

KLM Technology Group Project Engineering Standard	KLM Technology Group www.klmtechgroup.com	Page : 2 of 19 Rev: 01 June 2012
KLM Technology Group #03-12 Block Aronia, Jalan Sri Perkasa 2 Taman Tampoi Utama 81200 Johor Bahru Malaysia	COMMISSIONING PUMP START UP STRAINERS (PROJECT STANDARDS AND SPECIFICATIONS)	

1.0 PURPOSE

This document provides information on the different types of temporary startup strainers and their use.

2.0 SCOPE

This document applies to temporary strainers used for the protection of pumps during startup and initial operations.

3.0 DEFINITIONS

Startup strainers are protective devices temporarily installed in pump suction piping to prevent dirt, pipe scale, weld beads, spatter, or any foreign material from entering the pump. This pump protection is particularly important for multistage pumps in order to protect close clearances or running fits from foreign material.

4.0 TYPES OF STRAINERS

4.1 Conical Strainers

There are two basic flow paths through any type of in-line conical strainer, whether small apex, large apex (basket), or full pointed-cone type. One is with water flow to the fine mesh screen inside the cone (Figures 1 and 2) and the other is with water flow against the outside of the cone (Figure 3). The first flow pattern is preferred for most installations since, by its nature, debris is collected within the strainer, making inspection and removal of the strainer simpler, and weighing and analysis of the debris more accurate. Conical strainers are effective for startup applications, as well as most service requiring infrequent cleanout.