

Aluminium strips for transformers in top quality

Copper gradually being replaced by aluminium in transformer construction

Up until the 1990s, aluminium was hardly ever used for transformer windings. This was because conductor materials were not available in sufficient quality and there were no strip winding machines on the market that could handle aluminium instead of copper (high-voltage windings). Metall Service Menziken has been engaged from the start in developing products and services for the global transformer market.

Cost-effective and flexible with fast production

Modern strip winding machines enable transformer manufacturers to produce low-voltage and high-voltage coils/windings efficiently.

But to keep up with the global competition, they have to offer their products at a low price, flexibly, and with ever-shorter manufacturing and delivery times. These are exactly the requirements Metall Service Menziken fulfils with its supply of aluminium windings for transformers.



Aluminium strips for transformers in certified top quality



Strip thicknesses from 0.20 to 3.00mm and widths from 20 to 1260mm

tons of mother coils are available to transformer manufacturers on short order. The technical lead time is 5 days ex plant. Our customers thus benefit from the shortest delivery times on the market. In cooperation with a logistics specialist, we ship aluminium strips all over the whole world. Deliveries to the German-speaking countries are made twice a week by truck.

Everything the customer requires

Depending on the customer's strip winding machine, strips can be made with various inner coil diameters of 300, 400, or 500 mm. On request, we can equip inner diameters of 300, 400, or 500 mm with an additional aluminium core (winding sleeve).

If the same aluminium strip is to be used multiple times, the strip surface (starting at a thickness of 0.50 mm) can on request be protected with a paper liner to guard against scratches. Metall Service Menziken can also supply smaller quantities of some strip thicknesses, starting with as little as 200 kg per item ordered. Strip orders are assembled and packaged individually for each customer.

No compromises on material quality

Only the alloy EN AW-1350 is used as primary material in order to comply with the required minimum electrical conductivity as per EN 14121 (min. 35.4 MS/m) and the ASTM standard IACS 100% (min. 61%). Special attention must be devoted when slitting the strips to the resulting burr. To avoid sharp edges, the strips are not only cut in a way that minimises the burr; depending on the width of the strip, the slitting machine also smooths out or flattens the burr. The aluminium strips for transformer windings are thermally degreased for an optimally clean and grease-free surface.

Shortest delivery times on the market

Customers can choose primary material in a thickness range from 0.20 to 3.00 mm. The material is used to produce strips from 20 to 1260 mm in width. Several 100



Figure 1 Available on request with aluminium core in the inner diameter and with paper liners