SMART-Tote 125



Familiar with established trends in airport runway deicing equipment, the staff at SMART Manufacturing draws from more than 50 years of combined runway de-icing experience to enhance component systems while emphasizing simplicity, durability, and above all reliability. From the product tank to boom nozzles, study of every component determines where refinements could benefit conventional airport runway deicer applicators. With design improvement in mind, SMART Mfg. is pleased to introduce the SMART-Tote series.

The SMART-Tote 125 is a pallet type sprayer unit that is mountable on 3/4 ton or larger pickup box or flatbed trucks. This sprayer unit uses one interchangeable; United Nations approved, Intermediate Bulk Container (IBCs) as a product tank. A driver friendly, computer system controls the application rate as the vehicle speed or boom width changes. Completed with a three-section spray boom and unique Variable Orifice (VO) nozzles, application rates of 0.25 gallon per 1,000 ft² (0.95L / 93m²) at 1-50 mph and 1.0 gallon per 1,000 ft² (3.8L / 93m²) at 1-36 mph are at the operator's hand.



SMART-Tote installs easily on a truck box or bed.



Compact, driver friendly console.

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SMART Manufacturing

CONSTRUCTION

The SMART-Tote 125 frame is constructed of tubular steel and powder coat finished for durability. The three-section spray boom provides spray widths from 8' to 25' (2.4 to 7.6m). Protected by a breakaway clutch at the hinge, the booms release if they strike an object. When the booms are in the transport position, center section spraying is ideal for treating single lane roadways, parking areas and pedestrian walkways.

Intermediate Bulk Containers (IBCs)

UN-approved Intermediate Bulk Containers (IBCs) is used as a product tank for SMART-Tote series deicer unit. IBCs offer convenient storage for airports with limited storage facilities. When the bulk container empties the operator returns to storage and exchanges it for a full one. Quick product tank changes result in fast turn around times.

Computer / Product Control

The computer system monitors product flow, active boom width and ground speed to adjust the product pump output. The desired application rate is maintained regardless of the vehicle speed. The GVS velocity sensor (a GPS based sensor) produces true ground speed and eliminates magnetic drag wheel speed sensors and vehicle transmission interfacing.

Pump system

From Intermediate Bulk Containers, deicer liquid pumps through an efficient Centrifugal Cast-Iron Pump with a 5.5HP Honda engine. The computer system regulates product flow by controlling the engine throttle speed. A three valve shut-off assembly controls spray boom nozzle sections. Nozzle Valves may be used independently or combined using switches for left, right or center nozzles as desired.



Variable Orifice (VO) nozzles

The flow rate of the Variable Orifice (VO) nozzle changes as required by the vehicle speed and product flow. The inherent anti-drip design closes the nozzle when the vehicle stops. The nozzle droplet size and velocity produces no splash at 40 mph reducing atomization. Spray at speeds from 1 to 50 mph and at rates from 0.25 to 2.0 gallons per 1000 square feet. Variable Orifice (VO) nozzles eliminate check valves, selectable nozzles, quick-change nozzles, or multiple nozzle spray systems.

Sprayer Capacity

A 275 gallon (1,000L) Intermediate Bulk Container sprays up to 1.1 million square feet (102,000m²) with application rates from 0.25 to 2.0 gallons per 1000 square feet (0.95 to 7.5 L/93m²). This enables the driver to cover up to 44,000 lineal feet with a 25' swath.

