

Hillside Wire Cloth Co., Inc.

Cone Strainer: Installation and Direction

In the world of contaminant filtering for fluid processing systems, [wire mesh products](#) are king. This is especially true when a facility has installed new equipment or has replaced parts of an existing system, because of the need for some type of in-line filtration due to the greater possibility of dirt and debris being present. When any type of self-contained fluid processing equipment is exposed to the environment, or if pieces of that equipment are replaced, this opens up a window for the introduction of a variety of contaminants. For newly installed equipment, the most common debris found is usually manually introduced as a result of the manufacture and assembly of the equipment itself. This can range from pieces of shaved metal to gaskets and fittings, or even include nuts, bolts, or screws used to put the processing line together.

Also called a [cone strainer](#) or **conical strainer**, a [Witches Hat strainer](#) is an ideal solution for providing temporary filtration in systems that have recently been installed or had portions of the equipment replaced. The strainer is a cone-shaped [wire mesh basket](#) attached to a thin metal disc, and is usually inserted into a fluid processing line between two pipe connections. Optimally, the [Witches Hat strainer](#) is located within the processing system near the termination point, or end-point, of the equipment. This allows it to catch and filter as much particulate matter as possible before actual processing begins.

This type of [cone strainer](#) can be used in virtually any type of processing system because of its versatility in design. [Witches Hat strainers](#) can be fabricated from a wide variety of metals or metal alloys and different styles of mesh weave patterns. The mesh size should be small enough to filter out the smallest debris that may be in the equipment line, but not so small that it becomes constantly clogged and require cleaning or changing. The diversity in design creates a strainer that gives you strength and durability, as well as resistance to almost any pressure, temperature, or corrosive elements that may be present.

[Witches Hat strainers](#) are strictly a temporary addition to a pipeline, and if product filtration is required after system start-up, a permanent [wire mesh strainer](#) should be installed. When placing a [temporary strainer](#) into a fluid processing line, the pointed end of the strainer should be facing in the direction of the product flow (downstream). This allows the "basket" part of the strainer to catch any particles and debris before they reach pumps, motors, agitators, or other equipment that could sustain damage from contaminants.

To determine when the strainer may have become filled with particles or debris, it is recommended that pressure gauges be installed before and after the strainer's location. Pressure differentials outside of acceptable ranges in the downstream flow can indicate that the strainer has become clogged. This method can also be used for permanent [in-line strainers](#) and filtration options.

Choose the ideal temporary protection for your newly installed or replaced fluid processing equipment by adding a [Witches Hat strainer](#) to your system. This simple measure of protection can save you a great deal of time and expense, as well as minimize the potential for damage to your valuable equipment. A custom wire cloth manufacturing company like [Hillside Wire Cloth](#) can work with you to design a **strainer**, or any other [wire mesh product](#), that meets your specific processing needs.

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