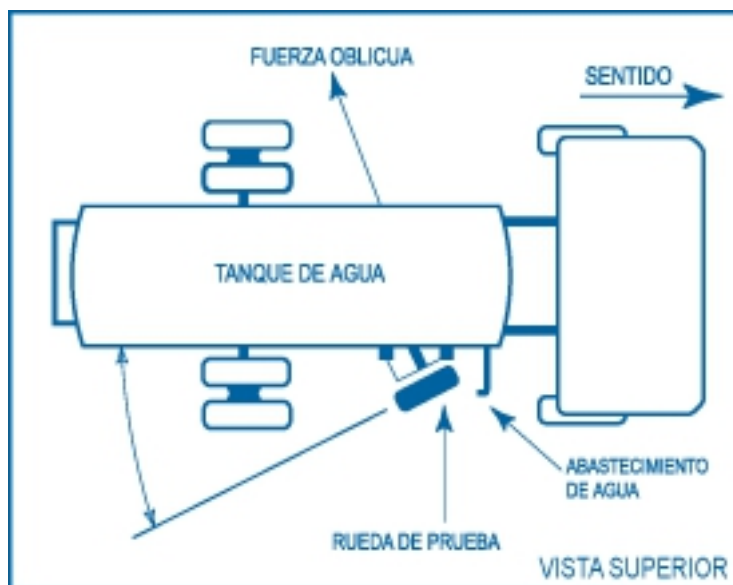




Monitoring skid resistance on wet pavements

SCRIM units measure the skid resistance of wet pavements. They have become standard equipment for measuring sideways friction coefficients, and help to identify sections of road with low friction levels.



Tests are conducted by pouring water on to the pavement immediately prior to the passage of the measuring wheel, to measure the friction of a wet pavement with a 0.5 – 1 mm sheet of water. Water tanks with capacities ranging from 6,000 to 29,000 l are fitted, depending on the units.

Electronic data processing equipment processes the information received from the measuring devices and co-ordinates it in line with the measuring speed. Vehicle speed and distance

travelled measured at the same time as the friction data.

SCRIM units have laser sensors which can provide continuous measurements of the macro-texture of the pavement at the normal travel speed of the equipment. They also have independent sensors for determining ambient and pavement temperatures.

Operation

The oblique force method is used to measure skid resistance on wet surfaces.



A wide-screen front camera with x, y & z co-ordinates is fitted for inventory purposes.

The units comprise a test wheel fitted at an angle of drift of 20° with regard to the longitudinal axis of the vehicle. A vertical load of 200 kg is applied to this wheel (with a strong, slick tyre).

The test wheel is subjected to a known vertical load but is permitted to rotate, i.e. it is not locked. As the wheel is dragged in the direction of the longitudinal axis of the vehicle a force perpendicular to the plane of the wheel is generated in the contact area between the tyre and the road.

