IRRICAD PRO 9

IRRIGATION DESIGN SOFTWARE

Major New Features in IRRICAD Pro 9

Block Entities
IRRICAD Pro introduces the concept of "Block Entities". Block Entities retain the drawn boundary of the block tools and "group" the laterals contained by them. They include the facility to automatically place control valves and submains, and greatly simplify the process of changing the type and spacing of laterals. Additional options include the ability to specify headlands/sidelands and lateral grouping.

Subdivision of Large Blocks
The new subdivision tool allows Block Entities to be subdivided into smaller sub blocks, streamlining the whole process considerably. When the subdivision dialog has been closed, a preview of the subdivision is displayed and a dialog listing the areas of the proposed sub-areas shown. At this stage sub-areas may be joined together, the current arrangement accepted or the process repeated.

Graphical Representation of System Operation
Arranging the system operation for designs that have a large number of zones can be difficult and time consuming. This process has been greatly improved by the introduction of a new graphically based management tool using colour coding.
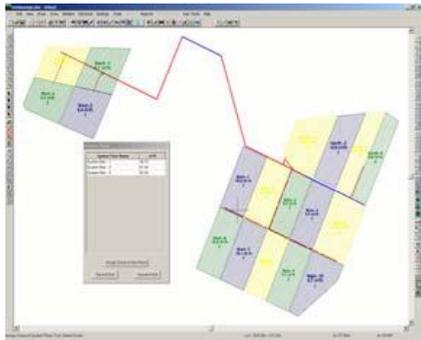
Enhanced Reports
Design reports have been enhanced and are easier to use and read.

Convert Drawing Items to Hydraulic Items with Ease
It is now possible to convert drawing items (both those drawn in IRRICAD or imported via DXF/DWG file) to hydraulic items by simply selecting the required items and then applying the appropriate hydraulic tool.

New Hydraulic Calculation Options
There is now a choice of the calculation formula used for analyzing tape hydraulics. The Diskin method may now be selected instead of the current Darcy-Weisbach method. In addition the Kinematic Viscosity may be specifies to account for a range of water temperatures and qualities.

Visual Connectivity Check
The connectivity check has been improved to visually display hydraulic items that are not connected, enabling the designer to quickly identity unconnected items.

New Highlight Elevations Tool
The new "Highlight Elevations" tool colours contours and spot heights based on their elevation making any anomalies much easier to locate and correct.

Design Based Label Settings
Label Settings are now design based. This means it is now possible for each design to have a unique set of label settings.

Enhanced Zone Design Configuration
The Zone Design Configuration dialog has been significantly improved, to include zones listed by zone name order. The actual valve pressure and minimum/maximum emitter pressures are displayed in the dialog and a facility to override the pressure range, calculated from the database defaults, used in the design process has been added.

### Create Empty Template Designs with Retained Hydraulic Dialog Settings
Values entered or database items selected, in all Hydraulic Item dialogs, are now retained with each individual design. This makes it possible to create empty "Template" designs that can be used efficient starting points for different types of irrigation systems.

Advanced Method for Elevation Data
A new method of analyzing tapes is included, so that the elevation at each emitter is used in the calculations. This method utilizes a Digital Elevation Model (DEM).

View Elevations as a 3D Representation
With a 3D DEM view you get a 3 dimensional view of the property and its topography.
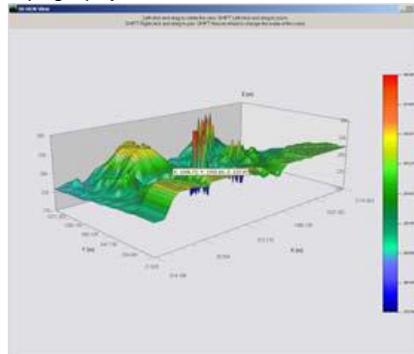
New DXF Importation Features
The number of individual segments is now counted during the contour importing process and a warning issued if the internal limit is exceeded. "Import Contours" now allows for multiple entities sections and also for LWPOLYLINE DXF entities.

Easy Contour Simplification
Enhancements have been made changes to the "Convert to Elevations" tool so that only items on visible layers are considered when attempting to join lines to create contours.

OLE Functionality
It is now possible to embed documents, spreadsheets and other objects in your Irricad design.

Valve Connector Tool
A new tool has been added that will automatically connect valves to the nearest mainline pipe.

Management Symbol
When graphical management is performed, a symbol representing the shift pattern is automatically created. This symbol can then be included in the design.

Hydraulic Gradeline
A new tool has been added which can display the hydraulic gradeline for spraylines, tapes and submain pipes.

Min/Max Pressure Labels
A new tool has been added that will display the location and value of the minimum and maximum emitter pressures for each zone.