

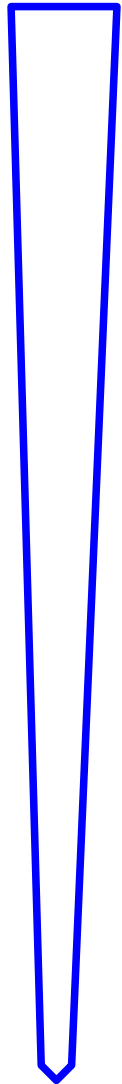
Lautsch Finite Elemente GmbH

Knife

MMT 9.....

Blade geometry

1 mm



50 mm

0.1 mm, 90 °

Stl file

44

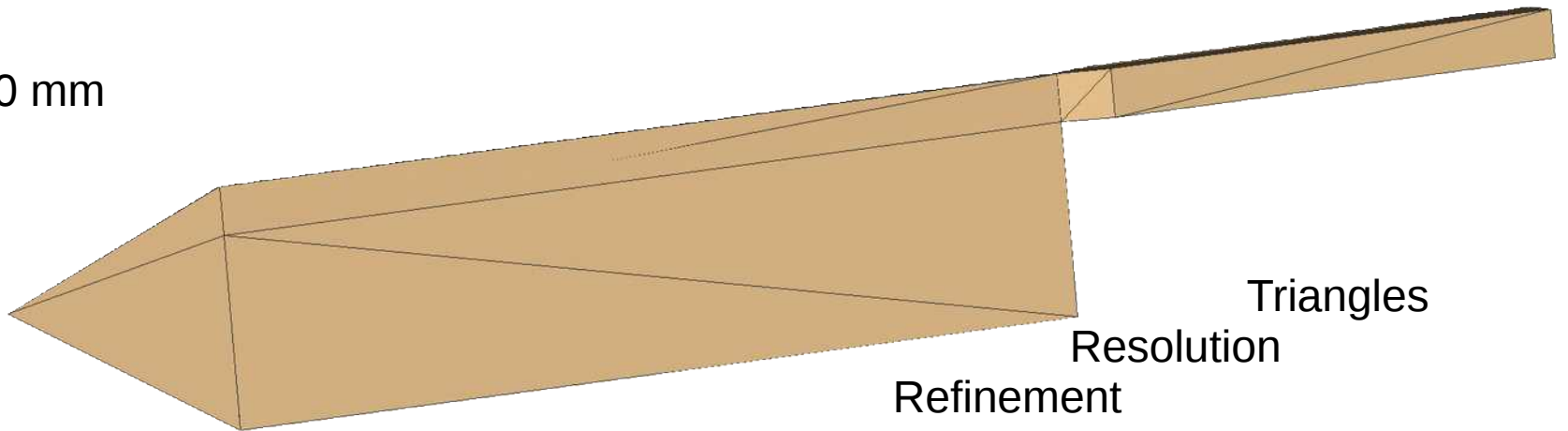
10 x 10 x 100

50 x 240

triangles

handle

blade

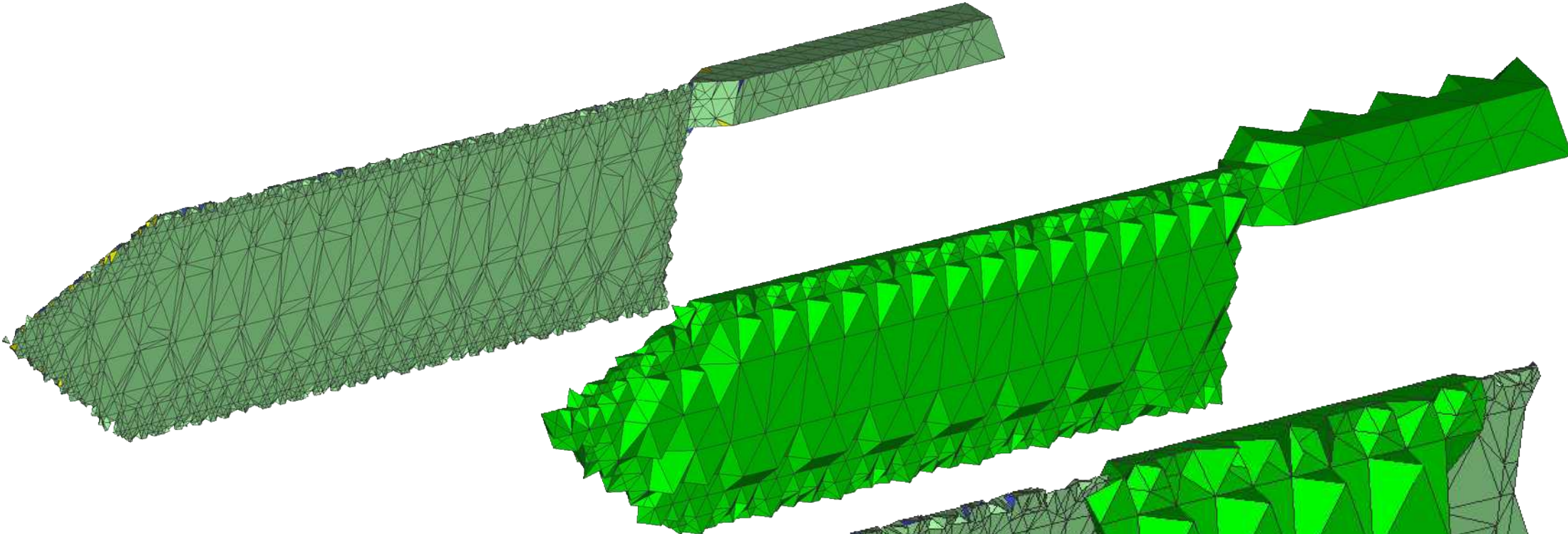


Triangles

Resolution

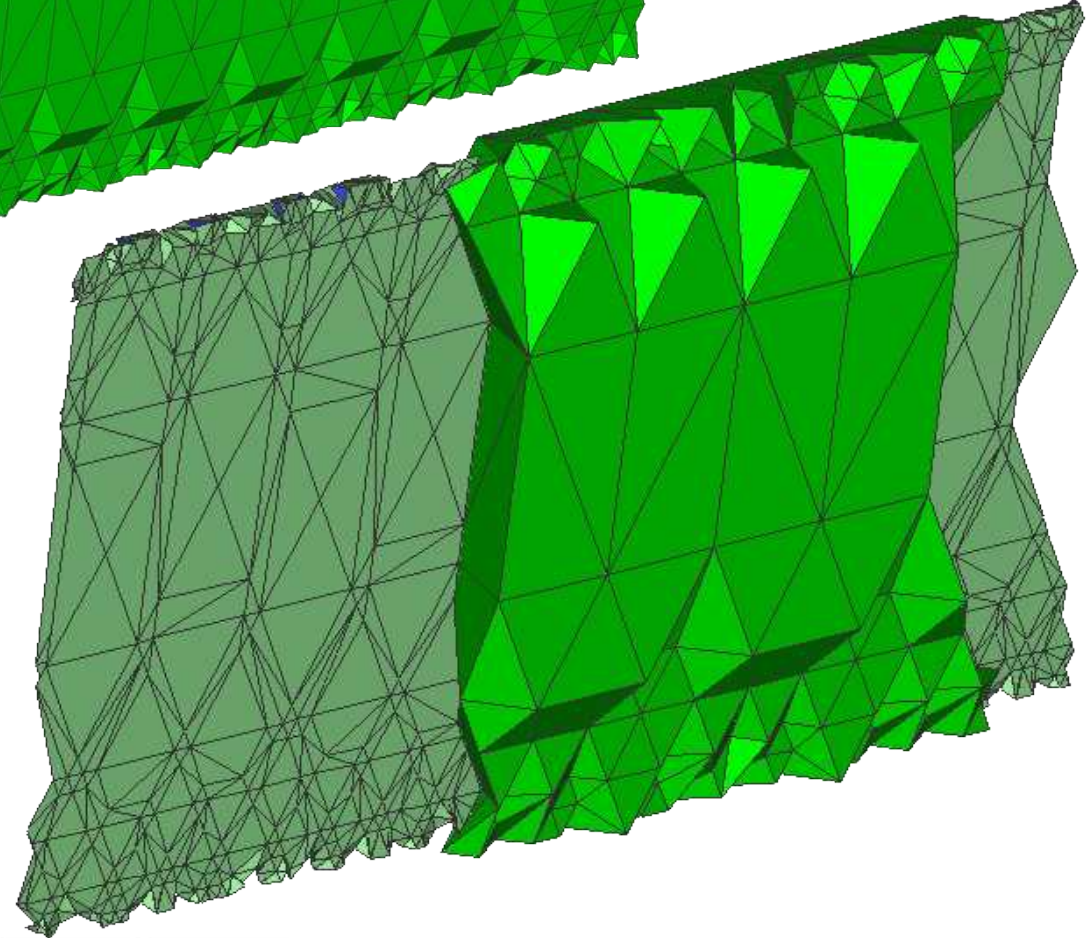
Refinement

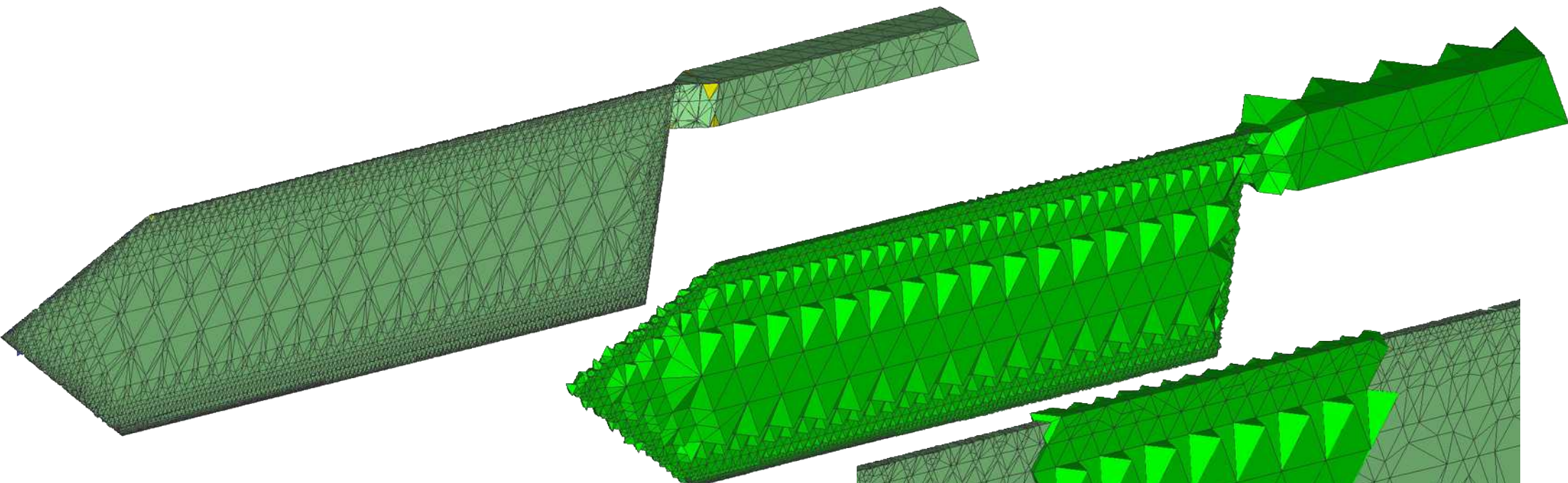
1	16	3234
2	8	6956
3	4	15614
4	2	26952
5	1	36082
6	0.5	47058
7	0.25	63366
8	0.125	72288



Knife and it's BCC approximation

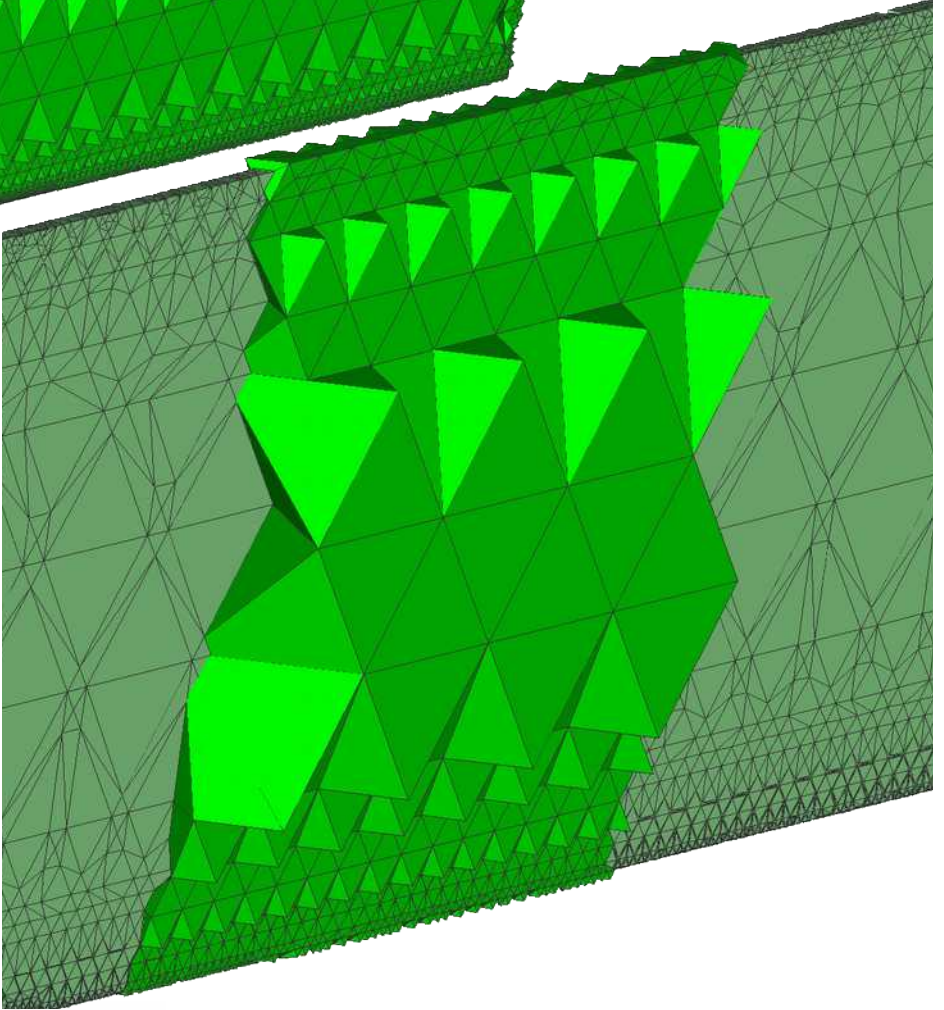
RESOLUTION	8
Refinement	2
triangles for the knife surface	6956

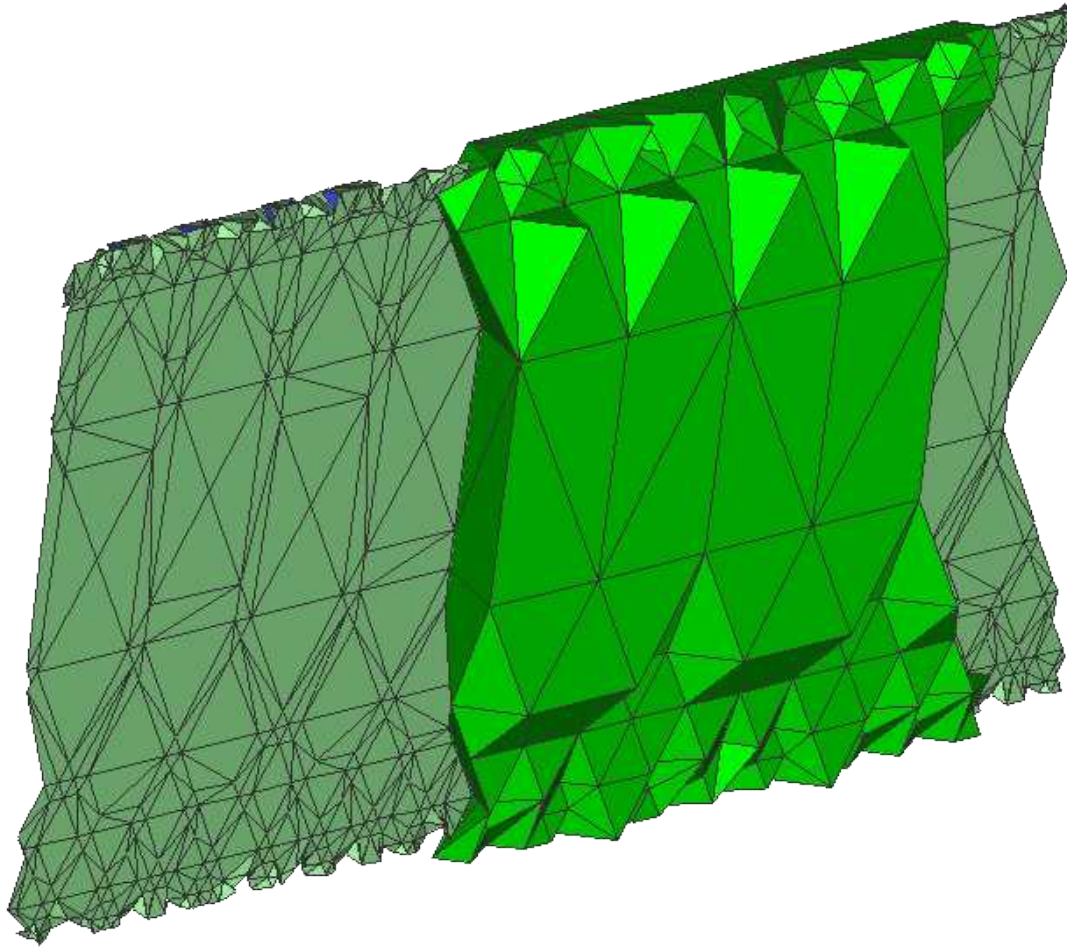




Knife and it's BCC approximation

RESOLUTION	0.125
Refinement	8
triangles for the	
knife surface	72288





geometric refinement 2 vs. 8 indicates the local nature of the refinement process: refinement is required only in the case of two (knife-back) or three kink lines (knife sharp end).

The fresh green elements are elements from the BCC refinement just before the MMT step. They govern the approximation power of the mesh.

