

Mu·METER FT256

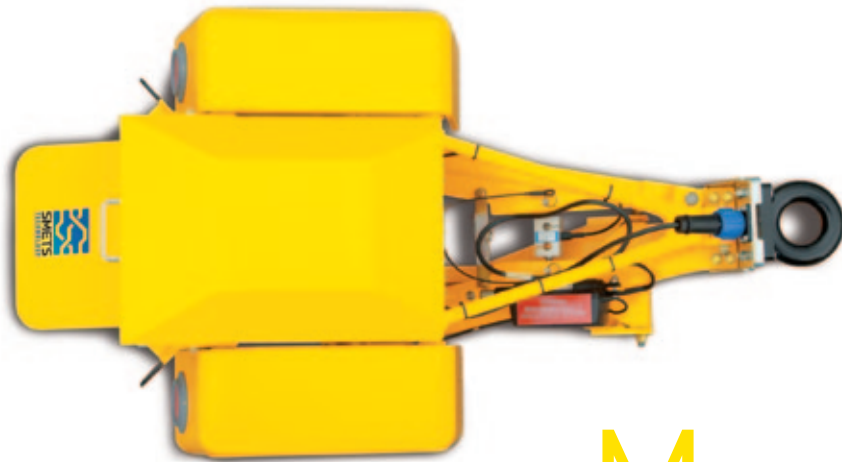
RUNWAY·FRICTION·CLASSIFICATION & MONITORING·SYSTEM

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1 Side view of the runway friction coefficient measuring instrument

2 Top view of the trailer system

3 Rear view

4 Mu-Meter FT 256 with towing vehicle

Mu-METER FT256

→ RUNWAY-FRICTION-CLASSIFICATION & MONITORING-SYSTEM

The Runway Friction Meter **Mu-Meter FT256** is a continuous surface measuring and reporting system for testing airport runways, taxiways and road surfaces. The equipment consists of a small three-wheeled trailer incorporating electronic measuring systems which operate in conjunction with a computer, carried in the chosen towing vehicle. The trailer systems produce signals which are presented on the laptop screen and processed for later downloading to an office printer.

In addition the recorded data can be exported via the laptop RS 232 serial port or stored on the floppy disk for which a drive is provided to the laptop unit. This feature provides the ability to download the data to an IBM compatible computer for data storage and analysis at a later time.

Mu-METER FT256

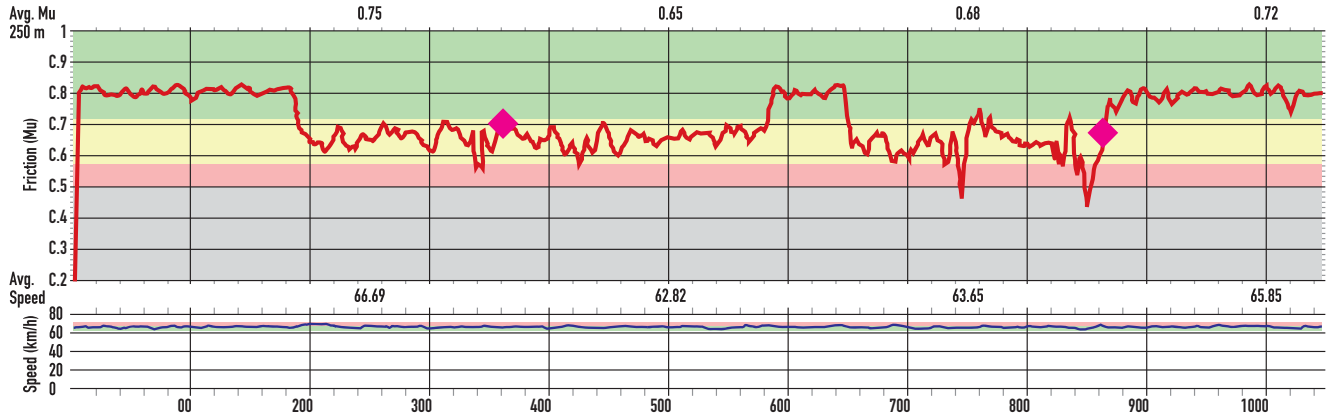
AIRPORT RUNWAY 28-10

Calibration Results		
Zero Reference	03/07/2001 - 20:11:29	242
Distance	01/07/2001 - 12:10:26	406.4
Board Test	03/07/2001 - 20:19:24	5674

Average Mu	1/3	2/3	3/3	Total
28 - 10	0.728	0.680	0.712	0.707

Weather Condition	
Air Temperature	
Operator Notes	

Run Start	04/07/2001 03:33:17	
Auto End Distance	On	
Distance Travelled	1045.40	meters
Average Speed	64.4	km/h



→EXAMPLE OF A FRICTION MEASUREMENT REPORT

The laptop processor can store 999 programmed friction runs, including 999 full classification surveys in accordance with:

- ICAO Annex 14, Volume 1; Attachment A, Section 7, Para 7.1 of the International Civil Aviation Organisation Airport Services Manual Part 2 (Third Edition-July 1999).
- UK CAA CAP683 Procedures for Runway Friction Classification and Monitoring.
- FAA Advisory Circular: Measurement, Construction and Maintenance of Skid Resistant Airport Pavement Surfaces.



TECHNICAL DATA

- Output reports in regionally defined format e.g.: CAA CAP 683 / ICAO / FAA etc.
- Provides accurate day to day friction measurements as part of a pavement maintenance plan.
- Immediate (weather-related) friction reports for transmission to inbound flights
- Runway friction classification & mapping for records and audit purposes.

DIMENSION

Length	1,553 mm
Width	960 mm
Height to top frame	570 mm

OPERATIONAL WEIGHT

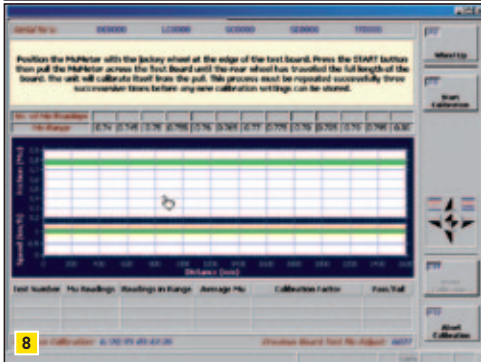
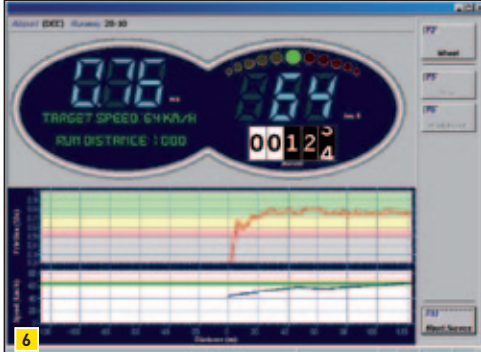
256 kg

TOWING SPEED

Normal friction testing	
Paved surface	64 km/h (40 mph)
Grass surface	48 km/h (30 mph)
Runway classification	64 to 96 km/h (40 to 60 mph)

OPERATING VOLTAGE

12V DC (vehicle supply)



Number of daily minimum turbojet aircraft landings per runway end	minimum friction survey frequency
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Less than 15	1 year
16 to 30	6 months
31 to 90	3 months
91 to 150	1 month
151 to 210	2 weeks
More than 210	1 week

(RECOMMENDATIONS FROM FAA AC 150 / 5350 -12C)

The Mu-Meter FT 256 has been developed especially for airport operations – for friction coefficient measuring on runways – and is nowadays in use throughout the world at international airports such as London-Heathrow, New York, Los Angeles and Tokyo as well as at many regional minor airports. The accurate results are applicable directly for audits in compliance with ICAO-standards and accepted worldwide as one of the reference products in ascertaining of the friction coefficient. The solid construction and design guarantee an unrestricted reliability.

The Mu-Meter FT 256 is able to be towed by any available vehicle with trailer hitch. The sturdy laptop, included in the consignment, can be operated easily by touch screen and supplies immediately available values in real time.

The Mu-Meter FT 256 works without water which would only be necessary if the annual air traffic stipulates friction coefficient measuring classification according to the ICAO-standards. The incredible resolution goes up to 1.5mm on a 3km runway view and shows how precisely the system operates.

- 5 Vehicle positioning screen
- 6 Survey screen
- 7 Zero calibrate reference screen
- 8 Board test calibration screen
- 9 Distance calibration screen



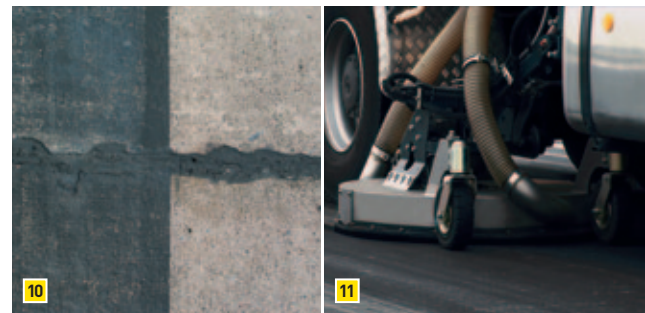
ARC-1000[®]

→ AIRPORT·RUNWAY·CLEANER

Jetport pavement and runway rehabilitation is a necessity in today's aviation industry. The continual increase in air traffic necessarily leads to increased tyre rub off on runways. The danger of skidding resulting from slippery runways is familiar to airport safety experts, for which reason friction tests are conducted regularly.

To ensure the highest possible degree of safety during landing, it must become standard practice to remove tyre rubber deposits before the surface reaches the critical limit.

We use water without the addition of chemical agents or any abrasive additives. Cleaning with water under high pressure is the least abrasive way to remove rubber deposits and runway markings.



Rubber removal
→ Ø 1,200 m²/h

Increasing of friction
coefficients on large areas
→ Ø 2,500 m²/h

Cleaning of asphalt drain surfaces
→ Ø 3,500 m²/h

10 Even the expansion joint material has not been destroyed.

11 The surface cleaner in working position.

COMPANY PROFILE

The owners of the company SMETS -Technology GmbH are very experienced and have been in that field of business since 1975. SMETS -Technology has partnerships in order to build and deliver professional and multipurpose vehicles for a wide range of cleaning applications in municipalities, authorities and in the contracting business (industrial cleaning).

The company attaches great importance to customer support in initial aspects of application technology, right up to the design and layout of specific vehicles required for the job to be done. And of course the service does not end here: Once the vehicle is handed over to the customer he receives professional on-the-job training and can rely on a competent after-sales service.

Long-term customer relations stand as a proof of acceptance of the products and customer satisfaction.



OUR RANGE OF PRODUCTS

- Sewer cleaning trucks (combined vehicles for cleaning and vacuuming, vacuum vehicles, cleaning vehicles)
- Sewer inspection systems and vehicles
- Accessories for sewer cleaning (maintenance and protection systems, hoses and cleaning pumps)
- Nozzles for sewer cleaning and high pressure cleaning
- Garbage trucks & industrial cleaning combination trucks
- Small high pressure cleaning units for sewer pipes with reduced dimensions
- Sweeping trucks
- Tipping container trucks
- Well cleaning and inspection trucks
- Runway cleaning trucks with high pressure water pumps (up to 2,500 bar) **ARC-1000®**
- Trucks for cleaning tanks or any other dangerous substances
- Road marking removal truck | MRT-300/2
- Friction testing unit | Mu-METER FT-256

VARIOUS TYPES OF HIGH PRESSURE WATER CLEANING TRUCKS

- Direct drive via cardan shaft of vehicle transmission
- Drive via separate diesel engine
- Equipped with soundproof insulation, water tank, complete workshop



PARTNER NETWORK

Algeria · Australia · Austria · Bahrain · Brazil · Egypt · England · France · Greece · Hungary
India · Indonesia · Ireland · Japan · Jordan · Kenya · Korea · Kuwait · Lebanon · Libya
Malaysia · Morocco · Oman · Pakistan · Philippines · Qatar · Romania · Saudi Arabia · Scotland
Serbia · Singapore · Sri Lanka · South Africa · Syria · Tanzania · Thailand · Tunisia · Uganda
United Arab Emirates

