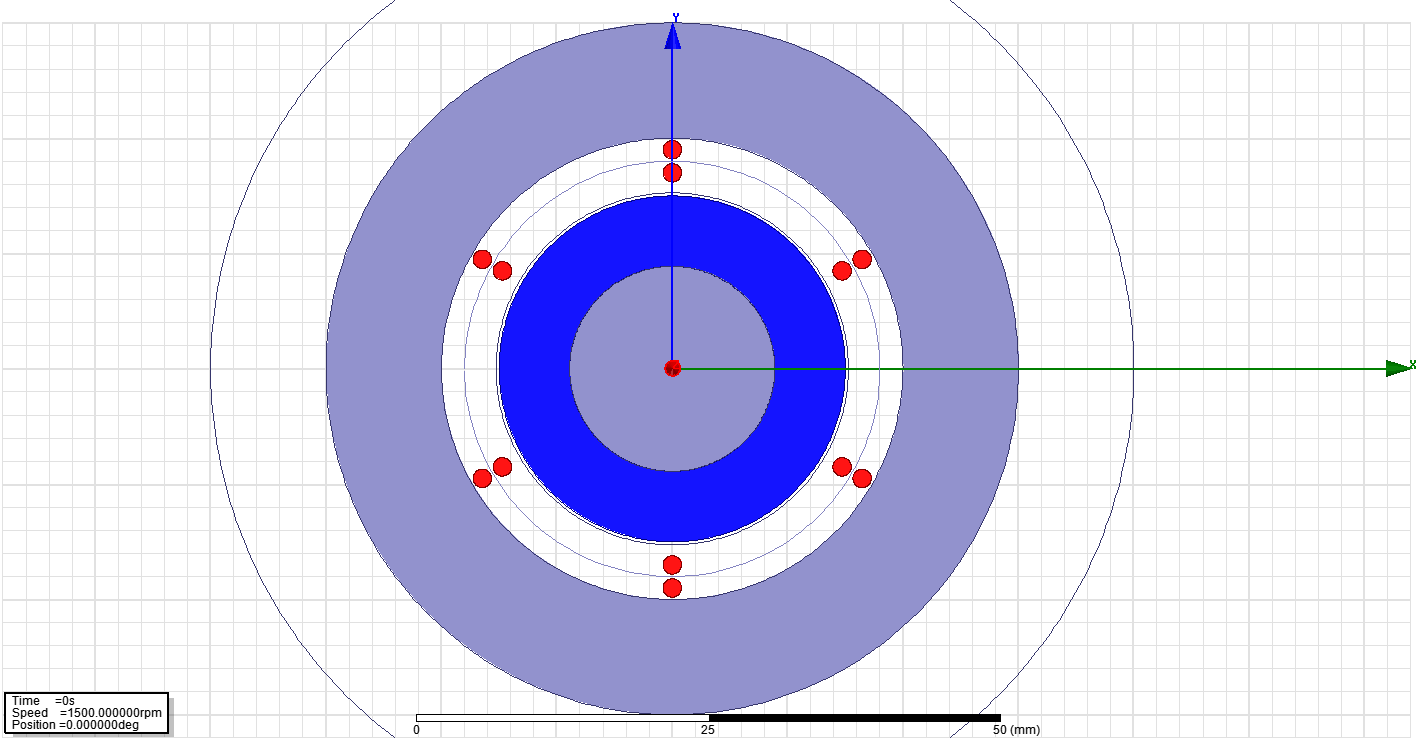




Max airgap flux density = 0.6T



Simple model to find number of turns roughly



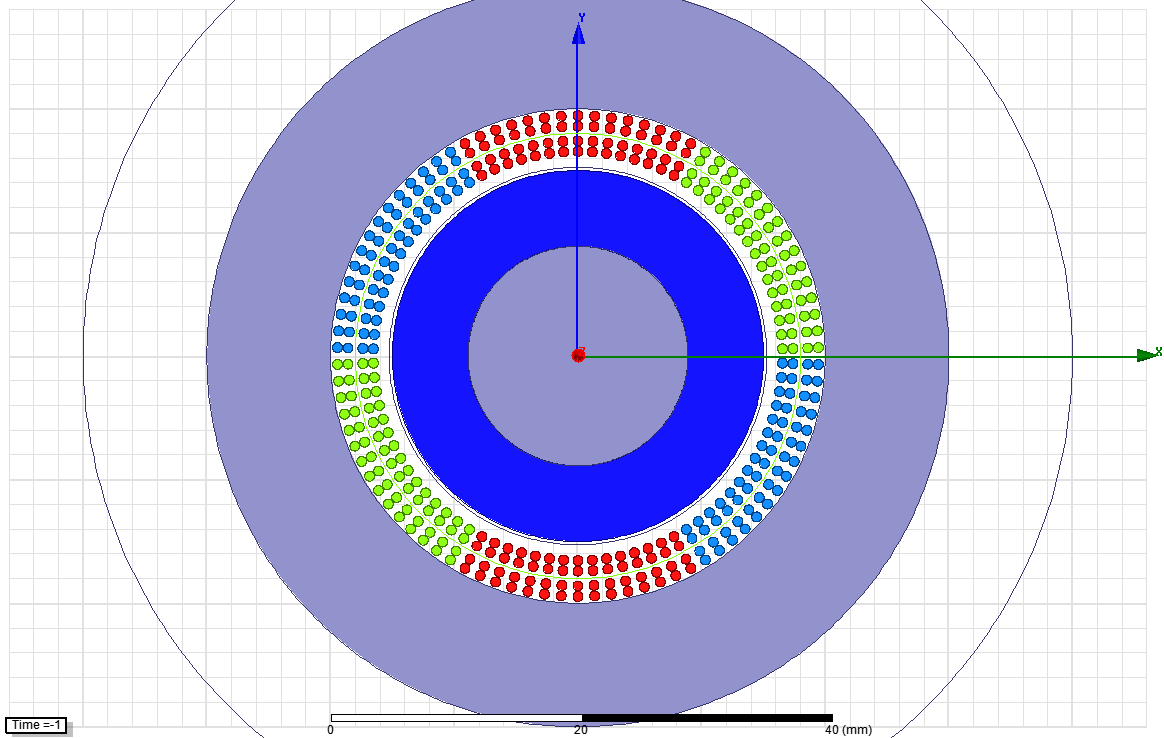


Induced voltage @1500 rpm 1turn

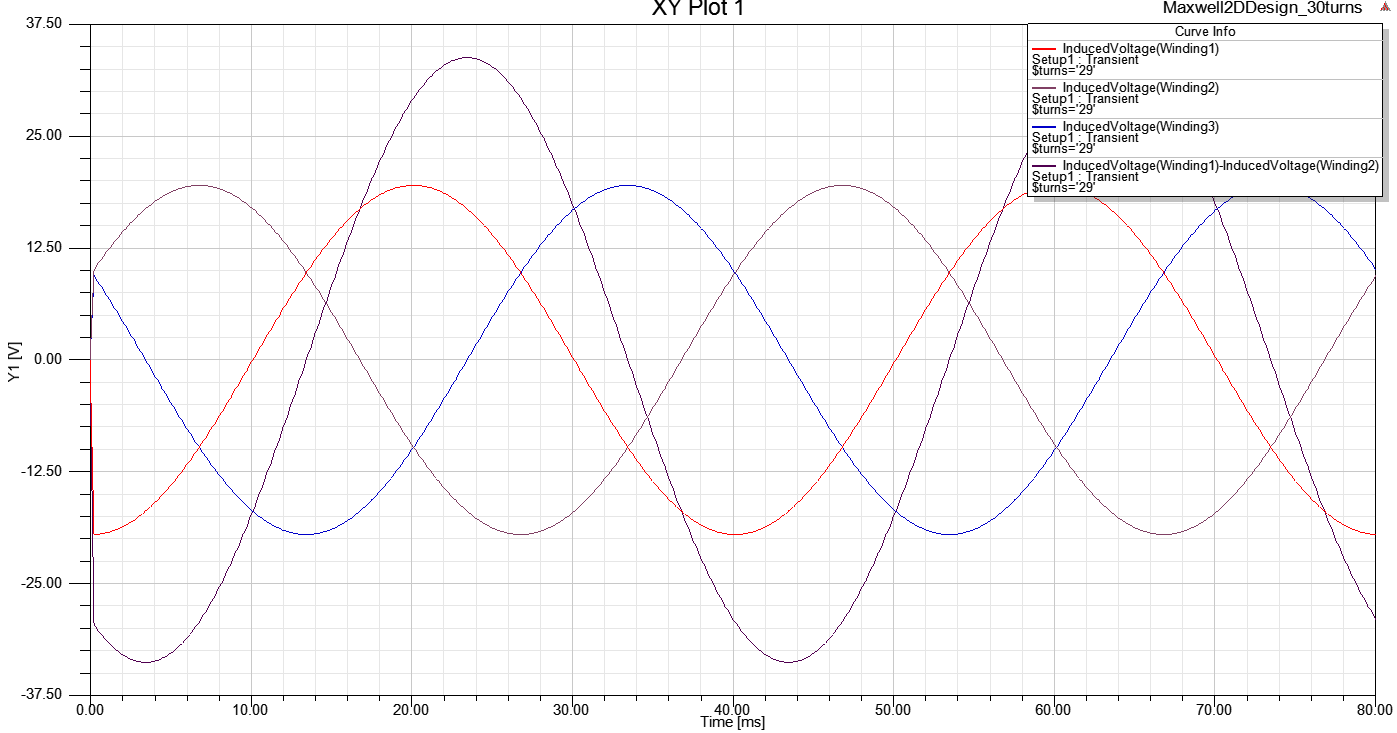


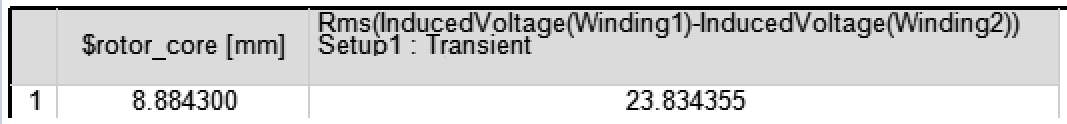


Induced voltage @1500 rpm 29 turns

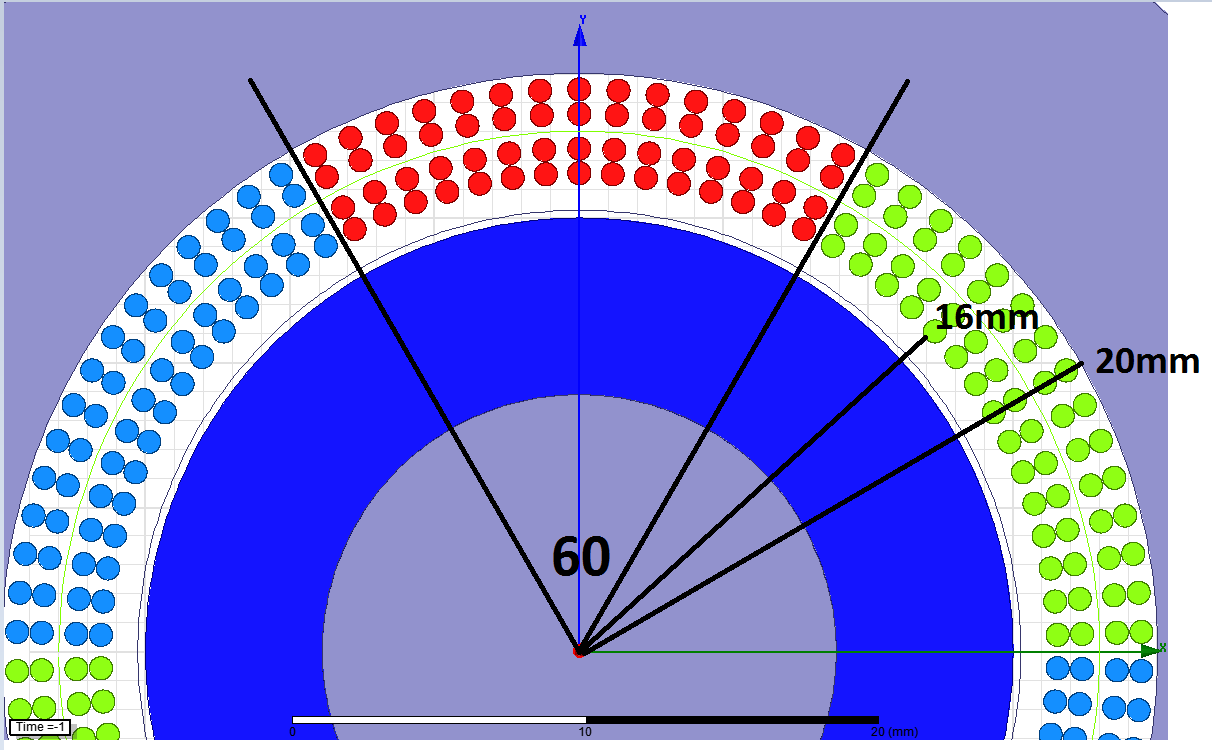
More realistic model

30 turns





Induced voltage @1500 rpm 30 turns



Area\*fill factor=total copper area

Total copper area / number of conductors = copper area

Pi\*(20^2-16^2)\*(60/360)\*0.7/60 = **0.88 mm^2 copper area**

Since 4 A/mm^2

**3.52 Arms**

**Max input power: 3^0.5 \* 3.52 \* 23.83 = 145.29 VA**