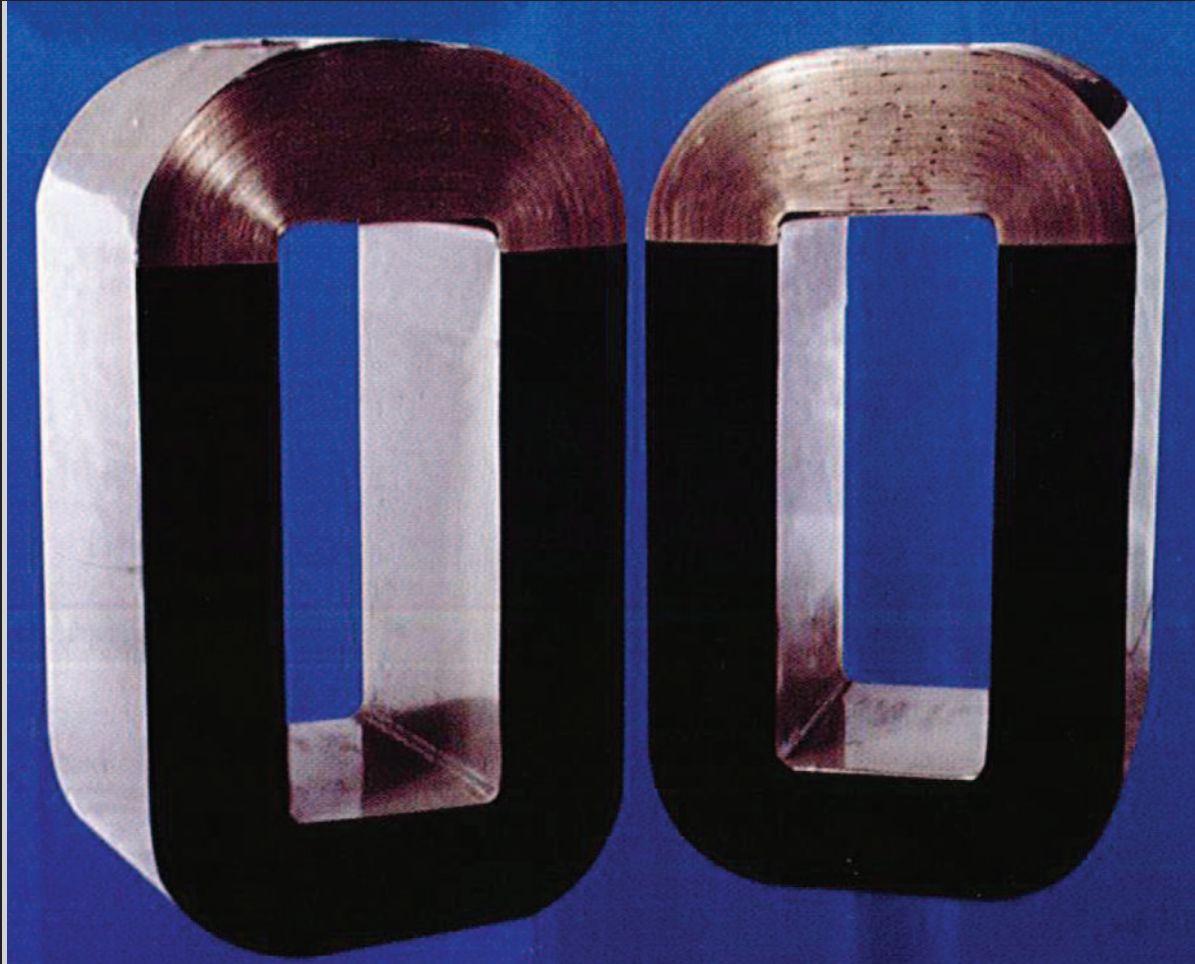


# ***Amorphous Metal Cores 5***

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## MAGNETIC PROPERTIES:

- Operating Flux Density:
  - Typical Single Phase: 1.3 - 1.4 Tesla.
  - Typical Three Phase: 1.25 - 1.35 Tesla.
- Saturation:
  - Induction (T) as cast: 1.56.
- No - load Core Loss and Exciting Power:
  - At the test condition of 1.3T, 50Hz, specific loss  $\leq 0.18\text{W/kg}$ ; specific exciting power  $\leq 0.45\text{VA/kg}$ .
  - At the test condition of 1.3T, 50Hz, specific loss  $\leq 0.20\text{W/kg}$ ; specific exciting power  $\leq 0.60\text{VA/kg}$ .
  - The no-load loss and exciting power of the three phase - Evans core will be approximately 25% higher and will vary according to specific design.

## PHYSICAL PROPERTIES:

Core Space Factor:

- Guaranteed Minimum: 86%.

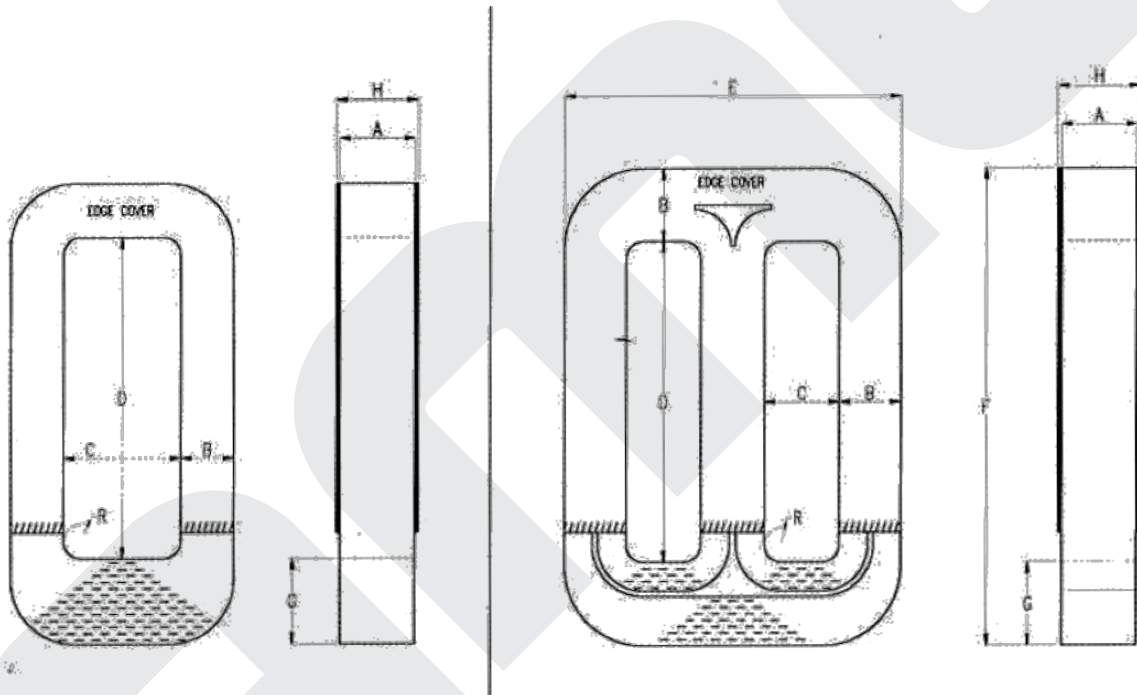
Density:

- $\text{g/cm}^3$  as cast: 7.19.

Core Design Standards:

- Ribbon width (A): 142mm, 170mm, 213mm.
- Core build-up (B): 0~300mm; maximum.
- Window width (C): 55~1500mm; tolerance:  $+3/-0\text{mm}$ .
- Window height (D): 180~2000mm; tolerance:  $+3/-0\text{mm}$ .
- Joint build (G):  $B \times 1.10 \sim 1.20\text{mm}$ .
- Window radius (R):  $6.4 \pm 1.5\text{mm}$ .
- Outermost layer shearing length: not more than 100000mm.
- Continuous service temperature:  $150^\circ\text{C}$ .

Core surface is coated in Epoxy Resin, not more than 2mm thick per side, (Dimension (H)) Ribbon width  $+4\text{mm}$ .



SINGLE CORE = CORE TYPE  
DOUBLE CORE = SHELL TYPE  
2 LARGE + 2 SMALL CORES = 3 PHASE

THREE PHASE - THREE COLUMN EVANS  
CORE