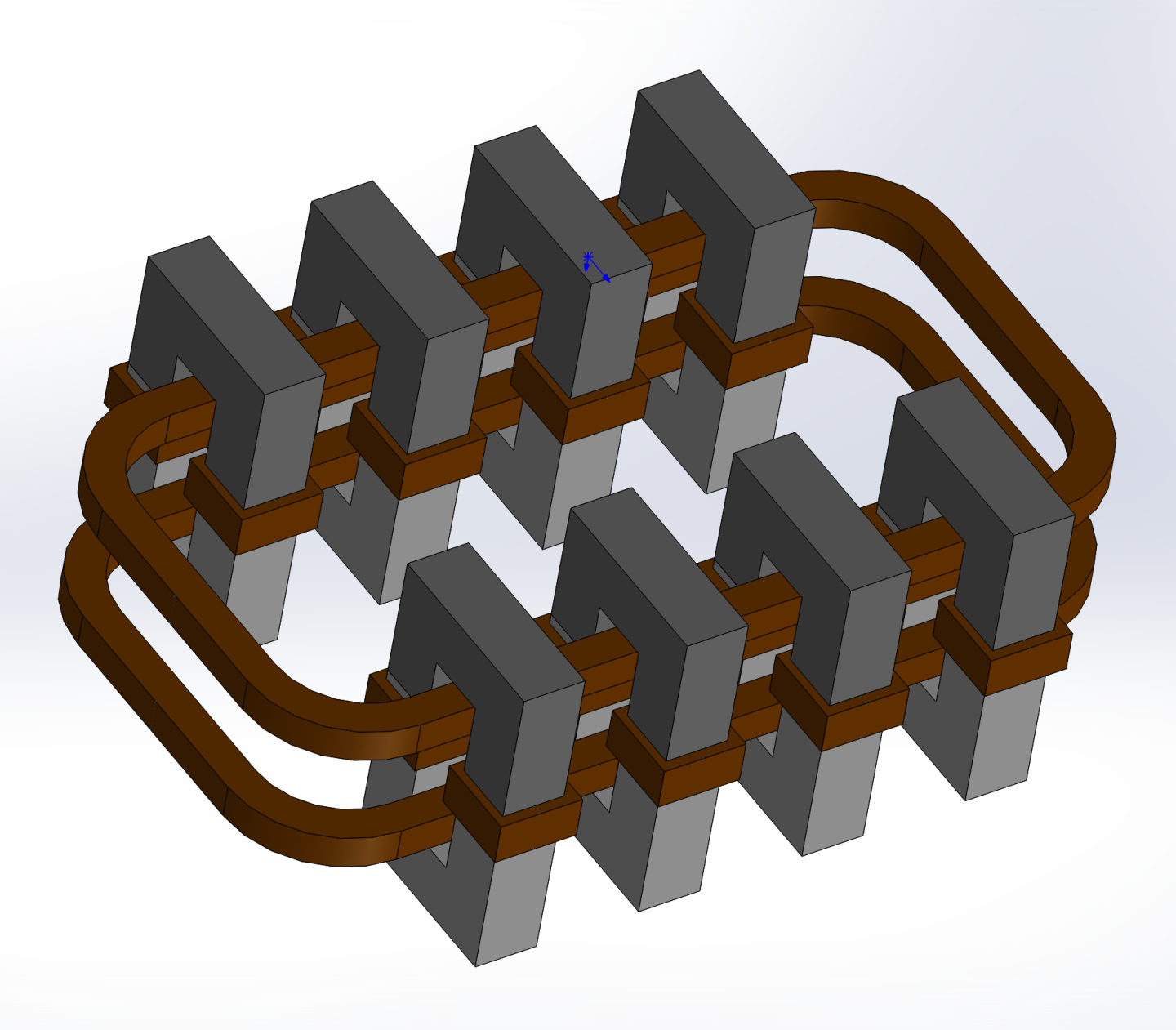
TFG_Z04_8-Pole Dimensions (WAG) and Structure

These dimensions are a "first pass - wild ass guess" at the physical structure. There are only three (3) main parts: 1. A set of "U" Poles, 2. A set of N-S Coils, 3. A set of Loop Coils.

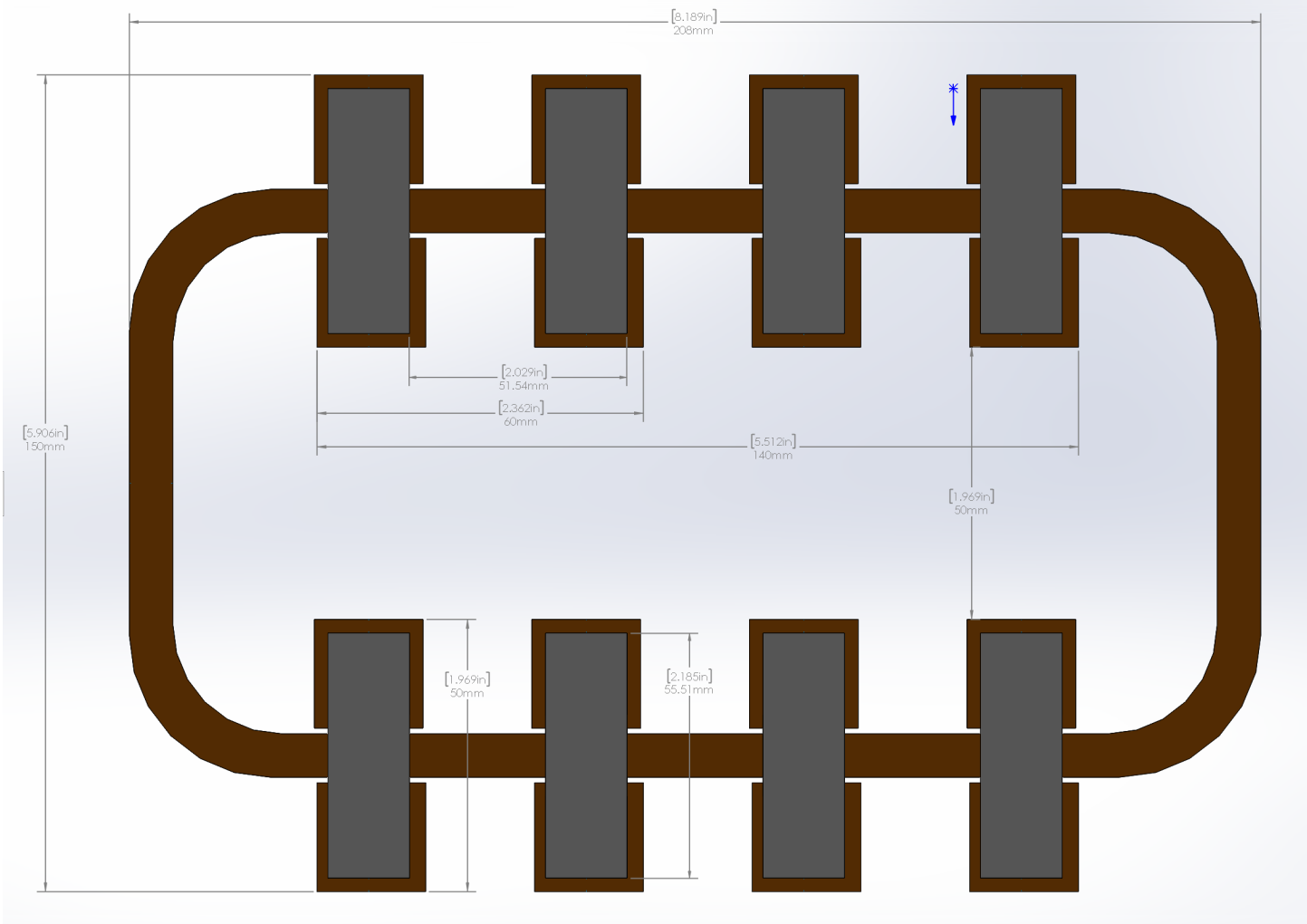
The "U" Poles are 'offset' such that cutting them reduces (eliminates) waste. The longer side is where the N/S winding is located.

After inserting the Loop coils (two), the N & S Coils are fitted on the long-end, and then the "U" shaped Poles are tightly fitted together with no gap. Supporting structure is not shown but should be non-metalic (a 3d printed structure would work here).

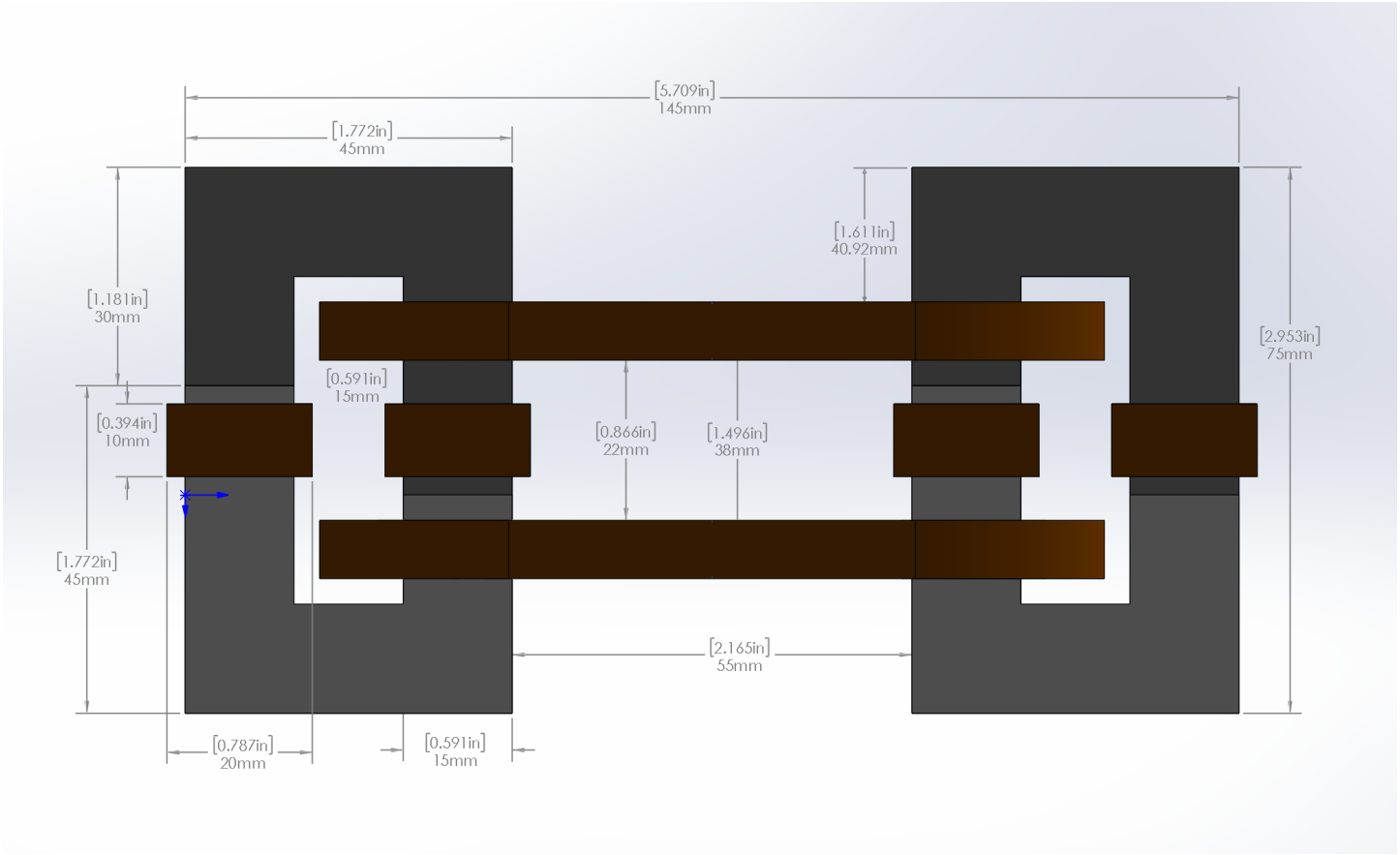
Prospective:



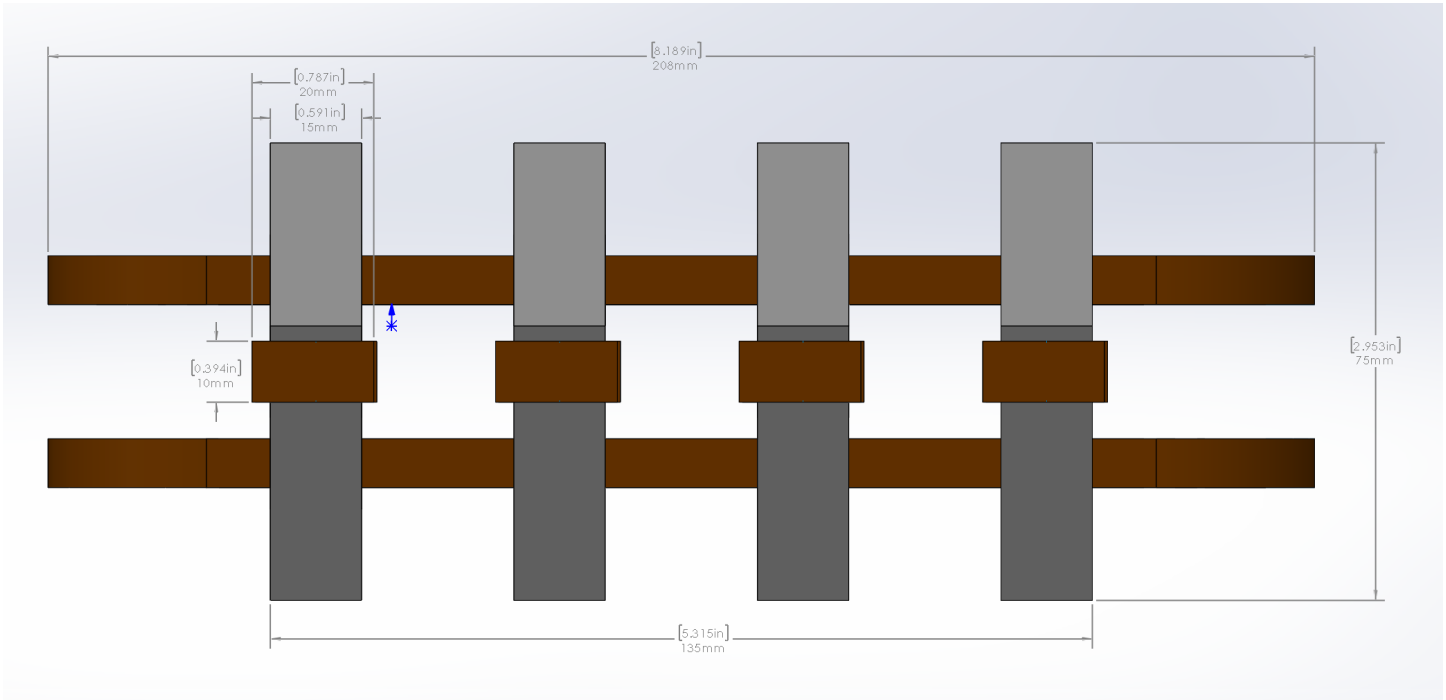
Top:


[8.189in]
208mm
[5.906in]
150mm
[2.029in]
51.54mm
[2.362in]
60mm
[5.512in]
140mm
[1.969in]
50mm
[1.969in]
50mm
[2.185in]
55.51mm

End:


[5.709in]
145mm
[1.772in]
45mm
[1.611in]
40.92mm
[1.181in]
30mm
[2.953in]
75mm
[0.591in]
15mm
[0.394in]
10mm
[0.866in]
22mm
[1.496in]
38mm
[1.772in]
45mm
[2.165in]
55mm
[0.787in]
20mm
[0.591in]
15mm

Side:


[8.189in]
208mm
[0.787in]
20mm
[0.591in]
15mm
[0.394in]
10mm
[2.953in]
75mm
[5.315in]
135mm

Laminated or solid electrical steel is used for the "U Pole" elements. Copper wire, stranded or solid makes up the N/S pole coils and the Loop coils.

NOTE: 1. The Pole pieces can not be placed too close together or the N/S coils will cause interference to the ajacent Pole coils. The distance remains TBD. Also, the transverse distance between adjacent Poles (the Loop width) also remains TBD.

NOTE: 2. It appears the TFG_EM has similar performance (so far anyway) to the LinGen V1 however the TFG_EM is much easier to build, uses less material, is readily expandable, and should be nearly the same size.

SL