

A day in the life of a welder: Mike's story

Attending a safety meeting

Mike is an oil pipeline welder. Pipeline welding requires accuracy and precision because of the flammable nature of the oil being moved along the pipes. Mike's job is to weld pipes together to make the joints as secure and safe as possible. The welds must be able to withstand both the pressure from the oil inside the pipe and the environmental conditions outside it.

Before Mike starts his first task, he is required to attend a safety orientation for the site. At the orientation, a safety officer reviews safety issues relevant to the site and goes over any other safety announcements. Today the safety officer talks to the welders about working in a new location along the pipeline. Mike and the other welders are encouraged to ask questions and discuss issues that concern them (oral communication). After the orientation, they sign a form to show that they participated (document use).

Reading the drawing

Mike reads a weld drawing to get information about the weld he needs to perform. He discusses potential problems and any concerns he might have with his supervisor (oral communication).









Choosing an electrode








Mike's supervisor tells him which electrode he needs to use for the weld he is about to perform (oral communication). An electrode is a piece of conductive metal that will spark, or create a welding arc, when activated with electrical current. The arc melts both the surface of the pipeline segments and the electrode itself to join the pipeline segments permanently. Two classification systems are used to identify electrodes: one is produced by the American Welding Society and the other by the Canadian Standards Association. Mike learned both systems during his training. He goes to the holding oven where the electrodes are kept dry and free of moisture and he finds the one he needs by reading the classification numbers marked on the electrodes (thinking skills – decision making).

Determining the type of weld

Mike looks at the symbols on the drawing to find out what kind of weld he needs to do (document use). He sees that he has to perform V-groove welds and bevel groove welds to join these pipes.

Weld symbols

Fillet	Plug or Slot	Spot or Projection	Seam	Back or Backing	Surfacing	Flange	
						Edge	Corner
							

Groove Welds						
Square	V	Bevel	U	J	Flare-V	Flare-Bevel
						

Wearing protective gear

Before he starts welding, Mike makes sure he is wearing the correct protective gear. He puts on gloves and safety glasses because the light given off by the welding torch is bright enough to damage his eyes. He usually keeps his safety glasses on even when he is not welding because the light from his coworkers' welding torches can be just as damaging. Mike also wears a respirator during the weld because the fumes given off can be very dangerous. These safety measures are posted around the site and Mike's supervisor reminds him about them from time to time (document use, oral communication).

