

**ALFO to realize the dream of low cost efficient Transformers.**



Aluminium Foil Cut Section Pic.

**ALFO-CNC** –Aluminium foil transformer winding machine –Patented with IPR (Intellectual proprietary rights) - 100% indigenous –designed to manufacture from 1Kva onwards - The production capacity in all leads to meet market demands of multiple capacity and covering wide range like single phase, multi phase and so on... In toto we can meet the demand of market.

**ALFO** - designs and manufactures transformers using aluminum or copper foil in place of the standard copper wire traditionally used for coil windings. ALFO Electric introduced this unique construction technology, providing practical and economical aluminum foil-wound transformers in the 1 Kva to 500 Kva power range.



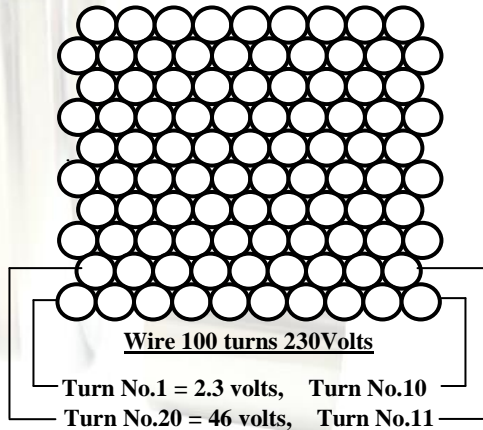
**Products:**

1. Single Phase Transformers.
2. Multi Phase Transformers.
3. Isolation Transformers.
4. Step up Transformers.
5. Step down Transformers.

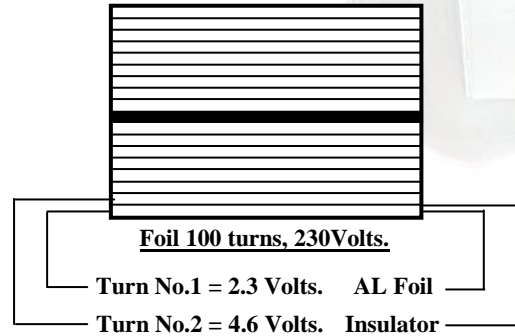
Modus Operandus	Applications	Quality Control
From the stage of aluminium foil it gets converted into coil, then transformer by electrical steel core, stages of testing like load, efficiency, performance and quality certification. With certification the product gets delivered to clients through our logistics division.	<ul style="list-style-type: none"> <li>• UPS / Invertors.</li> <li>• Servo Stabilizer.</li> <li>• Chokes.</li> <li>• Control panel.</li> <li>• Batter chargers.</li> <li>• Wind Mill.</li> <li>• Welding transformer.</li> </ul>	<ul style="list-style-type: none"> <li>• Testing apparatus and process</li> <li>• Technical parameters value</li> <li>• Test report</li> <li>• System report.</li> </ul>

## Comparison with Wire Wound & Foil Wound Coil Transformers.

### WIRE WOUND



### FOIL WOUND



S.No	Features	Copper wire wound transformers.	Aluminium foil wound transformers.
1	Voltage stress	Winding increased	Low
2	Electrical efficiency	100%	100%
3	Pricing Pattern	100%	80%
4	Weight	100%	60%
5	Size & compactness	Normal	20% - 25% lesser
6	Insulation	Chances of failure	No failure
7	Insulation thickness	Not under our control	We decide as per requirement
8	Winding area	Loss in winding space utilization	Full winding space is utilized
9	Temperature rise	when load changes it goes high	Normal
10	Heat sink	Not applicable	yes

## Uniqueness of Alfo Electric Transformers.

- *ALFO Transformer is smaller and lighter with the same ratings.*
- *ALFO Transformer that has the same size and rating but a lower operating temperature.*
- *ALFO Transformer is of the same size, operates at the same temperature, but can have a higher rating.*

## Economical.

- ❖ *The ALFO principle has succeeded in producing transformers with excellent electrical, mechanical and thermal characteristics which have also proved to be particularly compatible with the environment. ALFO transformers are as quiet as oil-immersed types.*

## ❖ At a Glance

1. *LV terminals*
2. *ALFO Transformers insulation for core and windings against mechanical vibrations, resulting in low noise emissions.*
3. *LV winding of aluminium / copper foil, windings fully covered with insulating sheet.*

*The principal advantage to using aluminum foil rather than copper in transformers is the reduction in weight. The density of copper is 0.145 Kg. per cubic inch while that of aluminum is 0.044 Kg. per cubic inch.*

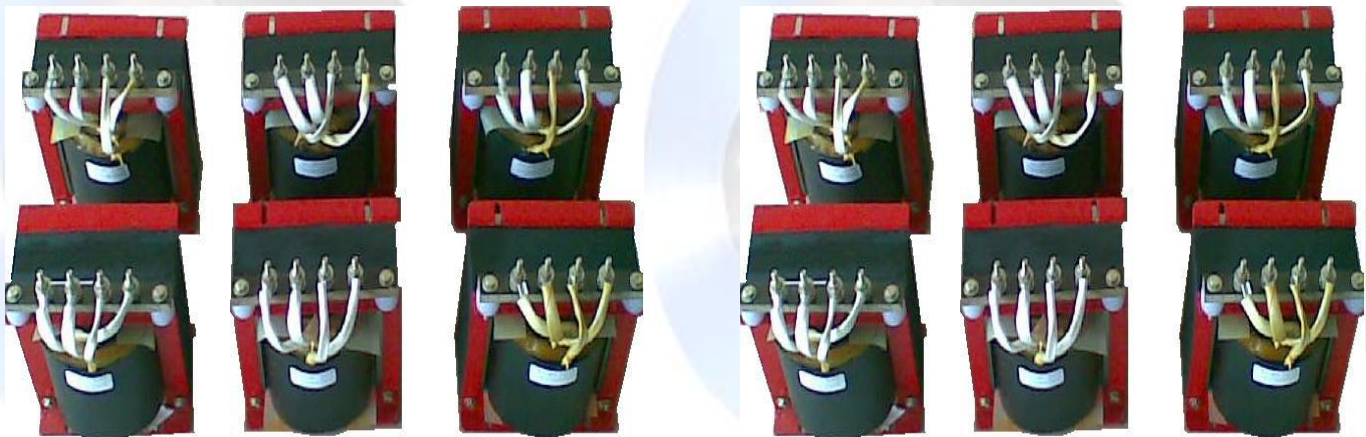


## ❖ The change from copper wire to aluminum Foil results in,


- ✓ *The physical geometry changes.*
- ✓ *The core losses change.*
- ✓ *The efficiency.*
- ✓ *Regulation.*
- ✓ *Temperature rise all change.*

## ➤ *Advantages and deviations.*

- ❖ *Increased reliability.*
- ❖ *Reduced size and weight.*
- ❖ *Higher ambient temperature operating capability.*
- ❖ *Improved electrical efficiency.*
- ❖ *Increased electrical stress resistance.*
- ❖ *Better overall regulation.*





Certificates	Vision	Our Performance
<p data-bbox="219 430 479 462"><u>Patented Certificate</u></p> 	<p data-bbox="560 430 1015 703">Merging the rise in consumption of transformer with price burst of copper in multifold, the day is not far away for ALFO Electric will become the leader in transformer industry.</p> <p data-bbox="560 766 1015 1039">In our quest to produce the best product possible, all incoming material, every individual step during the process and the final product are subject to strictest electromechanical properties.</p> <p data-bbox="560 1102 1015 1554">Backed by quality conscious &amp; certified product suppliers and dedicated professionals, ALFO Electric now pledged for in time and standard delivery. By leveraging on our unparalleled sourcing and logistics capability, our partners will enjoy the exceptional value that the ALFO Electric has to offer.</p>	<p data-bbox="1047 430 1453 651">ALFO ELECTRIC With in relatively short period of time, we have quickly gained identity through our quality &amp; timely delivery.</p> <p data-bbox="1047 766 1453 892">Quick response to the customer's needs is the keynote of our service.</p>

*Together We Create value to our Product.*