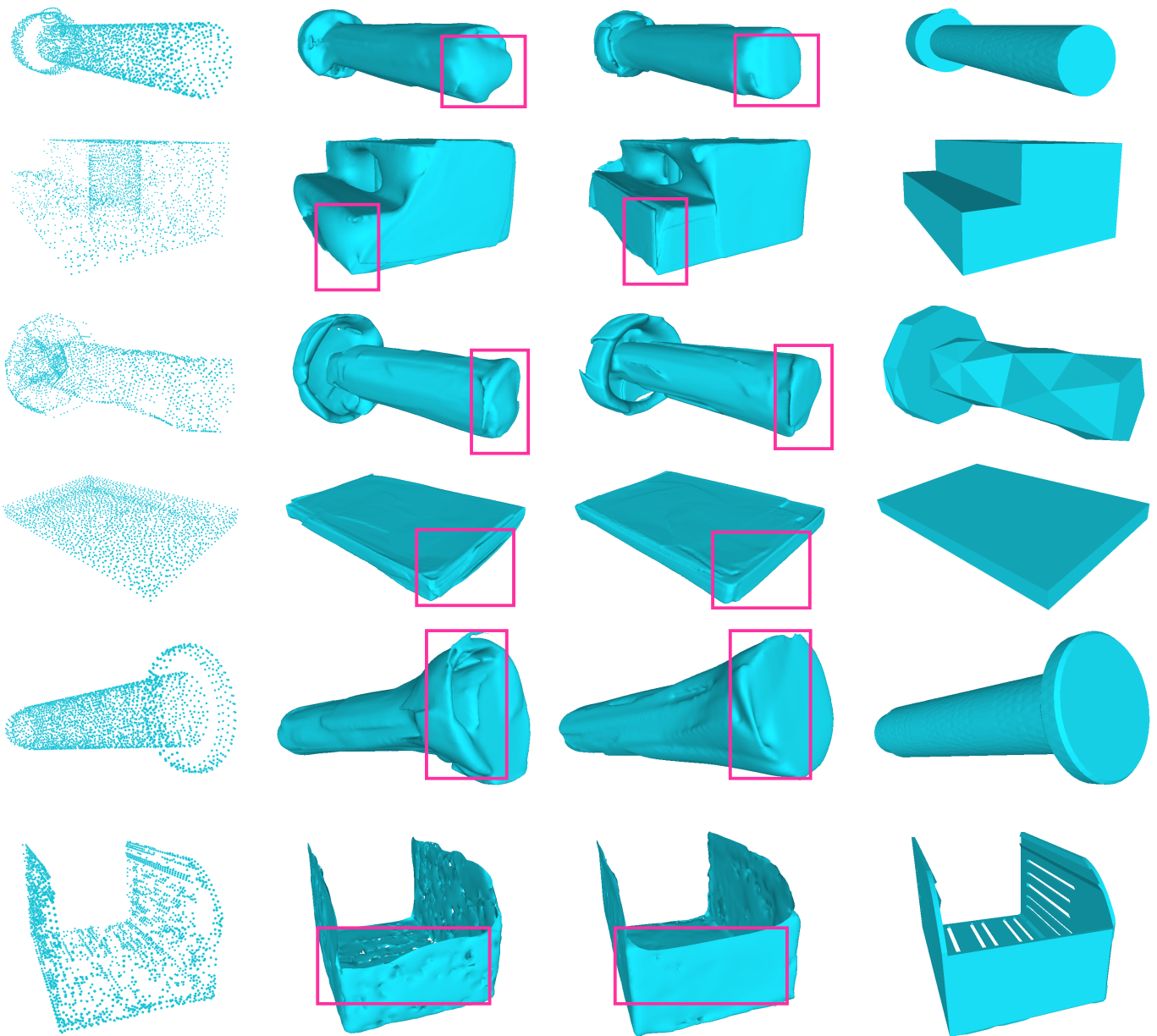


# Learning Embedding of 3D models with Quadric Loss

In this supplementary document we show more qualitative results of using *quadric loss* along with Chamfer loss for reconstructing 3D models. As quadric loss is an *ellipsoidal loss* which does not care about point distribution and *only* tries to preserve sharp features like edges and corners, it needs to be accompanied by a *spherical loss* like Chamfer loss to complement it.

Below we show the reconstruction result of models from the test set with Chamfer loss alone and Chamfer with quadric loss.



(a) Input Point Cloud

(b) Chamfer

(c) Chamfer + Quadric

(d) Original Mesh