



1. INFORMATION ON POWERLINE PRODUCTS DESIGNATION

1.1 **Power pylons and substation structures** are steel fabricated (cut, punched and galvanised) components erected for the transmission, distribution and/or reticulation of electrical power from the power station through to the consumer. At every transition between power generation, power transmission and power distribution there is a need for the erection of a substation which serves as a facility for the stepping up or down of power in preparation for the requirements of the next phase of the power transfer process. Substations are erected using steel structures fabricated by means of cutting, punching and galvanising.

1.2 Depending on the procuring entity's design and functionality requirements, galvanised **steel monopole structures** may be specified instead of power pylons for the transfer of power from the power station through to the end user. Galvanised steel monopoles are fabricated following a cutting, bending, welding and galvanising process.

1.3 In the construction of power pylons, monopoles, substation structures and distribution powerlines a variety of auxiliary components are used to fulfil such requirements as providing stability to the power pylon structures, attachment and fastening of components, provision of platforms and foundations, etc. These auxiliary components are made using a variety of metals including cast aluminium, galvanised steel, composite materials, brass and others. These components are collectively called **powerline hardware** and are used in both **power transmission and distribution**.

1.4 **Composite Insulators:** These insulators have at least two insulating parts, such as a fibre glass core and a polymer housing equipped with metal end fittings. They provide mechanical strength and insulate conductors from the structures they are attached to.

1.5 **The components addressed under this designation are classified as follows under the harmonisation system:**

1.5.1 Powerline Line, Distribution Line and Substation Hardware

- HS730890: Structures and parts of structures of iron/steel (Including steel powerline hardware)
- HS730820: Towers and lattice masts (Including monopole pylons and street lighting poles)



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- HS761090: Aluminium structures and parts for construction (Including aluminium powerline hardware)
- H854690: Electrical insulators of composite polymer materials

To ensure that local production and content is discharged on manufacturing activities, the products and components in Table 1 have been designated and must be included in bid invitations¹. *Different methods and/or process are used to manufacture the products/components. These include casting, forging, drawing, rolling, fabrication, helically or wire formed, injection, moulding, baking or a combination of these methods or processes.*

Table 1: Steel Power Pylons, Monopole Pylons, Steel Substation Structures, Powerline Hardware, Street Lighting Steel Poles and Steel Lattice Towers and Masts

Products for Designation	Minimum Local Content
Steel Power Pylons	100%
Monopole Pylons	100%
Steel Substation Structures	100%
Powerline Hardware (distribution line hardware and transmission line hardware)	100%
Street Lighting Steel Poles	100%
Steel Lattice Towers And Masts	100%

- 1.6 All primary steel related products: flat products (plates and coils) and long products (rounds, angles, sections and wire related products) and secondary aluminium ingots are included in this designation and must be manufactured and sourced locally. This is to support and sustain the existing local steelmaking and aluminium secondary smelting capacities respectively.
- 1.7 In this designation, imported input raw materials such as aluminium extrusion billets for the manufacture of aluminium components; rubber and zinc used in hot deep galvanising processes are deemed as locally manufactured products. These inputs should be imported in raw material form for further fabrication in South Africa.
- 1.8 The imported input raw material indicated in will be deemed to have been sourced locally for the purposes of calculating local content.



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- 1.9 For further information, bidders and procuring state organs may contact the Capital Equipment and Metals Sector Desk within Department of Trade Industry and Competition (**the dtic**) at telephone (012) 394-1356/1380 or e-mail localcontent@thedtic.gov.za.