

JB Tech Talk No. 1: “I THOUGHT IT LOOKED BETTER”

I had sold a heating package to a contractor for a large radiant floor heating system installation – boiler, pumps, the works. He was trying to get the system fired up but the primary (boiler) pump wasn't working so he phoned me and asked me to come to the site and to bring another pump. I told him that I'd be over but wouldn't bring a pump because a) I didn't have one and b) it probably wasn't the pump.

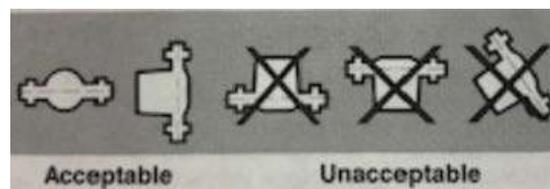
As soon as I walked into the boiler room, I saw the problem. The boiler primary pump, which had been supplied loose as part of the boiler package, was a wet rotor pump and was installed in a horizontal pipe with the motor shaft vertical. All wet rotor pumps (also called system-lubricated-circulators) must be installed with the motor shaft horizontal because the bearings are not designed for thrust loads.

I asked him if he still had the installation instructions for the pump. He seemed puzzled. I looked around the boiler room and saw the pump box in a pile of garbage in the corner. I dug out the instructions and **TICI*** a picture of the pump installed as he had done it with two big bold lines through it. His reply: 'What difference could that make?' (I've edited it for brevity and decency).

I told him in similar parliamentary language to get some wrenches and rotate the pump 90 degrees. He did, and it worked.

I then asked him why he had chosen to install the pump the way he had as he'd had a 50/50 shot at getting it right, instructions or not. His answer didn't surprise me because he is a good tradesman and fussy about his work. He said, 'I thought it looked better'. So, he did a wrong thing for what he thought was a good reason. And, in his case, I know that he never made the same mistake again.

**The instructions clearly indicated. Remember that for future reference.*



Under no circumstances should the pump be installed with the shaft vertical or where the shaft falls below the horizontal plane.