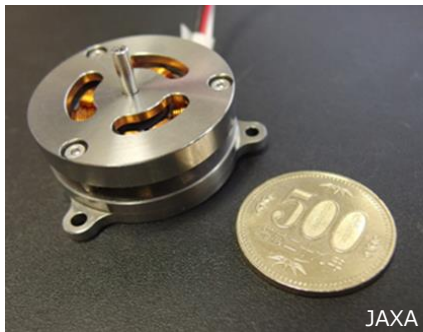


NIPPON KINZOKU Electrical Steel Foils "ST Series <ST080HP>" Adopted for "Compact and High Efficiency Motors with the World's Best class High Power Density" by JAXA et al. !

NipponKinzoku's Electrical Steel Foils "ST-080HP" have been applied to "Compact and High Efficiency Motors with the World's Best class High Power Density", that were the outcome of joint study by Japan Aerospace Exploration Agency(JAXA), ShinMaywa Industries ,Oita Univ.,Nihon-Bunri Univ.,Ibaraki Univ.and Shizuoka Univ..

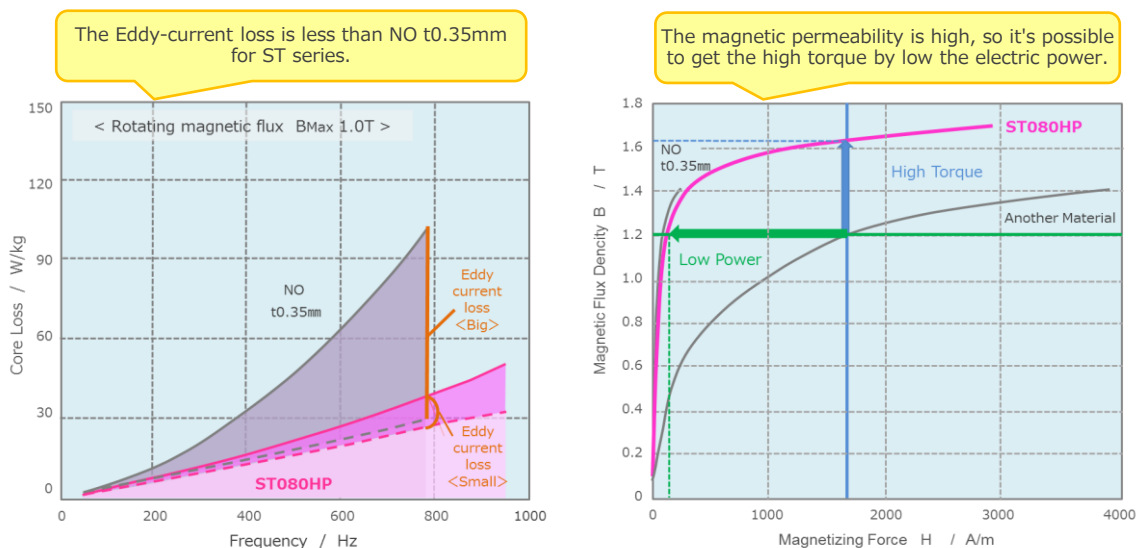


<Compact and High Efficiency Motors by JAXA et al. >

- Weight 25 g (Excluding motor case weight)
- Power ≥ 50 W
- Efficiency 85 % ($\geq 15,000$ rpm)
- Core material ST080HP (Thickness $80\mu\text{m}$)

This Motor was developed with the goal of High Power ($\geq 50\text{W}$) at Minimum weight ($\leq 25\text{g}$) by JAXA et al. The material for the motor core had been required the characteristics of High Efficiency at High Power Density(Compact,High Frequency and High Magnetic Flux Density).

NipponKinzoku's Electrical Steel Foils have High Magnetic Flux Density equal to that of Conventional Non-Oriented Electrical Steel (thickness $350\mu\text{m}$, etc.), and further thinning the thickness to $80\mu\text{m}$ makes it possible to obtain low loss even under High Frequency condition.



In automobiles, medical equipment and aerospace equipment market, various Compact· High-speed Motors are used . Recently, the needs for High Efficiency rise even in these market. Nippon Kinzoku has developed the Electrical Steel Foils "ST080HP" to meet these needs. JAXA et al. has applied "ST080HP" to "Compact and High Efficiency Motors with the World's Best class High Power Density" by JAXA et al.