

# Eos Common Steel Piping Database

The Eos Common Steel Piping Database developed for use with Sage Timberline Office Estimating is designed to support piping estimating for buildings, process facilities, power plants and other facilities which include common steel pipe specifications. The database supports conceptual estimating and detailed takeoff of designed piping. The database is designed to address the needs of Engineering and Design firms as well as Installation Contractors.

This database includes piping items for the common plastic piping types, sizes, schedules and pressure ratings. The database follows the Eos Group modular database design specifications and can be expanded or merged with other modular databases without conflicts or renumbering.

Eos Group has developed methods to quickly add additional piping materials and pipe specifications in the same structured manner to expand the piping database content. These may be added in entire sections, such as additional groups of pipe for different metal or specification. Or additional parts and pieces can be added, such as additional fittings, flanges, valves or hanger parts.

## CONTENTS

- A 120 Black and Galvanized Steel pipe with Cast and Malleable Iron threaded fittings
- A53/A106 Grade A ERW and Seamless pipe and Carbon Steel fittings with Butt Welded, Socket Welded, Threaded, Flanged, Victaulic Pressfit and Grooved End fittings
- A53/A106 Grade B ERW and Seamless pipe and Carbon Steel fittings with Butt Welded, Socket Welded, Threaded, Flanged, Victaulic Pressfit and Grooved End fittings
- Stainless Steel 304/304L and 316/316L ERW and Seamless pipe and Stainless Steel fittings with Chrome P11 pipe and fittings with Butt Welded fittings
- Chrome P11 pipe and fittings with Butt Welded fittings
- Class 150 Cast Iron Cement Lined Flanged Pipe and fittings
- Class 150 Cast Iron Cement Lined Flanged Pipe and fittings
- C151 Ductile Iron Cement Lined Pipe and C110 mechanical fittings socket end, threaded end and flanged end; by pressure rating
- Cast Steel valves: Gate, Globe, Ball, Butterfly, Check, Diaphragm, Plug and Other; in weld end, socket end, threaded end, and flanged end; by pressure rating
- Stainless Steel and Bronze valves: Gate, Globe, Check and Other; in weld end, socket end, threaded end and flanged end; by pressure rating
- Pipe insulation: Fiberglass, Foamglass, Urethane Foam, Calcium Silicate, Cellular Glass, Mineral Wool and Phenolic Foam
- Basic Pipe Hangers, Supports and Anchors
- Basic Bolt and Gasket sets
- Basic Painting and Coating

## ASSEMBLIES

Assemblies are included to support rapid take off of either detailed or conceptual piping. Assemblies are designed to take off all items for a run of one size, schedule, and pressure in each pass.

Assemblies are differentiated for shop fabricated vs. field fabricated piping and for differing joint methods; i.e. butt welded, socket welded, screwed, flanged (bolted), press fit, grooved end couplings.

Each piping assembly includes pipe, fittings, shop welds and/or field welds, valves, hangers and supports, insulation, and coating. The user may enter specific quantities or select built-in calculation of quantities based on underlying calculations and tables (which are adjustable by editing the database). The selections for calculated quantities are based on entry of pipe complexity:

- Simple; min fittings (~2 ftg/100')
- Moderate; avg fittings (~8 ftg/100')
- Complex; many fittings (~14 ftg/100')
- Highly Complex (~25 ftg/100')

Selection of labor conditions (see above) is also included.

Items are selected for all possible entries made in the assembly takeoff. The database includes NSPC (Non Specified) items in the event the assembly takeoff entries would have otherwise selected an item which does not exist in the database.

## SAMPLE ASSEMBLY TAKE OFF SCREEN

Piping A53 Butt Welded Shop Fab Piping with WN Flanges, Flg Valves		
Quantity	1.000	each
Pipe Run Length	100.000	lf
Pipe Diameter	6.000	inch
Pipe Schedule CS	40.000	sch
Pipe Pressure CS	150.000	psi
Pipe Spec A53	2.000	
Pipe Complexity	2.000	type
Pipe Labor Select	3.000	type
Pipe Labor Proc/Pwr	7.000	type
Enter Field Welds?	No	
Enter Hngr/Sppts?	No	
Valves?	Yes	
Valve Pressure CS	150.000	psi
Valves Flg Gate	2.000	ea
Valves Flg Check	1.000	ea
Valves Flg Globe		ea
Valves Flg Ball		ea
Valves Flg Butterfly		ea
Valves Flg Diaphragm		ea
Valves Flg Plug		ea
Valves Flg Other		ea
Pipe Insulated?	Yes	
Pipe Insulation Type	4.000	TYPE
Pipe Insulation Thk	2.000	inch
Pipe Coated?	No	