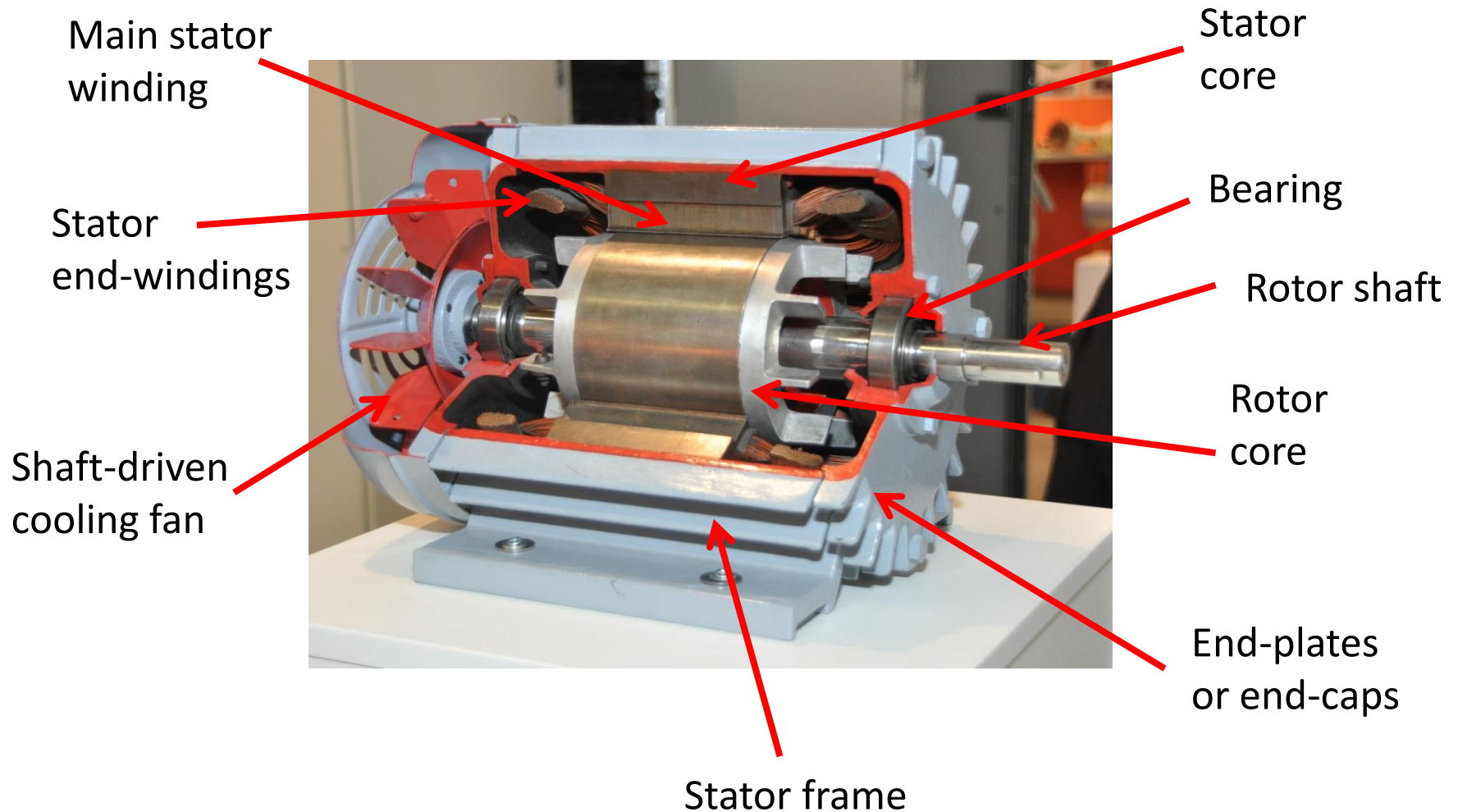
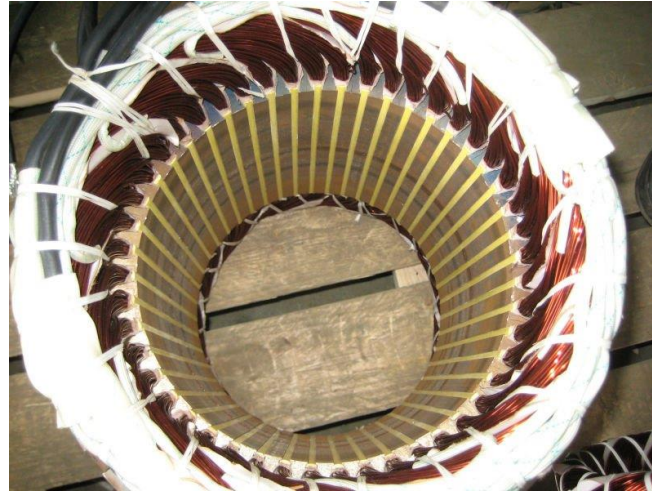
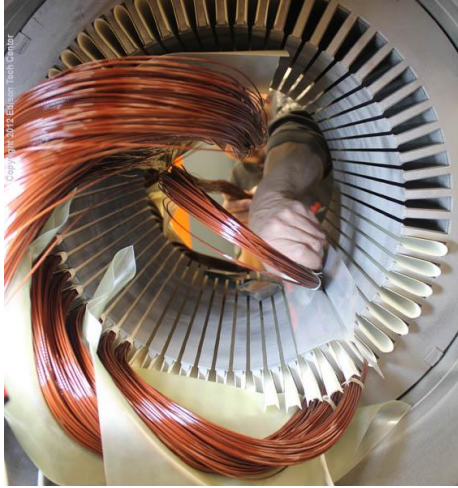


# Basic anatomy of an AC electrical machine (example shown is a medium sized induction motor)

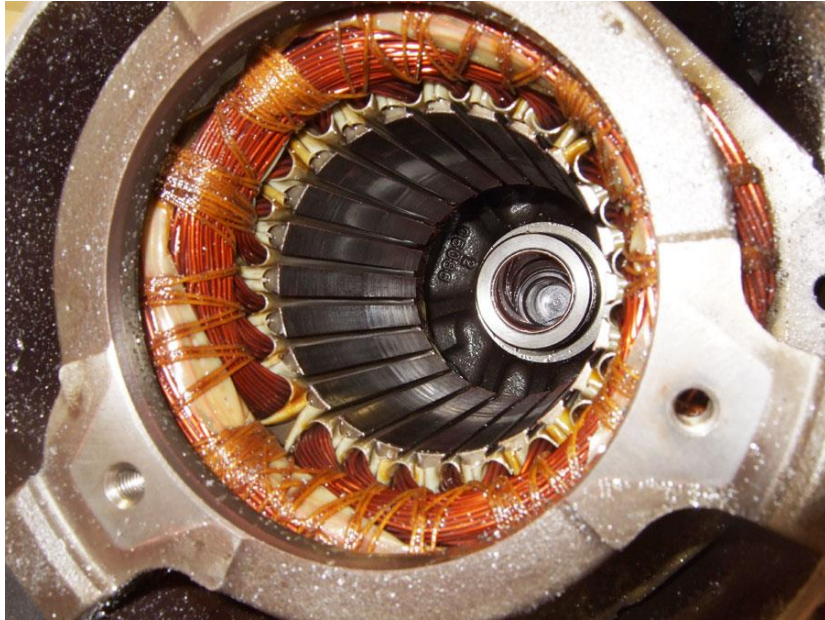


# AC machine stators - Part-way through manufacture

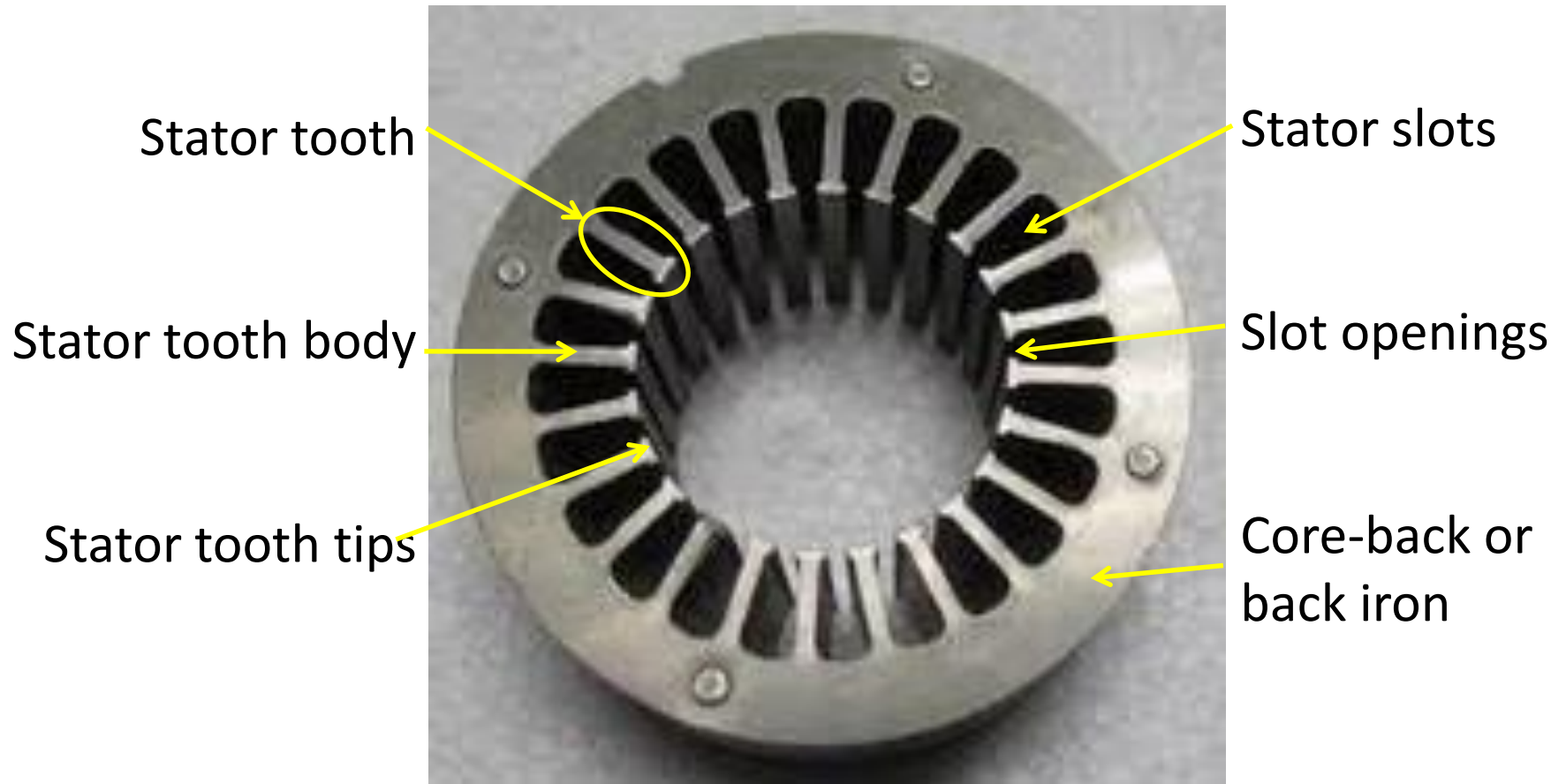




# AC machine stators – Impregnated and terminated



# Features of a typical stator core



# Stator core

- Sometimes referred to as simply 'stator iron'
- In 99.9%+ of AC machines, stator cores are manufactured from a stack of thin sheets (referred to as laminations) which are typically 0.1 to 0.65mm thick (0.35mm and 0.5mm being the most common).
- Most stator cores consists of hundreds of separate laminations which are joined into a stack by notching, cleating, clamping pins, weld along core or adhesive bonding
- Individual sheets are often coated with a very thin insulating coating
- Several alternative magnetic materials for stator cores