Pipe Trades Workshop
PIPEFITTING VS. PLUMBING

People often ask the difference between pipefitting and plumbing. The difference has to do with sanitation. Plumbers work with pipes that contain potable water or sewage. Pipefitters don’t touch those. They work with pipes that contain everything else.

Pipefitting
Pipefitters come in two different varieties: Building Trades and Service fitters.

Building Trades
Building trades pipefitters lay out, assemble, fabricate, maintain and repair piping systems. The pipes could be tiny, or they could be so big you could drive a truck through them. There could be anything flowing through the pipes: air, or water, or steam, or gas, or even food. Building trades pipefitting jobs take place mainly in refineries, steel mills, factories, utility plants, schools and hospitals.

Here’s an example of a building trades pipefitting job: Earlier this year, I worked at the Will County Power Station maintaining the coal piping to two of their boilers. Coal is ground into a powder and blown through pipes into a boiler, which heats water into steam. The steam turns turbines to generate electricity. Coal is abrasive and it sandblasts the pipes it goes through, so they have to be replaced or rotated every few years. The job involved blueprint reading, welding, trigonometry, rigging, the use of many hand and power tools, and a lot of teamwork.

Service
The service side of pipefitting deals with maintaining and repairing HVAC and refrigeration equipment. Service fitters work with pipes, but more frequently with condensers and furnaces and refrigeration units. Service fitters deal with electrical schematics. They need to understand how HVAC systems function, and their knowledge must be continually updated as technology changes. Service fitters work mainly in stores, businesses, high rises, hotels, and office buildings.

An example of an HVAC service job might involve driving out to a building where the air conditioning has stopped working. The fitter would have to examine the system, figure out the problem, and fix it as quickly and safely as possible. Service calls can occur during the day or at night.

Plumbing
Plumbers protect the health of the nation by keeping our drinking water clean and making sure our sewage is disposed of safely. Good sanitation is one of the things that separates us from third world countries, and our plumbers are proud of the job they do. Plumbing is the only trade that requires its practitioners to pass a rigorous licensing exam.

Plumbing comes in four flavors: residential, commercial, service and maintenance, and site crew plumbing.

Residential
Residential plumbing is the plumbing you see in your house. Plumbers install the pipes and fixtures (sinks, toilets, etc.) that you are already familiar with. Residential plumbing is physically demanding and requires a lot of focus, as speed is usually an issue.
Commercial
Commercial plumbing is found in factories, high rises, hotels, hospitals, stores, and office buildings.

Service and Maintenance
Service and maintenance plumbers repair existing residential and commercial systems. They have a broad knowledge of plumbing, and are good at problem solving. They enjoy good job security, because people are always doing stupid things like flushing beach towels down their toilets.

Site Crew
Site crew plumbers work in ditches and sewers. You see them outdoors working in the street, sometimes by hand, sometimes with big machines. Site crew plumbers do a fair amount of emergency work, which can mean uncomfortable hours but good overtime wages.