

**TRI-MER® CORPORATION
ENGINEERING
TECHNICAL BULLETIN**

FUME WASHER CROSSFLOW SCRUBBER

The Tri-Mer® Crossflow Scrubber is an alternate to our ultra high efficiency FAN/SEPARATOR® Unit.

On the market today there is not a Crossflow scrubber operating that has a higher efficiency factor from a standpoint of total desired result.

Tri-Mer® Corporation primarily offers this unit in cases where applications require a horizontal negative pull Crossflow scrubber unit with either integral or remote recirculation systems.

Customers with existing fans find this unit attractive since they generally can interface their operative fan to this unit.

The Tri-Mer® Crossflow system uses the ultra high efficiency TRI-PACKS® packing which offers unparalleled performance from the standpoint of total scrubbing efficiency.

Standard applications of this unit primarily relate to metal finishing operations where corrosives are a problem. Some modifications of this equipment, however, allow us to handle high load gas output conditions and/or organic scrubbing problems where the number of transfer units can be translated into a horizontal system. Odor control systems are with modifications to this unit.

Flexibility of design is important and consequently, the Tri-Mer® horizontal packed bed system can be tied to a wide variety of applications. Generally speaking, with higher sophisticated chemical treatment processes, remote recirculation systems are provided with chemical treatment usually pH monitored.

Where straight water washing is required such as in most acid scrubbing applications, either integral or remote recirculation systems can be provided.

The Tri-Mer® horizontal unit uses in all phases regardless of packing depth, continuous overflow flooding of the packing to insure maximum internal wetting of the packed media. This is important in a horizontal unit in order to obtain maximum efficiency. Without this feature, a horizontal scrubber will not operate to desired efficiency levels.

All Tri-Mer® horizontal scrubbers come with high efficiency moisture elimination sections insuring water droplets carry through will not take place.

Fans are mated specifically to the scrubber system to insure proper static pressure draw through the unit as required by internal and desired external static concerning the system that the unit will be applied to.

Standard materials of construction include PVC and polypropylene, with stainless steel on special request.

As mentioned, this horizontal scrubber can be coupled to an existing fan saving the user the cost of replacing that fan in instances where an appropriate exhaustor already operates.

Operational flexibility makes it possible to interface this unit on a wide variety of applications.