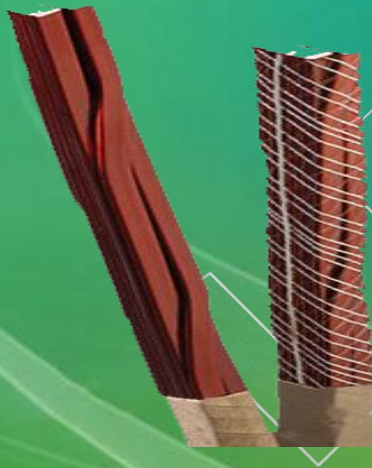


CONTINUOUSLY TRANSPOSED CABLE



CONTINUOUSLY TRANSPOSED CONDUCTOR

Continuously Transposed Cable (CTC) consists of a number of rectangular, film insulated conductors made into an assembly and usually over-wrapped with layers of insulating material.





LP Industry has experienced team for Enameled Wires, advanced technology, excellent equipment, strict management is the foundation of the company continuous development and expansion, and the Enameled Wires win the trust of customers. We believe that through our continuous efforts and pursuit, we will be able to achieve mutual benefit and win-win with our customers!



Continuously Transposed Cable

Number of strips	7-49
Single Dimension	thickness of conductor a : 1.00-3.15mm Width of conductor b : 3.00-12. 50mm
Suggested Ratio Of Width And Thickness	2.5
Max thickness of CTC	80mm (excluding insulation)
Max Width	26mm (excluding insulation)
Max Height Of CTC Bundles	80mm (excluding paper insulation)
Packing	30kg- 150kg ply-wood spool(250*400/250*500/250*600)
Application	It can be used in Power Grids and Substations, Renewable Energy Systems and Industrial Applications.



Packing

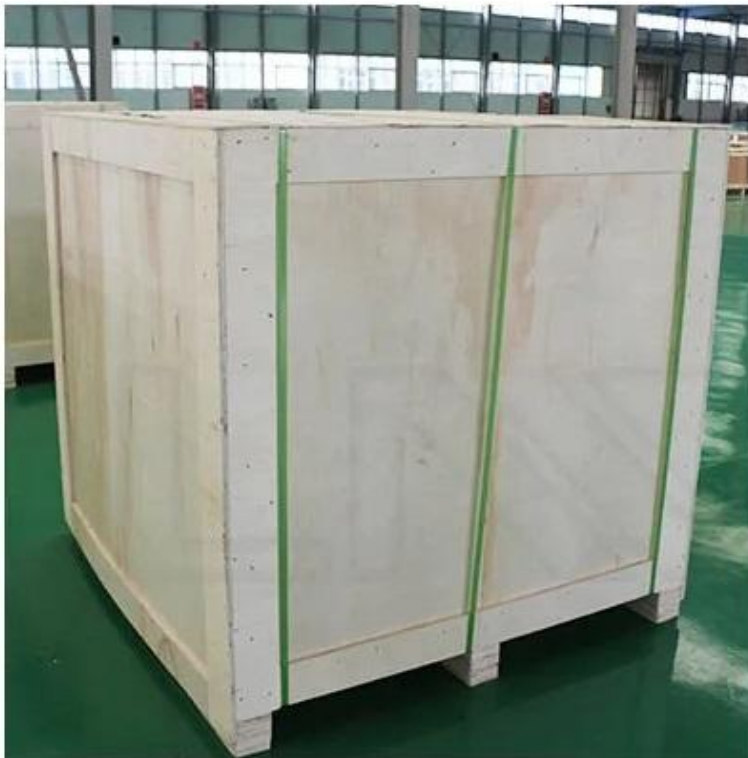


Innerpacking:

PT-25/PT-30/PT-60/PT-90/PT-200
plastic spool or
250mm*400mm/250mm*500mm/250mm*600mm wooden spool

Outer packing:

wooden case outer Winding wire



Working Processing:

Conductor Selection: High-quality copper or aluminum conductors are selected based on the specific requirements of the application. Factors such as current carrying capacity, voltage level, and mechanical strength are considered during the conductor selection process.

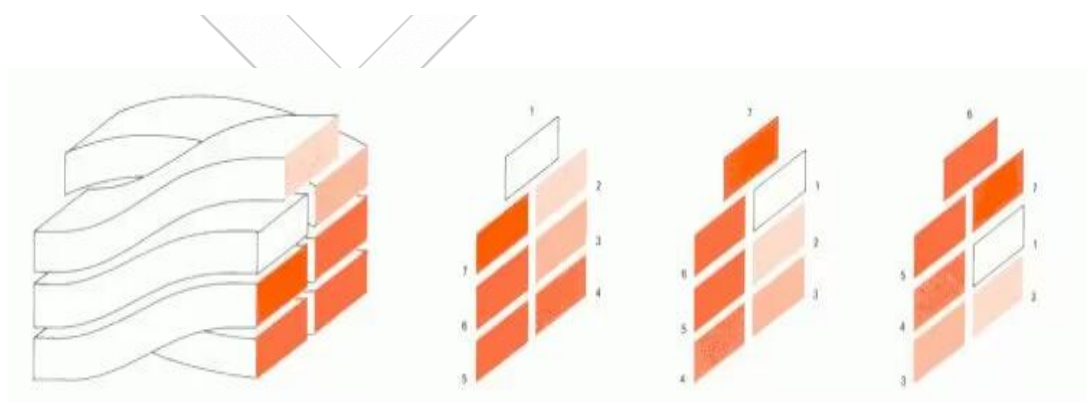
Bunching: In this step, a predetermined number of conductors are gathered and twisted together in a process called bunching. The aim is to create a compact and uniform bundle of conductors before the transposition process begins. Bunching ensures that the individual conductors are aligned and ready for the subsequent steps.

Transposition: Transposition is the key process that distinguishes CTCs from traditional cables. It involves systematically twisting each conductor within the cable bundle to achieve a continuous and repetitive pattern. The twisting is performed in a specific sequence to ensure equal distribution of currents and cancel out the effects of skin and proximity losses. The most common transposition pattern is known as "4-3" or "4-4-3," which refers to the number of conductor movements per cycle.

Insulation: Once the conductors have been continuously transposed, they are insulated to provide electrical insulation and mechanical protection. Various insulation materials, such as cross-linked polyethylene (XLPE) or ethylene propylene rubber (EPR), may be used depending on the specific application requirements.

Jacketing and Shielding: In some cases, CTCs may undergo an additional step of jacketing and shielding. The outer jacket provides additional mechanical protection and safeguards against environmental factors such as moisture, chemicals, and abrasion. Shielding layers, typically made of metallic tapes or wires, can be added to minimize electromagnetic interference and improve the overall electromagnetic compatibility of the cable.

Testing and Quality Assurance: Before CTCs are ready for deployment, they undergo rigorous testing to ensure compliance with industry standards and specifications. This includes tests for electrical performance, insulation resistance, mechanical strength, and other relevant parameters. Quality control measures are implemented to maintain consistency and reliability in the production of CTCs.

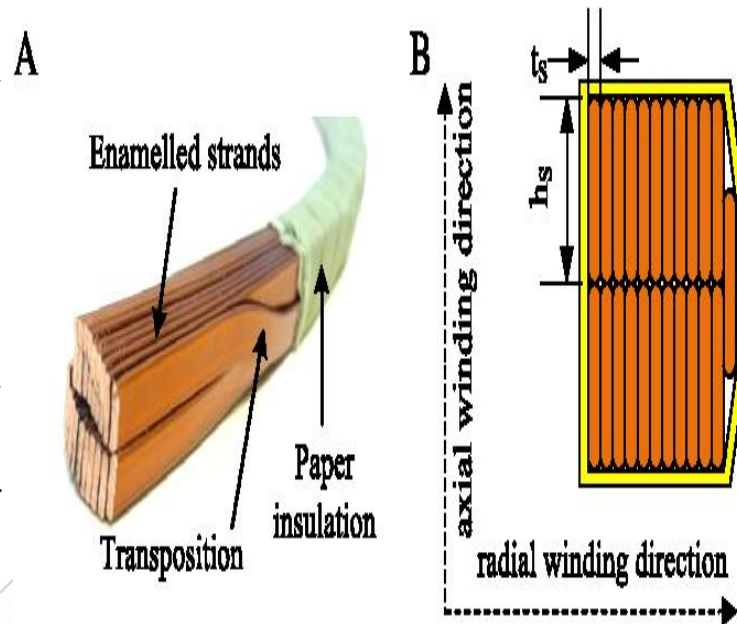


Benefits of Continuously Transposed Cables:

Enhanced Efficiency: One of the primary advantages of continuously transposed cables is their exceptional efficiency. By minimizing resistance and power losses, CTCs enable a more efficient transfer of electrical energy, leading to reduced energy consumption and improved system performance.

Lower Electromagnetic Interference: EMI is a common challenge in high-voltage power transmission. The continuous transposition of conductors in CTCs helps cancel out the magnetic fields generated by neighboring conductors. As a result, electromagnetic interference is significantly reduced, ensuring the stability and reliability of the power transmission system.

Increased Reliability: CTCs exhibit enhanced durability and reliability due to their design. The even distribution of current among conductors prevents localized overheating and reduces the risk of insulation degradation. This increased reliability translates into lower maintenance requirements, minimized downtime, and improved overall system longevity.



Welcome to enquiry LP Industry
Continuously Transposed Conductors!

