

POWERING THROUGHTIME AND BOUNDARIES



TRANSMISSION TOWER



البابطين للطاقة و الاتصالات
AL-BABTAIN POWER & TELECOM

TRANSMISSION TOWER

Our product range does not only include all the traditional items that are necessary in any traditional course, however these products now have the characteristics that make it easy to unleash their full potentials which are; their simple and aesthetic designs.

Al-Babtain is regarded as one of the leading manufacturers & suppliers of transmission towers. The company has successfully completed numerous projects locally & internationally to electrical utilities either directly, or through contracting companies. For over three decades, Al-Babtain has become the most trusted name in the Transmission & Distribution (T&D) and telecommunication industries. And its technical expertise, manufacturing capabilities & worldwide experience are brought together, for most cost efficient results and quality products as per the international standards.

All towers are made as per the requirement of the customer. We supply towers up to (1000) KV. With the state-of-the-art infrastructure, using the latest CNC machines coupled with well-trained manpower, ensuring repeated accuracy in all production components, thus eliminating mismatch at site.

Product Range:

- Steel lattice towers for power transmission up to 1000 KV with all varieties of configuration (horizontal, vertical, double delta.....etc.)
- Substation structures/gantries
- Undercrossing gantries

In house facilities:

Design:

The latest state-of-the-art software is used to develop the most efficient and economic design. A team of a highly qualified design engineers, combining many years of experience with sophisticated computer programs (3D modeling in both analysis and detailing), ensures that the most economical solution to a customer's specification is achieved. This leads to a competitive design, thus reducing the project costs.

List of software for design (transmission towers) are as follows:

- iTower Designer – 3D model analyses / design transmission towers & gantries
- PLS Tower –3D model analyses / design transmission towers & gantries with liner and non-liner capabilities.
- Bocad – detailing transmission towers & gantries in 3D models
- Tekla - detailing transmission towers & gantries in 3D models



TRANSMISSION TOWER

List of software for design (communication towers) are as follows:

- TS Tower – designing telecom towers
- STAAD PRO – analyzing forces, designing steel and concrete structures
- PCA COL – designing reinforced concrete
- GUYMAST – designing telecom towers
- AUTO CAD & PROSTEEL – general detailing

Manufacturing:

(15) of the most modern CNC machines perform various operations on the angles, while (6) CNC machines work on plates. Apart from the above, a well-established Robotic Machine for welding, special purpose machines, guillotines, and other steel workers, complete the factory production set up. A well-trained workforce and the most modern machinery, help Al-Babtain tower factory to turn out quality products on time. The present production capacity is approximately 65,000 tons per annum.

Proto Assembly:

All new towers are proto assembled before the mass production, to ensure that no problems are faced at site. A crew of a well qualified and experienced erectors dedicated to Proto Assembly, ground assemble the towers in an area earmarked for that purpose.

Galvanizing:

The company has two large modern Hot Dip Galvanizing (HDG) plants with pre and post treatment facilities. For the plant no.1, the zinc bath is 9 m long, 1.6 m wide and 2.0 m deep, and plant no.2, is 14.5 m long, 1.4 m wide, and 1.8 m deep respectively. The capacity of the plant is 80,000 tons per annum.

Tower Testing:

Al-Babtain tower testing station works in hand with Al-Babtain tower factory to test the towers, thus ensuring that all activities are performed in house. The tests are carried out as per the IEC 60652 standard or client's requirement basis. This makes Al-Babtain tower factory a one-stop-shop for your entire tower needs.

Tensile Testing:

In house tensile testing machine gives that added advantage of verifying incoming raw materials for its tensile/compressive strength.

Quality Assurance/ Control – ISO 9001 – 2008:

The fundamental understanding and need for quality is an established element of Al-Babtain's tower factory. Our trained quality controllers, who ensure that all the routine inspection and tests are carried out to certify that the finished product meets both the customer specifications & the international standards, carefully monitor all the process until the dispatch.

Process inspection is carried out from the raw material acceptance tests to the final product approval, according to the recognized standards of BSS, DIN, ASTM, JIS, ISO, SASO, etc.

Environmental Management System (ISO 14001), and Occupational Health & Safety Management System (OHSAS 18001) were also developed and implemented.



www.al-babtain.com.sa



البابطين للطاقة و الاتصالات
AL-BABTAIN POWER & TELECOM