

Custom Motor Laminations

When designing a custom motor, the lamination components you select are just as important as the engineering that goes into them. The best materials for custom motor components depend on the end product's application and your specific needs.

MATERIAL OPTIONS FOR MOTOR LAMINATIONS

✓ COLD ROLLED MOTOR LAM STEEL (CRMLS)

- Most common custom engineered motor component
- Lowest cost
- Simple to stamp
- Low tool wear

✓ SILICON STEEL (ELECTRICAL STEEL)

- Made of low-carbon steel and a small amount of silicon
- Added volume resistivity
- Ideal for use in motion control products that require improved performance
- Available in a variety of grades and thicknesses

✓ NICKEL ALLOYS

- Nickel laminations contain iron and 49 percent Ni or 80 percent Ni
- Low core losses and high permeability at low or moderate inductions
- Great for motor, synchros and resolvers
- High permeability and low core losses

✓ COBALT ALLOYS

- 48 to 50 percent cobalt and 2 percent vanadium
- Best for applications with the highest possible flux density without saturation
- High tensile strengths
- Good for weight-sensitive applications