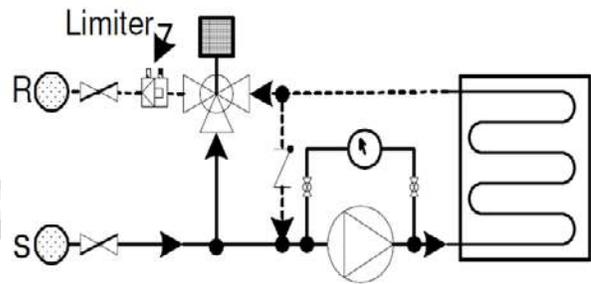


This is not a dissertation on a yoga position. It's another one about blaming the 'new product never tried before'.

It was the first large project we had done with automatic flow limiting valves. Flow limiters had been around for decades but they were new to our market, so there was suspicion. One interesting side note is that a manual balance valve competitor had done everything he could to shoot down the limiters but when he saw that wouldn't work, he picked up a competing line of limiters and tried to get the order.

The contractor called and asked me to go to site because they couldn't get heat from one of the air handling unit's heating coils and he believed it was obviously because of the flow limiter, even though all the other systems were working fine.

It was a pumped coil arrangement with a 3-way valve and check valve bypass\*. The control valve was 100% open. They were right; there was no heat. I checked the pressure drop across the limiter and it was zero. No pressure drop, no flow. However, this proved the limiter wasn't plugged.



At this point I could have said 'It's not the limiter, so I'll be leaving.' But that's not real customer service and I had also supplied the pump and air handler, so I pressed on. Something was plugged, so everything had to be checked.

There was flow through the coil, so the pump worked, and the coil wasn't plugged. With the pump off, the pressure at the inlet of the limiter was the same as the supply line pressure. That told me that the only thing that could be stopping flow was the return line butterfly valve.

When I closed the valve, the handle moved like silk from stop to stop and didn't require any pressure to seat the butterfly against the seal. I told the contractor the valve was defective and he offered his opinion, which was essentially that I was crazy. To prove I wasn't we cut away the insulation on the back side of the valve and he watched the end of the shaft while I turned the handle. There was no movement. The shaft was broken.

Now I could leave and do my Snoopy happy dance all the way out.

They called me later to say they found a clean break in the valve shaft, almost like it had been laser cut. I don't know if the episode reduced their suspicions about the new-fangled flow limiters, but they were likely checking their butterfly valves for a while.

*\*This arrangement is old, and there are better options. Don't use it.*