

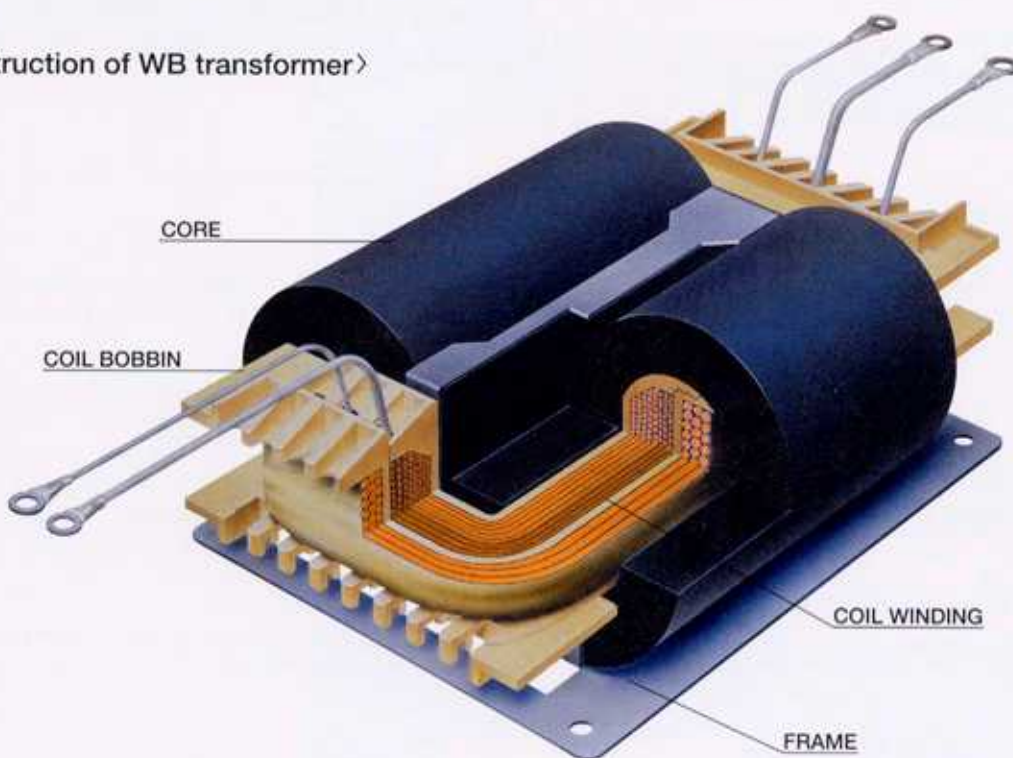
WB TRANSFORMER

**One idea realized this high performance transformer.
This idea is "to wind non-cut core strip on the coiling bobbin".**

WB transformer is a new transformer that non-cut core strip is wound on the newly developed coil bobbin. As a result of further development of well-reputed SC transformer, the coil bobbin and core strip winding machine were developed, realizing more effective works for coil winding, insulation process and core strip winding as well as steady quality and extreme cost reduction.

Therefore, this is a transformer which meets ecological age from the material and energy saving point of view.

〈Construction of WB transformer〉



WB transformer is a transformer which is applied with the Know-how of Kawatetsu Densetsu (Kawatetsu Electric Engineering Co., Ltd., Kobe) based on their own reliable technology

Wound-core-type Transformer with Coil Bobbin "WB Transformer" is a compact, light weight and high efficiency transformer, based on the idea that the core should be wound on the coil. Therein, the Know-how which was awarded by Energy Saving Foundation and Japan Electric Equipment Industry Association regarding SC transformer. WB Transformer is a further developed one of SC transformer, realizing low costs which is resulting in expanding of its applications.

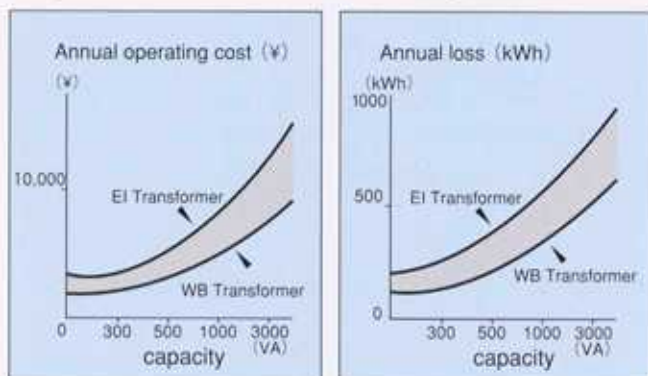
Construction of coil bobbin

The coil bobbin of WB Transformer was developed under the cooperation with a specialized coil bobbin maker, NISHIMOTO GOSEI HANBAI CO., LTD. (Hirakata, Japan), and it seeks most rational shape regarding distribution and tap-lead of core and wire. The primary wire is completely separate from the secondary wire and core, and it meets the International Standard (IEC 742) regarding Creepage distances (Cr) and Clearances (Cl).

WB Transformer responds to user's various needs

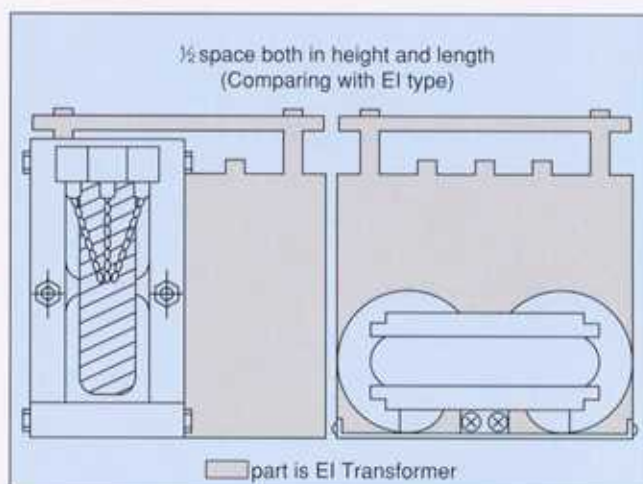
Energy saving, Low cost

Through adopting the winding technology of non-cut core sheet and grain-oriented magnetic steel strip the iron loss was much reduced, which resulted in energy saving and less operation costs. The price is low, thus it is economical in all aspects.



Compact, Light Weight

Owing to the unique coil bobbin the core design was achieved to space saving type, i.e. small, light and thin transformer. Further, vertical or horizontal setting is possible, which is very convenient for installation.



High Reliability

The construction of coil bobbin meets International Standard (IEC 742) in Creepage distances (Cr) and Clearances (Cl), and the high insulation performance was realized. The material meets

UL94V-0, and Lignite, FR-530 (B-grade) and grain-oriented magnetic steel strip (RGH) are used, achieving steady and high quality transformer.

Features of WB Transformer (comparing with EI type)

1 Full use of core performance

It is possible to uniform the core effective section by means of winding the core sheet on the coil, and the magnetic circuit is shorter. Further, it is so designed that the core performance of the grain-oriented magnetic steel strip can be fully used.

2 No cut and gap in the core

Non-cut core structure is so simple that there are neither cut-section nor gap (connection part), so there are less leakage of magnetic flux, less noise and less vibration.

3 Using coil bobbin

As the curvature of coil bobbin where the core strip should be wound is identical with the core radius, the core can be wound without deteriorating the core performance, and the coil bobbin and the core can be integrated in one body, thus the high insulation performance and the exact dimensional shape can be realized. Further, as the automatic winding machine can be used, the stable quality and low cost winding are realized.