

Trough-type three-level distribution box



Summary of Content

A trough-type three-level distribution box is a liquid distributor designed to evenly distribute high liquid loads across a column using multiple troughs and metering stages for optimal flow control.

Structure and Design

A trough-type distribution box consists of a pre-distribution trough, often called a parting box, mounted above several equally spaced narrow troughs. In a three-level configuration, the distributor includes three sets of metering elements or troughs, each designed to handle different liquid load conditions: minimum, design, and maximum flow rates. The troughs feature lateral notches or orifices that guide the liquid onto the packing or tray surface, ensuring uniform distribution. The parting box collects the incoming liquid and feeds it into the troughs. The troughs may have bottom holes or side openings, which help prevent fouling by allowing sediment to settle at the bottom while maintaining consistent flow through the orifices. Multi-level holes allow the distributor to operate efficiently across a wide range of flow rates, providing a high turndown ratio.

Operation

Liquid enters the parting box and is directed into the troughs. Each level of troughs is activated depending on the liquid load:

- Minimum load: Only the bottom troughs are active.
- Design load: Middle troughs engage to handle standard operating conditions.

Article Content

The Ultimate Guide to Distribution Box Types

Discover the key types of distribution boxes with NUOMAK's comprehensive guide. Learn about Main Distribution Boards (MDB),

The Meaning and Function of Primary, Secondary, and Tertiary ...

Differences Between Primary, Secondary, and Tertiary Distribution Boxes Primary Distribution Box: Designed

Distribution Box and Selection Guide: Internal Structure, Components ...

Learn how to choose a distribution box and understand its internal structure, including MCBs, busbars, neutral bars,

Weir-Trough Distributors

The trough-type distributor can be constructed to fit packed columns with a diameter ranging from 36" to 60". It is designed especially

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Trough Type Distributor | Liquid Distributor

This type of distributor consists of a pre-distribution through or parting box which is mounted above equally

Wiring Trough Enclosures | Wireway Boxes | RSP Supply

Explore wiring trough enclosures and electrical wireway boxes for protected cable routing, terminations,

Distribution Box: Types and Functions | Axis-Electricals

A distribution box ensures that electrical supply is distributed in the building, also known as a distribution board, panel board, breaker

PROtrough

Discover PROtrough: The modern alternative to traditional concrete cable trough systems for rail, light rail, and power markets.

Distribution Box

Distribution Box Space and cost saving solution Amphenol LTW's distribution boxes facilitate efficient cable management, easy

Trough Type Distributor | Kuber Precision Tech LLP

The trough-type distributor consists of a pre-distribution trough, or "parting box," mounted above multiple equally spaced narrow

tray_distributors_7

In practice, three different types of gravity distributors are used: deck-type, pan-type and trough distributors. They vary in partitioning

DRAFT SPECIFICATION FOR L. T. DISTRIBUTION BOX OF

1.1. : CONSTRUCTIONAL FEATURES :- L.T. Distribution Box shall be outdoor type and have suitable enclosure (factory built

AMACS Distributors Weir Trough Type

AMACS Liquid Distributors – Weir Trough Type AMACS Weir Type Liquid Distributors effectively handle a wide variety of gases and

Liquid distributors

A Riser Type Distributor consists of a plate, equipped with circular or rectangular risers for vapor flow and perforations in the floor for

Understanding Distribution Boxes:A Comprehensive Guide

A distribution boxes is an essential device that manages the safe and efficient flow of

Trough Type Liquid Distributors

Lianda Filter offers trough type liquid distributors, including single-stage and two-stage designs, for uniform

Trough Type Distributor | Liquid Distributor

Trough type, the distributor has got long tunnel called throughs with lateral notches as discharge orifices. Orifices are located either

What Is a Distribution Box? Types, Components & How

A distribution box, also called an electrical distribution box, distributes incoming power to

Michael Schultes, Werner Grosshans, Steffen Müller and GmbH,

Figure 2. Distributor layout with point circles for calculating distribution quality below support ring location of a trough type distributor

Feed-through terminal blocks, multi-conductor terminal

In addition to the simple feed-through versions, the range of four-level terminal blocks and three-level

HANBIT SOLTECH

The Model TTD-806 “Weir-Trough” distributor is the most versatile distributor and it incorporates a compound weir design that

Trough Type Liquid Distributor | MACH Engineering

The trough type liquid distributor is one of the most commonly used types of liquid distributor. It has a rectangular receptacle, called

Liquid Distributors | RVT

Liquid Distributor Uniform dispersion of the liquid onto the packed bed or structured packing is provided by appropriately engineered

FENIX Process Technologies Pvt. Ltd. Specializes in Process

Features of this distributor resembles with channel type distributor, for special applications where low liquid flow rates are required,

Liquid Distributors

In a trough distributor, liquid is introduced into the parting box to properly distribute the liquid onto the

Three Phase Distribution Box Functions and Applications Explained

A three phase distribution box safely distributes and protects power for large equipment in factories, buildings, and high-demand

Contact Us

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