V-Cone Application Guide

**Industry:** Chemical

**Product:** Potash, Salts & Chlorine.

**Application:** Flow measurement in a continuous process. Steam, condensate and feedwater in a Power Station.

**Measurement Challenge/Difficulty:** The customer was completely frustrated since none of the flowmeters they tried performed as needed. The main problem is that condensate is a very difficult fluid to measure because it is never just water. Condensate contains steam bubbles which cause shocks and cavitation which typically destroy other types of flowmeters.

**Previous Method:** Pitot Tube/orifice for the steam side of the process. On the condensate side of the process, the customer tried a variety of technologies. Nothing worked!

**Solution:** We explained the basic V-Cone features to the customer. We highlighted the mixing and memory effect of the V-Cone which results in crushing the large bubbles to a myriad of microscopic ones, thereby eliminating the usual condensate problems.

**Date Installed:** April 1995

**System Diagram:** None

**Submitted by:** Azriel Kutasov • KAMA LTD, Israel

**Additional Comments:** The customer requested our performance guarantee which included the return of the V-Cones if they were not successful in this application. We gave them that guarantee and the V-Cones are working to their satisfaction.

---

**Literature No.:** 24509-71/Rev. 1.1

**Industry:** Chemical

**Niche Market:** Facilities, Power Station

**Process:** Condensate from Power Station

**Product:** Potash, Salts, Chlorine

**Fluid:** Steam/Condensate/Feedwater

**Viscosity & Sp.G.:** 0.24 cP

**Flow Rate:** 7,000 to 70,000 kg/h

**Pressure:** 4 bar gauge

**Temperature:** 120 degrees C.

**Size:** 4 inch

**Date:** April 1995

**Submitted by:** Azriel Kutasov KAMA LTD Israel