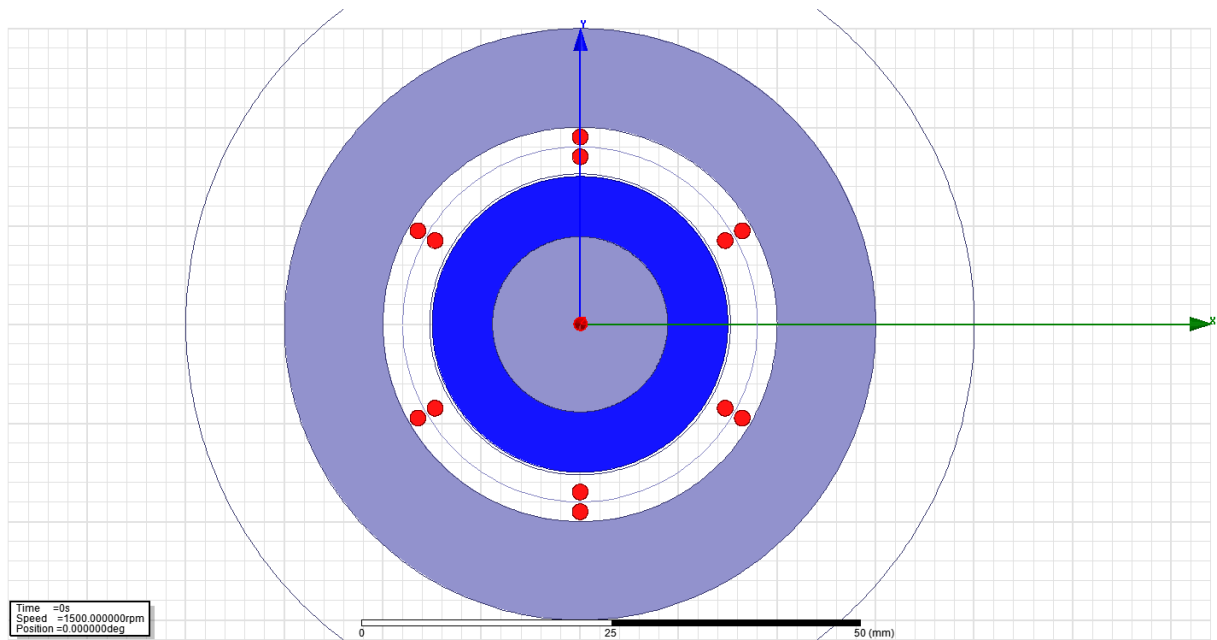


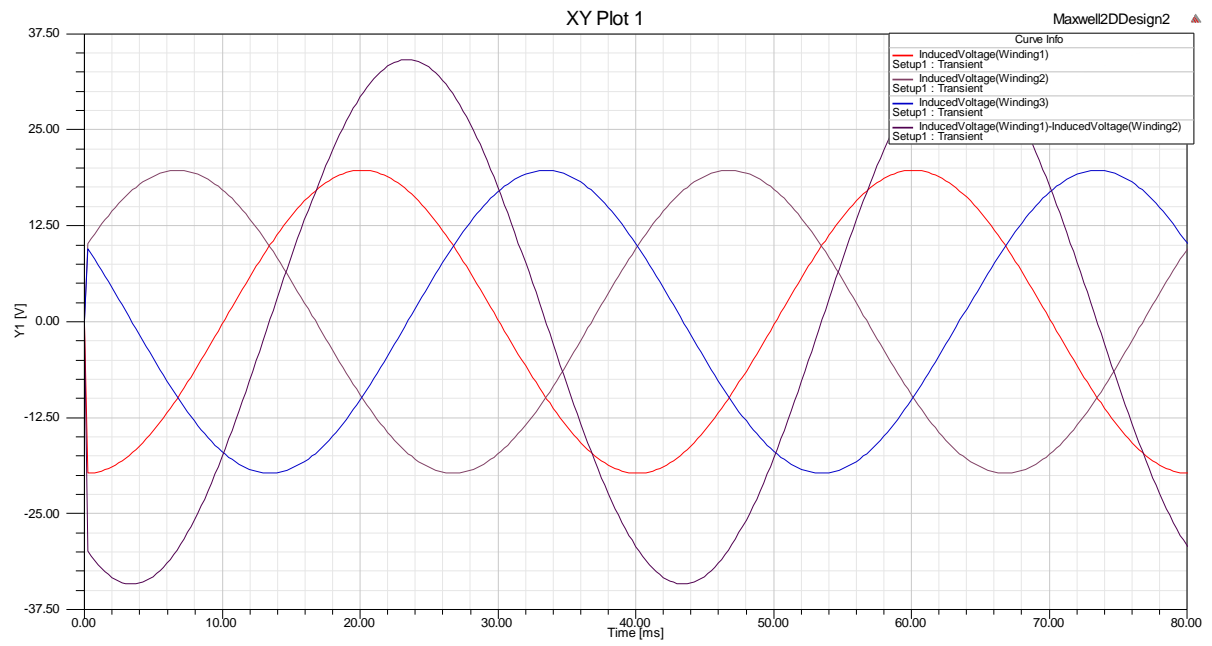
Max airgap flux density = 0.6T



Simple model to find number of turns roughly



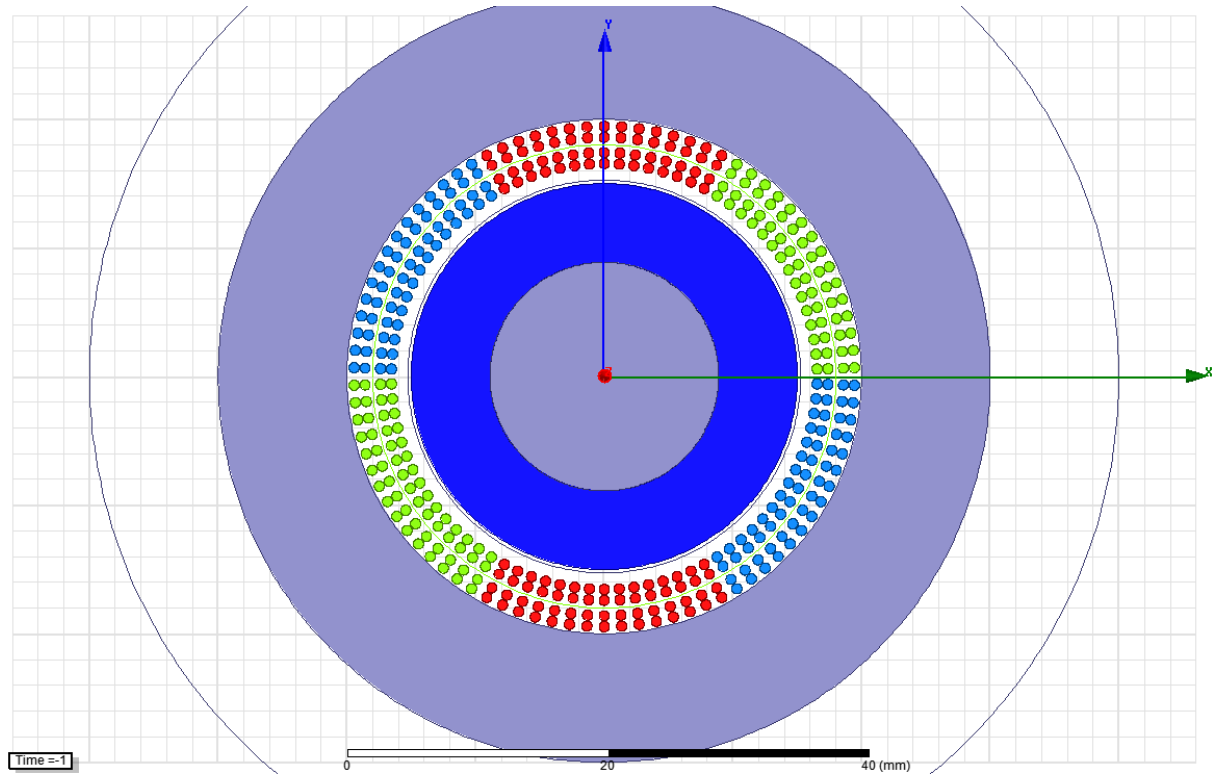
Induced voltage @1500 rpm 1turn



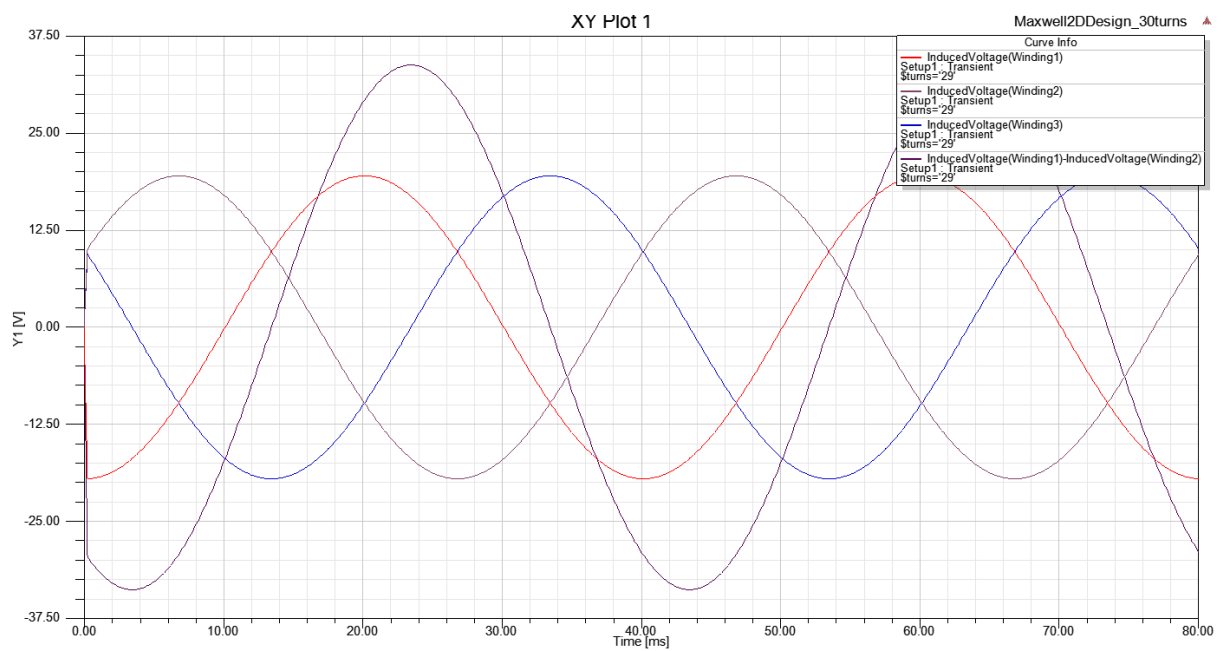
	\$rotor_core [mm]	Rms(InducedVoltage(Winding1)-InducedVoltage(Winding2)) Setup1 : Transient
1	8.884300	24.113909

Induced voltage @1500 rpm 29 turns

More realistic model

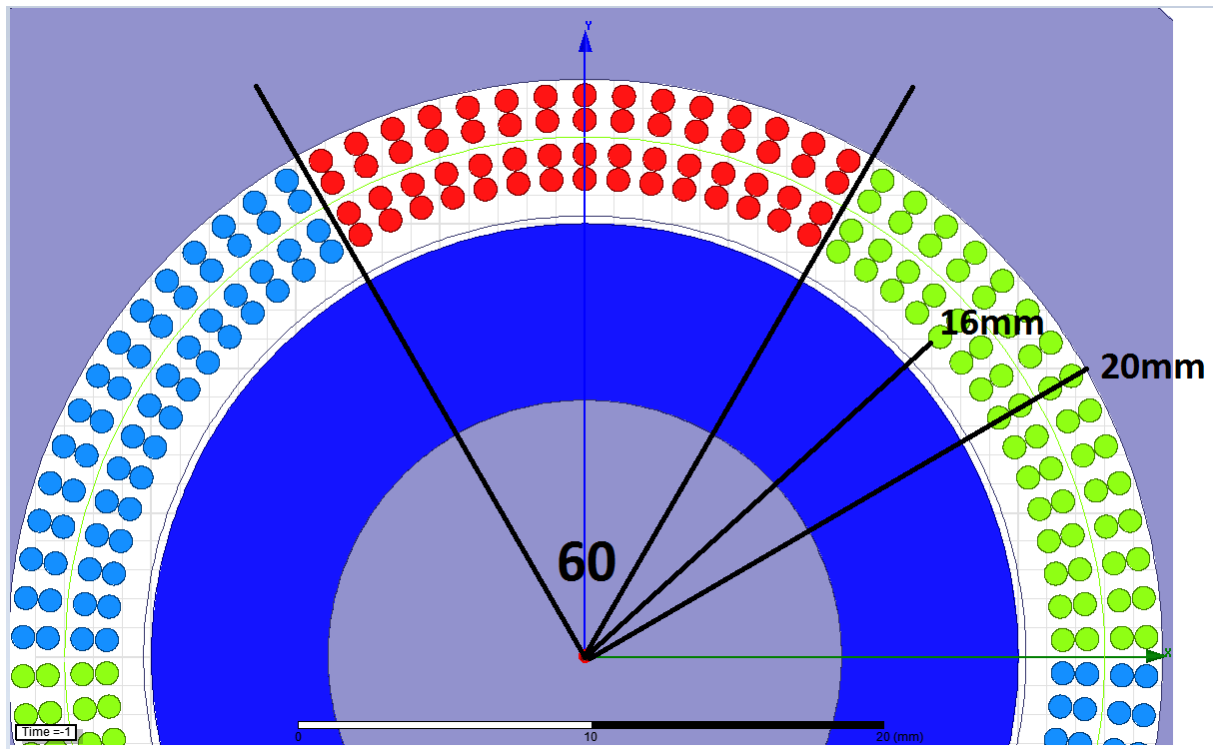


30 turns



	\$rotor_core [mm]	Rms(InducedVoltage(Winding1)-InducedVoltage(Winding2)) Setup1 : Transient
1	8.884300	23.834355

Induced voltage @1500 rpm 30 turns



Area*fill factor=total copper area

Total copper area / number of conductors = copper area

$\text{Pi} \cdot (20^2 - 16^2) \cdot (60/360) \cdot 0.7/60 = 0.88 \text{ mm}^2 \text{ copper area}$

Since 4 A/mm²

3.52 Arms

Max input power: $3^{0.5} \cdot 3.52 \cdot 23.83 = 145.29 \text{ VA}$