

## primtech – CAD Functions for Planning and Design of Substations

primtech is a software based on the use of AutoCAD, the worldwide standard for CAD design and for the exchange of CAD data, as its graphic editor. In addition to the specific primtech CAD functions and primtech CAD and CAE objects, all AutoCAD functions are available. By our intelligent primtech-AutoCAD objects, developed specifically for the needs of substations designers, the planning process of a substation is extremely simplified.

### Field Grids

Field grids, saved in the system according to voltage, serve as positioning aids for electrical equipment, and ensure that the distances between individual devices are not less than the voltage-dependent minimum clearances.

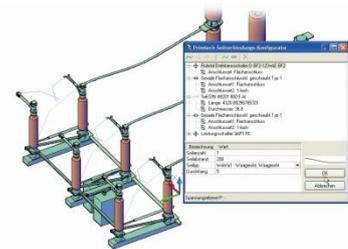
### Cable/Pipe Connections

Cable and pipe connections can be assembled under the guidance of a dialog, and automatically generated in the 3D model. In addition to the cable, cable connections also include chains, springs and terminals, and the sag can be specified.

Particular support is given to the three-phase design of an installation.

### Cable Ducts

The software supports the generation both of cast and of segmented cable ducts. Both the length and the volume of the cable ducts are available to assist the assessment of parts lists.



### Earth Cable Network

Earth cable networks can easily be generated and assessed, including all their components such as terminals, earth cables, earthing details etc.

### Roads/Paths/Fences

Convenient functions allow the quick planning of roads and paths, including crossings. The creation of fences with mesh wire or rigid fence segments is also supported. These information can be evaluated in the specific bill of materials.



### Lightning Protection

The lightning protection tool generates surface objects in AutoCAD and these are screened against lightning stroke by the relevant lightning protection equipment. This allows both lightning protector rods and cables to be investigated.

### Steel construction

Steel construction tool is supported by a comprehensive 3D library including components such as steel lattice towers or supporting constructions for bus bars. A comprehensive library of profiles for the generation of fully customized steel girders is also available.

### **Rendering/Display**

The saved materials, and the consistent 3D design of a switchgear installation, allows you to create a photo-realistic display at the push of a button.

### **Item Numbers**

You can assign the item numbers individually, or assign them for an entire drawing with a single command.

<http://www.primtech.com>