

## **REPORT NO. 744**

**INCREASE IN THE GENERAL RATE OF CUSTOMS DUTY ON TRANSFORMER  
CORES, HAVING A POWER HANDLING CAPACITY NOT EXCEEDING 50 000 KVA,  
CLASSIFIABLE UNDER TARIFF SUBHEADING 8504.90, FROM 5% TO THE WTO  
BOUND RATE OF 15% *AD VALOREM*, BY WAY OF THE CREATION OF AN 8-DIGIT  
TARIFF SUBHEADING**

The International Trade Administration Commission herewith presents its **Report No. 744:**  
**INCREASE IN THE GENERAL RATE OF CUSTOMS DUTY ON TRANSFORMER CORES, HAVING A**  
**POWER HANDLING CAPACITY NOT EXCEEDING 50 000 KVA, CLASSIFIABLE UNDER TARIFF**  
**SUBHEADING 8504.90, FROM 5% TO THE WTO BOUND RATE OF 15% AD VALOREM, BY WAY OF**  
**THE CREATION OF AN 8-DIGIT TARIFF SUBHEADING, with recommendations.**

  
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**AYABONGA CAWE**  
**CHIEF COMMISSIONER**

**PRETORIA**

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**REPUBLIC OF SOUTH AFRICA**  
**INTERNATIONAL TRADE ADMINISTRATION COMMISSION OF SOUTH**  
**AFRICA**

**REPORT NO. 744**

**INCREASE IN THE GENERAL RATE OF CUSTOMS DUTY ON TRANSFORMER CORES, HAVING A POWER HANDLING CAPACITY NOT EXCEEDING 50 000 KVA, CLASSIFIABLE UNDER TARIFF SUBHEADING 8504.90, FROM 5% TO THE WTO BOUND RATE OF 15% *AD VALOREM*, BY WAY OF THE CREATION OF AN 8-DIGIT TARIFF SUBHEADING**

**Synopsis**

STI Electrical (Pty) Ltd, (herein referred to as “STI Electrical” or “the applicant”), applied for an increase in the general rate of customs duty on transformer cores, having a power handling capacity not exceeding 50 000 KVA, classifiable under tariff subheading 8504.90, from 5% *ad valorem* to the WTO bound rate of 15% *ad valorem*, by way of the creation of an 8-digit tariff subheading.

The International Trade Administration Commission (“ITAC” or “the Commission”) considered the application in light of all the information at its disposal. In particular, the Commission took the following factors into account:

- The subject product is a transformer core, an integral component of the transformer, regarded as the magnetic circuit part. It is made up of thin laminations of cold-rolled grain-oriented silicon steel (CRGOS), commonly known as core steel;
- The domestic manufacturing industry’s total production and sales volumes of the subject product declined during the three-year period under investigation;
- The domestic industry manufacturing transformation core is relatively price uncompetitive vis-à-vis imports of similar imported products; and
- Declining profits, coupled with an escalating cost structure, in relation to the manufacturing of the subject product, primarily driven by the cost of raw materials.

- The price impact analysis revealed that tariff levels used would have a minimal impact on domestic price, therefore offering a balanced approach that protects local industry while minimizing consumer impact.

The Commission concluded that additional tariff support should enable the domestic industry manufacturing the subject products to utilise its existing under-utilised production capacity, achieve economies of scale, resulting in increased volumes with a reduction in the marginal cost of production.

The Commission recommended that the rate of customs duty on transformer cores, having a power handling capacity not exceeding 50 000 KVA, classifiable under tariff subheading 8504.90, be increased from 5% to the WTO bound rate of 15% *ad valorem*, by way of the creation of an 8-digit tariff subheading.

The Commission further recommended that the duty be reviewed to monitor the performance of the industry after a period of three years from the date of implementation, or such other period as decided by the Commission.

#### **THE APPLICATION AND TARIFF POSITION**

1. STI Electrical applied for an increase in the general rate of customs duty on transformer cores, having a power handling capacity not exceeding 50 000 KVA, classifiable under tariff subheading 8504.90, from 5% *ad valorem* to the WTO bound rate of 15% *ad valorem*, by way of the creation of an 8-digit tariff subheading.
2. The applicant is incorporated in South Africa, with interests in the manufacturing industry and the electrical sector. The company manufactures transformer cores, with its manufacturing plant based in Johannesburg, in the Gauteng Province. The applicant is one of only two companies in the Southern African Customs Union ("SACU") region which is involved in the manufacturing of transformer cores.
3. The applicant specializes in the production of transmission cores tailored to the specific needs and specifications of their clientele, which primarily consists of power utilities and municipalities operating within the energy sector. Transformer cores, being pivotal components, facilitate the seamless transfer of energy across circuits within the infrastructure of these power utilities. This capability is instrumental in enhancing the overall efficiency and reliability of energy transmission and distribution



systems deployed by entities within the energy sector.

4. As motivation for the increase in the general rate of customs duty, the applicant cited, inter alia, the following:
- Transformer cores are currently imported into South Africa and attract 5% *ad valorem* customs duty, making it difficult for domestic producers to compete with similar low-priced imports;
  - The price of grain-oriented silicon steel, the main input material used in the manufacture of transformer cores, has increased significantly over the years, particularly between 2019 and 2022, further eroding the competitiveness of the domestic industry manufacturing transformer cores against imports of similar products;
  - The domestic industry involved in the fabrication of transformer cores, including but not limited to, sizing, slitting, stacking and clamping processes, contributes significantly towards industrialization, diversification and value addition in the country;
  - The company is an important contributor to job creation and retention, particularly in its home district of Ekurhuleni, a region characterized by high unemployment rates, affecting mostly the youth; and
  - Tariff support for the transformer cores manufacturing industry would not only assist in the industry's growth in South Africa, but also in the country's industrial development and employment creation objectives.
5. On 22 March 2024, the Commission published the application in the Government Gazette No. 50311, under Notice 2380 of 2024 for interested parties to comment, as follows:

**INCREASE IN THE GENERAL RATE OF CUSTOMS DUTY ON:**

*"Transformer cores, having a power handling capacity not exceeding 50 000 Kva, classifiable in tariff subheading 8504.90, from 5% ad valorem to the WTO bound rate of 15% ad valorem, by way of the creation of an 8-digit tariff subheading."*

6. Table 1 below shows the existing tariff structure of the subject product.

Table 1: The subject product's current tariff structure

Tariff Heading / Subheading	Description	Statistical unit	Rate of duty					
			GENERAL	EU/UK	EFTA	SADC	MERCOSUR	AfCFTA
85.04	Electrical transformers, static converters (for example, rectifiers) and inductors:							
8504.3	Other Transformers:							
8504.90	Parts	kg	5%	free	free	free	2.5%	4%

Source: SARS, 2024

7. As shown in Table 1 above, the subject product, classifiable under tariff subheading 8504.90, currently attracts a 5% *ad valorem* duty under the General category.

8. The requested tariff position is shown in Table 2 below.

Table 2: The requested tariff structure

Tariff Heading / Subheading	Description	Statistical unit	Rate of duty					
			GENERAL	EU/UK	EFTA	SADC	MERCOSUR	AfCFTA
85.04	Electrical transformers, static converters (for example, rectifiers) and inductors:							
8504.3	Other Transformers:							
8504.90	Parts	kg	5%	free	free	free	2.5%	4%
8504.90. xx	Transformer Core	kg	15%	free	free	free	2.5%	4%

Source: SARS, 2024

## INDUSTRY AND MARKET

9. The subject product is a transformer core and is one of the most basic components of the transformer, which is the magnetic circuit part of the transformer.

10. The transformer cores are made up of thin laminations of cold-rolled grain-oriented silicon steel (CRGOS), commonly known as core steel. The core steel is made by alloying silicon with low carbon content steel. Transformer cores are essential components in electrical transformers, widely used in power transmission, distribution networks, and industrial applications. Figure 1 below shows a graphical illustration of the subject product.

Figure 1: Transformer Core



11. There are two known manufacturers of transformer cores in the SACU region, namely, STI Electric and Alloy Magnetic Core (Pty) Ltd.
12. The market analysis of transformer cores indicates a steady growth rate due to increasing electricity demand and infrastructure development in the South African energy sector. The expanding industrial sector is also driving the demand for power transformers and transformer cores. The rising adoption of renewable energy sources and the subsequent implementation of smart grids are further fuelling the market growth.
13. The known importers of the subject product, who also serve as manufacturers of the entire transformer structure in the SACU region are amongst others: Actom (Pty) Ltd, Reliable Transformers (Pty) Ltd, SGB Smit (Pty) Ltd, Power Matla (Pty) Ltd, Revive (Pty) Ltd, Baines, Trans Electron (Pty) Ltd, Dimako (Pty) Ltd, PCB (Pty) Ltd, Peter Souris (Pty) Ltd and Armcoil (Pty) Ltd.
14. Import statistics for transformer cores are currently declared under a broad tariff sub-heading for “other parts”, (tariff subheading 8504.90), which also includes a number of other products not subject to this investigation.
15. Import volumes under tariff subheading 8504.90 increased from 1 665 tons in 2020 to 3 036 tons in 2022. Given that the tariff subheading under investigation incorporates a wide range of other products that fall under the broad category of “parts” of transformers, the increased import volumes under this tariff subheading does not necessarily translate to an increase in import volumes of transformer cores. It is,



however, a good indication of the trajectory of import volumes under this broad category.

16. The domestic manufacturing industry's production and sales volumes of the subject product declined between 2020 and 2022. This resulted in a decline in industry capacity utilization during the same period.

### **COMPETITIVE POSITION**

17. The domestic industry manufacturing transformation core is relatively price uncompetitive vis-à-vis imports of similar imported products.

### **COMMENTS RECEIVED**

18. Alloy Magnetic Cores (Pty) Ltd, submitted its comments stating that it has no objection to the application by STI electric, for an increase in the duty of transformer cores having a power handling capacity not exceeding 50MVA, classifiable under TH 850490, to 15% *ad valorem*. It further cited that various countries have export incentive schemes on their manufactured products of up to 15% *ad valorem* and that the global demand for transformers has risen in response to increased energy needs.
19. Comments objecting to the proposed increase in customs duty on the subject products were received from ACTOM Power Transformers, a division of ACTOM (Pty) Ltd, stating, amongst other reasons, that the increase in customs duty on transformer cores will raise costs, thereby making ACTOM uncompetitive in its markets; both local and international core prices have risen, further inflating the core's share of total transformer material costs and worsening the impact of the potential duty increase; and this will weaken South Africa's transformer industry, leading to higher prices, loss of market share to imports, job losses, and eventual de-industrialization.
20. The applicant responded to ACTOM's objections by highlighting that there is sufficient domestic capacity to manufacture the subject product, as acknowledged by ACTOM. The applicant further argues that tariff support would boost production and sales volumes of transformer cores, strengthening the case for localizing input materials. Additionally, the tariff increase is sought to create a level playing field against low-priced imports that are saturating the local market.



## **PRICE IMPACT ANALYSIS**

21. In an effort to gauge the potential price-raising impact of the proposed duty on downstream industries, the Commission conducted a price impact assessment using a partial equilibrium model to assess the effects of the proposed tariff increases of 10% and 15% *ad valorem* on import competition and domestic production. The analysis found that both tariff levels would have a minimal impact on domestic price, therefore also offering a balanced approach that protects local industry while minimizing consumer impact.

## **FINDINGS**

22. The Commission considered all the relevant information at its disposal. In particular, the Commission considered the following factors:

- The subject product is a transformer core, an integral component of the transformer, regarded as the magnetic circuit part. It is made up of thin laminations of cold-rolled grain-oriented silicon steel (CRGOS), commonly known as core steel;
- The domestic manufacturing industry's total production and sales volumes of the subject product declined during the three-year period under investigation;
- The domestic industry manufacturing transformer core is relatively price uncompetitive vis-à-vis imports of similar imported products;
- The declining profits, coupled with an escalating cost structure, in relation to the manufacturing of the subject product, primarily driven by the cost of raw materials and
- The price impact analysis revealed that tariff levels analysed would have a minimal impact on domestic price, therefore offering a balanced approach that protects local industry while minimizing consumer impact.

The Commission concluded that additional tariff support should enable the domestic industry manufacturing the subject products to utilise its existing under-utilised production capacity and achieve economies of scale, resulting in increased volumes with a reduction in the marginal cost of production.

## **RECOMMENDATION**

23. In the light of the foregoing, The Commission recommended that the rate of customs duty on transformer cores, having a power handling capacity not exceeding 50 000 KVA, classifiable under tariff subheading 8504.90, be increased from 5% to the WTO bound rate of 15% *ad valorem*, by the way of the creation of an 8-digit tariff subheading.
24. The Commission further recommended that the duty be reviewed to determine its impact on the industry value chain after three years from the date of implementation, or such other period as decided by the Commission.