

Free demo program
available from our
website!



Poles 'n' Wires

*Create a Refined Line Design...
...in Minimal Time!*

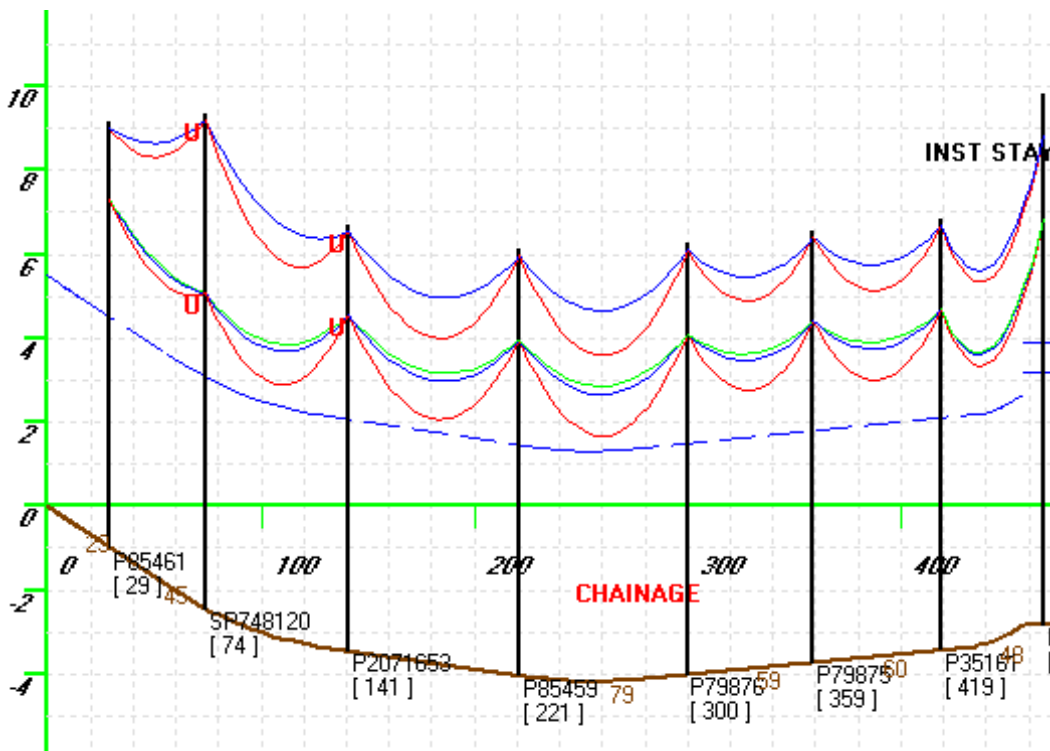
QUICK AND SIMPLE POWER LINE DESIGN SOFTWARE

Poles 'n' Wires is a simple yet powerful tool for designers and maintainers of overhead power lines and others who may need to check:

- clearance heights of overhead wires
- mechanical loads applied to poles and support structures by attached conductors
- wood pole strength
- conductor ratings, reactance and spacing requirements

With Poles 'n' Wires, you do not need to be an expert to perform these calculations.

- Databases for Structures, Poletop Constructions and Pole-mounted Plant
- Calculation of vertical downloads due to conductors, stays, plant and structures
- A link from Tip load module to compare tip loads with structure capacity; expresses tip load and vertical download as a percentage of rated strength



- Two wind condition calculation
- Uplift forces due to conductors are explicitly calculated for inclined spans
- When working with different electricity authorities, Poles 'n' Wires allows you to establish corresponding "working sets" for structures, conductors and option settings
- Blowout checks take into account construction width
- Excel import into tip loads module
- Export Bill of Materials from Profiler
- Export Profile to Autocad
- Import survey groundline data
- Use working stress or limit state calculation methods



Conductor Sag-Tension-Temperature Calculator

Enter temperature, span length and stringing tension (or sag) of the conductor to determine sag (or stringing tension), actual tension under 'Wind' and 'No Wind' conditions, and mid-span blowout of the conductor.



Stringing Table Generator

Associated with the Sag-Tension-Temperature Calculator is a Stringing Table Generator that allows you to produce tables showing sag, tension or blowout for a range of span lengths and temperatures for a nominated conductor.



Line Profiler

Enter survey data for the ground line, place poles, attach circuits and then let the computer draw the profile. You can check that ground clearances are adequate and that inter-circuit clearances are maintained. You can also check for uplift conditions on poles.



Pole Tip Load Calculator

Determine the resultant load on a pole due to the forces applied by the attached conductors or cables. Enter details of the attached conductors, and the module calculates the resultant equivalent tip load or applied bending moment for 'Wind' and 'No Wind' conditions. Use working stress or limit state calculations methods.



Pole Strength Calculator

Determine the tip load capacity or bending moment capacity of the wood pole. Enter details of the pole at its base, eg its diameter, timber species, measurements of any internal hollows.



Conductor Library

Use the large existing database of conductors and cables, or add to it as you require.



MES Calculator

Determine the Mean Equivalent Span/Ruling Span for a strain section of mains to be erected. This is an important element in determining sags and tensions in new lines when span lengths within the section vary significantly.



Sag Calculator

Calculate the sag in a span from conductor height measurements or from times for conductor wave returns or swing.



Conductor Ratings

Calculate the current rating of a bare conductor under different weather conditions.



Line Reactance

Calculate the inductance, capacitance and characteristic impedance of a line given conductor type and inter-phase spacing.



Conductor Spacing

Calculate the maximum allowable sag in a span if mid-span clashing is to be avoided, given voltage and conductor spacing at supporting poles.