HEV Motor Design Comparison of IPMSM with Sintered Rare-Earth Magnet and PMASynRM with Bonded Dy Free Magnet in the Same Size

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This paper studied on the design comparison of traction motor for same size with sintered rare-earth magnet and bonded Dy free magnet. We designed PMASynRM with bonded Dy free magnet by changing only rotor and experimented to verify performance at the same size IPMSM with sintered rare-earth magnet.

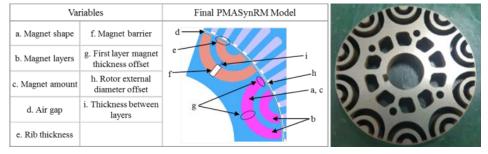


Fig. 1 Design variables and final PMASynRM model