

Metal Holder Project

This is an overview of my first real project building anything out of steel using stick welding. This is constructed entirely out of 1/8"x1" steel bar.

I found I could bend this relatively easily and with some precision using a bench vise and a level as shown below. The end tabs were then drilled out for the mounting holes.



The bent arm and tabs were then setup on the welding table. I had initially used smaller fixture magnets, but they were unstable and I upgraded to the larger ones shown which worked well. The fillet welds were done at 90A.



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I then cut out six pieces for dividers and welded them in as shown below using fixture magnets to hold them in place during welding. The resulting bracket is shown on the right below.



As can be seen below, my work table previously had all sort of pipe and metal tied and strapped to the table in a questionable manner (left.) The new bracket mounts in the back to replace the strapping (center.) And you can see all the metal (and pipes) are now cleanly and securely organized (right.)

