# GASWorkS<sup>™</sup> 10.2

## UK Design Module



## Product Description

The UK Design Module (UKDM) is an optional set of features for the GASWorkS software. The included features are designed to closely support the requirements of the United Kingdom (UK) Institution of Gas Engineers guidance documents IGE/GL/1, IGE/TD/3, and IGE/TD/4. The UKDM includes common UK-specific design methods and practices, as well as features and routines requested by past and current UK Users of GASWorkS. The optional features associated with the UKDM include...

#### **UKDM Features**

**Dimensional Units Conversion Utility** - Allows a quantity in a specified dimensional unit (for example, length in metres) to be converted to an equivalent value in another selected dimensional unit (for example, feet).

**Fuel/Energy Type Comparison & Conversion Utility -** Allows a quantity in a specified fuel/energy type (for example, KW electricity) to be converted to an equivalent value in another selected fuel/energy type (for example, m3 of natural gas).

**Diversity Calculation Utility -** Allows calculation of diversified hourly loads based on specified heating type, annual heating load, and customer count.

**Pipe Segment Calculator** - Allows calculation of various hydraulic values associated with flow in a single pipe segment, including pressure drop, maximum flow rate, minimum pipe size, maximum length, velocity, and more.

**Specialized Reports -** Provides four specialized reports, the Main and Service Authorisation Reports and Main and Service Assumption Reports. The format of these reports is similar to reports found in GASWorkS 8.0. The reports are saved in a comma-delimited format that can be viewed and manipulated in many third-party spreadsheet applications.

**Pipe Property Table -** Special handling of the "Allow Calculation" and "Sizing Group" items is provided in the pipe properties table and pipe sizing routines.

**Pipe Attributes -** A custom linked pipe attribute file is provided to allow specialized handling of attributes along a pipe/main feature. A special type of pipe vertex, known as a Pipe Attribute Marker, is provided to segregate a pipe feature into multiple segments. Each segment can possess unique attribute values. Special commands are provided to allow manipulation and management of the attribute markers.

**Customer Attributes -** A custom linked customer attribute file is provided to allow specialized handling of attributes along a customer service line and associated with a customer. A special type of service vertex, a Customer Attribute Marker, is provided to segregate a service line into multiple segments. Each segment can possess unique attribute values. Special commands are provided to allow manipulation of the attribute markers.

**Custom Fittings** - A set of specialized fittings are provided for use with the service sizing routines. This feature allows a fitting to be specified by type (for example, a 90-degree elbow) instead of a specific size and type (for example, a 63mm 90-degree elbow). The sizing routine selects the appropriate size and associated equivalent length value depending on the required service size.

**Connections & Terminations -** Similar to the custom fittings, connections and terminations can be specified as a type (for example, "Tapping Tee" or "House Entry"). The appropriate size and associated equivalent length value, depending on the required service size, will be used during the sizing routine.

**Service Line Calculation** - A set of special features, attributes, commands, and calculation routines are provided that support the calculation of the service line size based on specified load data, configuration, and sizing criteria. The routine supports the calculation of "composite" (dual-sized) services.

#### **UKDM** Features

**Special Graphic Display Features -** Attribute segment numbers and a change in size symbol for composite services can be displayed in the Graphic Data Interface.

**Special Plotting Features -** A special map scale syntax is provided. A User-defined title block can be included in the plot output. A special editor is provided to create and revise a title block definition.

**Bill Of Material List** - A routine is included to create a generic Bill Of Material list for the associated project. The list includes User-specified fittings, connections, terminations, automatically generated fittings, etc. The list can be viewed in GASWorkS or in any third-party application that supports the ".csv" file format.

Some UK Users may be familiar with GASWorkS 8.0. This version of GASWorkS was a custom version that was only available to Fulcrum Connections and was never commercialized. Some of the features and data items found in the UKDM are similar to those found in GASWorkS 8.0; however, GASWorkS 10.2 does not wholly or completely duplicate the GASWorkS 8.0 features or data set.

The UKDM is an optional set of features for the GASWorkS software. The module complements the standard features of the GASWorkS software and requires the installation of the GASWorkS software to be functional. The cost of the module is in addition to the cost of the GASWorkS software. The cost of the UKDM is \$495 (USD) per license - one license per User. Please note that listed prices are subject to change without notice.

Legal - GASWorkS and the "B-Cubed" logo are trademarks of B3PE LLC.

Effective Date: January 1, 2022

Street