

*Anvil offers both Basic and Extended Services...  
Contact your Anvil representative for more information.*

### BASIC SERVICES

Anvil Design Services produces fabrication drawings and Bill of Materials of mechanical room piping 2½" and larger including chillers, heat exchangers, boilers, and pumps from contractor supplied flow diagrams, mechanical drawings, and approved submittals and specifications.

Initially, Anvil personnel meet with you to determine your piping preferences. The project scope and fee is agreed upon in a Design Services contract.

The plans and specifications are then interpreted in terms of economy, accuracy, and compliance. We may suggest modifications in arrangement, construction, equipment location, or product to attain the desired results. Piping layouts are carefully analyzed to determine whether further economies can be attained in the piping system.

Piping drawings are then prepared to determine the most efficient pipe routing, taking equipment location and any interferences into consideration. Preliminary prints are sent to you for revision or approval.

Upon approval, (4) sets of drawings with tags and Bills of Materials of the included system components are sent to you.

With Basic Services, you can plan the mechanical room. The preliminary drawings can be taken to coordination meetings with other trades

### VALVES

Qty	TAG#	SIZE	PART#	DESCRIPTION #1
	4	2.5	GRUVLOK,SER.7000	BUTTERFLY VALVE, GRVD
	25	2.5	GRUVLOK,FIG.758	STRAINER, GROOVED
	27	2.5	GRUVLOK,SER.7800	CHECK VALVE, GRVD
	34	6	GRUVLOK,FIG.7260	STRAINER, GROOVED
	55	10	GRUVLOK,SER.7000	BUTTERFLY VALVE, GRVD
12	58	6	GRUVLOK,SER.7000	BUTTERFLY VALVE, GRVD
	61	10	GRUVLOK,SER.7000	BUTTERFLY VALVE, GRVD
	81	6	GRUVLOK,FIG.722G	3DTY VALVE, GROOVED
	85	6x5	GRUVLOK,FIG.7250	SUCTION DIFF, GROOVED
	89	6	GRUVLOK,FIG.7250	SUCTION DIFF, GROOVED

### FITTINGS

Qty	TAG#	SIZE	PART#	DESCRIPTION #1	DESCRIPTION #2
10	2	2.5	GRUVLOK,FIG.7050	90 ELBOW, GRVD	290390014249
27	5	2.5	GRUVLOK,FIG.7000	COUPLING, FLEX GRVD.	
32	7	2.5	GRUVLOK,FIG.7400	COUPLING, RIGIDLK GRVD.	290390013522
6	8	2.5	GRUVLOK,FIG.7060	TEE, GROOVED	29039001688
4				45 ELBOW, GRVD	2903900

to "reserve" space by "getting in" first. Also, your field supervisor can spend more time supervising and not calculating pipe lengths and pipe routing. The components can be grouped from the finished drawings for better workflow planning.

We usually reduce fitting counts by 10%-15% by moving equipment whenever possible, usually less than a foot. The more movement that is allowed, the more savings can be realized.

**EXTENDED SERVICES**

Extended Services include any scope beyond Basic Services. There are many different types of services offered as extended:

- BOM by component (pump, chiller) or by system
- Unique Tagging – adding unique tags to components
- Air Handling Units – with associated ductwork
- Single Line Routing – non-dimensional
- Distribution Piping
- Dimensioned Floor Penetrations
- AWWA Piping - Total Scope
- Commercial Piping
- Oil Field Piping
- Retrofit Projects - Field Survey
- Hybrid Systems
- Anything Else

