

**SCHMIDT**

**ACE**

**Airport Combination Machine**



# ACE

## Airport Combination Machine



The ACE was developed for the de-icing of airport runways, taxiways and aprons. It applies liquid and solid de-icing agents with extreme accuracy via two special spreading discs. The maximum spraying width is 15 metres and the maximum spreading width 24 metres.

### Construction and Technology

The ACE is comprised of three components: the modular polyethylene fluid tanks and drive unit, the separate hopper as well as, two rear-mounted special combi discs. The stable and low maintenance combi discs were specially developed for applying both liquid and solid de-icing materials. There are very few wearing elements. The entire machine is coated with a specially developed corrosion protection. All cavities are air closed. Specially designed for mounting on large carrier vehicles or semi-trailers, the combination machine is powered by the vehicles' hydraulics or a separate diesel engine. Its modular design makes a wide variety of assembly options for the ACE possible. This ensures that it can be easily customised to meet the individual needs of the various airports.

### In Operation

The ACE tackles icy surfaces using anti-icing and de-icing methods with a road speed related control of up to 30 km/h. The spraying width of the two angle positioned spraying discs located at the rear of the machine is 6 – 24 m. During spraying it is 6 – 15 m. Up to 50 % of solid spreading material with an admixture of liquid de-icing agents can be applied. The application of up to 50 g/m<sup>2</sup> of the de-icing liquid can be sprayed precisely and with a good coverage efficiency. The special combi discs form large drops and are positioned just 500 mm above the surface of the ground. This reduces the swirling caused by turbulence to a minimum. The de-icing fluids are pumped, fully road speed related, by two pumps from the tanks to the special spraying discs. The spraying discs are fitted with a special injection system. An even and accurate spraying pattern is guaranteed by the reliable closed loop powering of the conveyor belt, the fluid pumps and the special combi discs. Spraying is controlled by the control panel which is very easy to operate and located in the operator's cabin. This means that both the spraying width and dosage can be regulated quickly and efficiently.

### Technical Data

Tank capacity	according to customer requirement
Spreading width	6 m – 24 m
Spraying width	6 m – 15 m
Operating speed	up to 30 km/h road speed related
Dosage	5 – 50 g/m <sup>2</sup> thawing materials 10 – 60 g/m <sup>2</sup> comb. of dry and liquid materials 5 – 50 g/m <sup>2</sup> abrasive materials
Distribution	special spraying discs
Drive unit	vehicle hydraulics or diesel engine
Construction	truck (fix-mounted or de-mountable system)

