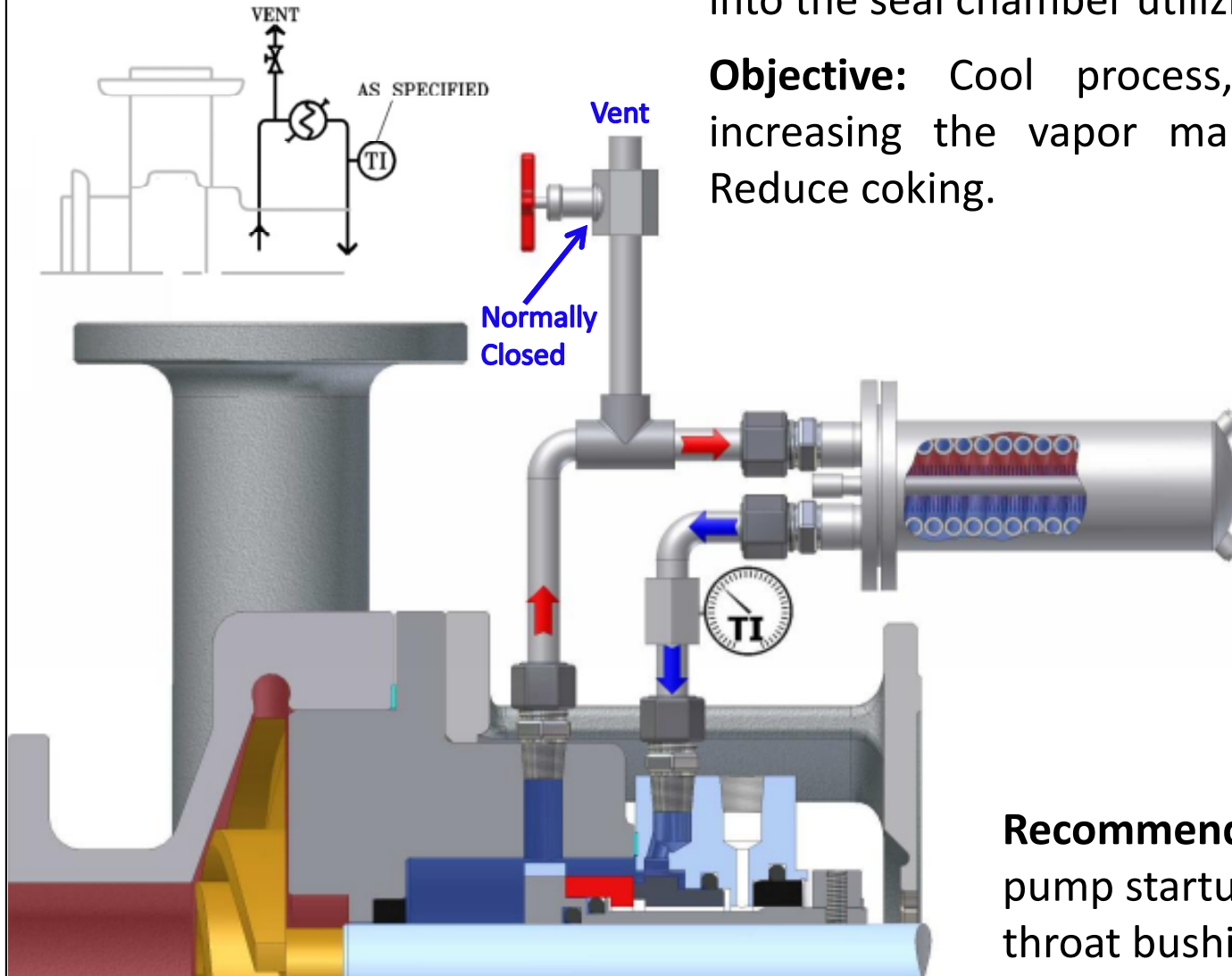


Plan 23



Description: Plan 23 is recirculation of process fluid from the seal chamber, through a seal flush cooler, back into the seal chamber utilizing a pumping ring.

Objective: Cool process, improving lubricity and increasing the vapor margin in the seal chamber. Reduce coking.

Advantages: Has greater cooling efficiency than Plan 21 because it continuously recirculates the seal chamber fluid through the seal flush cooler. It decreases the duty, reduces cooler fouling and increases cooler life.

Recommendation: Vent tubing before pump startup and use close clearance throat bushing in seal chamber.