MOVENTOR SKIDDOMETER

SPECIFICATION

RUNWAY FRICTION TEST DEVICE
SKIDDOMETER BV 11 RUNWAY FRICTION TESTING TRAILER

1. GENERAL

1.1 Mode of measurement

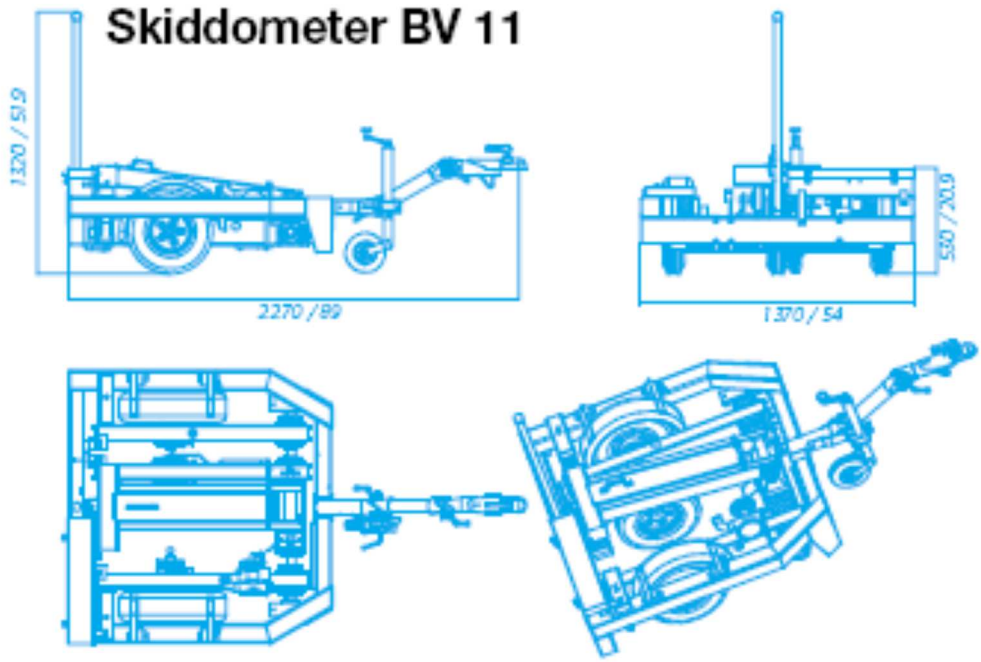
The Skiddometer BV 11 is designed for continuous measuring of the friction coefficient on runway surfaces. (when dry, wet, with ice or with tyre/rubber remains, as described by ICAO)

1.2 Approving

The measuring procedure is approved by FAA and ICAO.

1.3 Size

Weight:	390 kg / 860 lbs.
Length:	2,45 m / 8 ft
Width:	1,40 m / 4,6 ft
Height:	0,50 m / 1,7 ft
Height including fender marker:	1,30 m / 4,3 ft
Measuring speed range:	20–160 km/h / 12–100 mph



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2. OPERATING CHARACTERISTICS

2.1 Handling

The Skiddometer is easy to operate and maintain by any ground staff, especially as the computer has a ”built in” operation manual.
The Skiddometer is designed to be operated and maintained by one operator only.

2.2 Travel speed of the Skiddometer

Measuring speed range 20-160 km/hour

2.3 Presentation of the measurement results

The measuring result is presented in an optical display as well as printed simultaneously on paper indicating name of airport, date, time, temperature and the runway code number. All these are instantly available in the cabin of the tow vehicle. Friction data can be stored on any PC during measurement. Information is stored on memory for later usage. Range of friction coefficient 0-1,0.

2.4 Calibration

The Skiddometer does not require regular calibration before use, the computer system is auto zeroed after power is switched on. The validity of existing calibration can be checked by “calibration check” function. Time for this is approx. 2-3min. Annual service and calibration shall be performed according to service manual.

2.5 Reliability

Relative error of the Skiddometer in operating condition does not exceed 5 %.

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3. TECHNICAL CHARACTERISTICS

3.1 **Mode of braking**
Measuring tyre has a continuous slip ratio of 17%.

3.2 **Tyres**
The Skiddometer has two reference tyres and one measuring tyre. All the three tyres are air-filled type and fits to same rim.

3.3 **Types of a measuring tyre**
As per FAA-ICAO recommendation two different types of measuring tyres are recommended: 1 low pressure tyre for wet runway measuring (ASTM) and 1 high pressure tyre for snow or ice covered surface (T520), the latter made by natural rubber, same as for aircraft tyres. Skiddometer is designed to operate with low as well as high pressure measuring tyre.

3.4 **Design**
The Skiddometer and its power lines, measuring hub and electrical system are built in type and protected for use in all weather conditions.

3.5 **Stability**
The Skiddometer offers a maximum stability also during high speed turns and urgent braking. This is due to the low and wide, fully suspended chassis of the Skiddometer.

3.6 **Measured and recorded parameter**
An average friction coefficient is presented for sectors A, B and C for both measurement directions on a runway. Complete averages are given for each sector and runway total friction coefficient is also given.

3.7 **Further special technical characteristics and equipment**
The Skiddometer is designed to be towed by any commercial/passenger vehicle equipped with tow bar, ”ball” type or ”hook” type.

3.8 **Power Source**
12 Volt electrical system from tow vehicle.

3.9.1 **Runway Calibration** (WOB water on-board / WMS trailer option)
The Skiddometer can be equipped with optional self-wetting systems including pump, water nozzle and tank supplying a uniform water depth of 1 mm in front of measuring tire. Optional tank constructions water sack (WOB) 1000l or trailer (WMS) 1300l specified according customer needs.

4. ACCESSORIES - SPARES

4.1 **Availability**
Spare parts are available for all units from1973, to current production, spare part availability for next 15 years. All spare and wear parts are stocked In Finland Pirkkala delivered same day by courier services. Spare parts are also stocked globally by Moventor certified dealers.

4.2 **Special tools**
Special tools not required.

5. **GUARANTEE TIME**
1 year general full warranty
30 years warranty for frame construction

6. **DELIVERY**
According customer needs

7. **MANUALS**
Complete operation, maintenance and spare-part manuals, in English language, delivered with each unit. Network diagram of functions included

8. **TRAINING**
2 days, at local airport or at Moventor factory by Moventor staff, covering operation, service and maintenance.

9. **MANUFACTURER**
Moventor Oy Inc. Finland