

Airport Runway Friction Tester



SARSYS Trailer Friction Tester STFT

FEATURES

- Measuring program in accordance with ICAO and FAA
 - Windows based measuring computer (Touchscreen) "All in one"
- Standard equipped with water tank (build in) for maintenance measuring
 - Wireless communication
- The trailer frame/tank manufactured of stainless/acid proof steel
 - Operational efficiency, Modern technology



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SARSYS VOLVO Friction Tester SVFT

FEATURES

- Measuring program in accordance with ICAO and FAA
 - Windows based measuring computer (Touchscreen) "All in one"
- Build-in V70 or XC70 Volvo chassis
 - Original (Volvo) rear axle system
 - CE-certified by Machine Directive (2006/42/EC)
- Excellent ergonomics, finger top control



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SARSYS Friction Tester TRANSPORTER SFTT

FEATURES

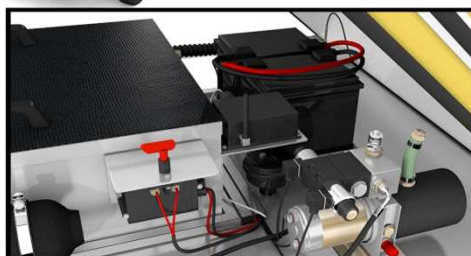
- Measuring program in accordance with ICAO and FAA
 - Windows based measuring computer (Touchscreen) "All in one"
- Engine and Chassis models in unlimited variations (Volkswagen standard models)
 - Original (Volkswagen) rear axle system
- Build-in water tank with min. capacity of 780 liters
- Outstanding maneuverability
 - Total operator comfort



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- for safe takeoff and landing

"In this business,
the safest option
is always best"



■ PRODUCTSHEET STFT

SARSYS TRAILER FRICTION TESTER

BASIC PRINCIPLE AND GENERAL DESCRIPTION

The measuring system is the famous SARSYS Single Transmission system used in the SARSYS Friction Tester. It is primarily designed for friction measuring on airport runways and taxiways, but can also be used for measuring on roads. The STFT is programmed to measure in accordance with regulations issued by authorities such as ICAO and FAA, and designed for both operational and maintenance measuring.

MEASURING PROGRAMMES

The STMC measuring computer system is pre-programmed for complete measurements in accordance with ICAO and FAA regulations as basic modes.

HYDRAULIC SYSTEM

The hydraulic system comprises an electrically powered hydraulic pump, a hydraulic cylinder, a valve block, pressure switches, a pressure accumulator, valves and piping. The hydraulic system retracts or lowers the measuring wheel on the surface and also provides the vertical load on the measuring wheel during measuring. The gear-type hydraulic pump is powered by an electric motor supplied with current from the electrical system on the trailer. The electrically operated valves in the valve block system are controlled by the computer with relays.

ELECTRICAL SYSTEM

The trailer has its own electrical system which comprises two batteries, battery charger, lights, relays, heater for the case for the electrical components and sensors for the electrical system. A heater is installed in the box for electrical equipment to keep the components dry and at the right temperature for a long maintenance-free lifetime.

COMPUTER SYSTEM

The windows based computer controls the measuring process in accordance with the selected programme, e.g. measurement according to ICAO; FAA; Taxiway mode etc. Wireless system are used between the towing vehicle and the trailer.



■ STMC - PANASONIC CF19
INSTALLED IN A SARSYS
FRICTION TESTER, SVFT



■ WIRELESS BRIDGE

The hardware of the measuring computer is a rugged laptop with touchscreen function and a wireless bridge for communication to the trailer thru a peer to peer connection. The preamplifier is fitted in the box for the electrical equipment on the trailer.

MAIN PRODUCT FEATURES (STFT)

- Measuring programme in accordance with ICAO and FAA
- Windows based (Wireless) Touchscreen measuring computer
- Approved and CE -certified according to Machine Directive
- Standard equipped with build in water tank (Volume 560 lit.) in the chassis for maintenance measuring
- Approved by FAA and SCAA (Swedish Civil Aviation Authority)
- Operational efficiency, modern technology
- The trailer frame/tank manufactured of stainless/acid proof steel
- Transmission in aluminium and stainless steel
- Balanced/weighted for perfect repeatability of the measurement



■ PRODUCTSHEET SVFT

SARSYS VOLVO FRICTION TESTER

SARSYS VOLVO FRICTION TESTER (SVFT),

built into the Volvo V70, is one of the most advanced friction measuring systems on the market. It is primarily designed for friction measuring on airport runways and taxiways, but can also be used for measuring on roads.

The SVFT is programmed to measure in accordance with regulations issued by authorities such as the ICAO and FAA and is designed for both operational and maintenance measuring.

The Volvo V70 is a high-performance front-wheel drive car offering excellent manoeuvrability in combination with a good weight class working environment for the operator.

The large space in the back provides unimpeded access to the measuring system, making service and maintenance work easy and comfortable. There is still room for a good load of extra equipment, such as spare wheels, tools etc., a valuable feature when a number of airports are to be visited for regular maintenance measuring.

An important guideline for the design of the SVFT has been to make full use of the prime advantage of self-contained configuration: Speed and smoothness in operation.

The entire measuring system is contained within the car with unchanged driving qualities and without need to hook up a trailer.



■ SARSYS VOLVO FRICTION TESTER

In the operational situation, the vehicle is immediately available for a measuring run and a runway friction report is also available to airport operations or to traffic control within just a few minutes after the start of the run.

The speed of the reporting can be further increased by using a freewave modems transferring the measured data directly to a PC at the receiving end.

For measuring on wet runways, stipulated for maintenance measuring, the SVFT is available with a water system. Its water tank has a volume of 580 litres, sufficient for 7000 metres (23.000 ft) of runway with a 1 mm water layer.

The measuring wheel can be fitted with a standardized measuring tyre, as stipulated by ICAO and FAA for this type of measuring.

MAIN PRODUCT FEATURES (SVFT)

- Measuring programme in accordance with ICAO and FAA
- Approved by FAA and SCAA (Swedavia)
- Modern technology and operational efficiency
- Excellent ergonomics, fingertip control
- Outstanding manoeuvrability
- Total operator comfort
- Easy service and maintenance
- Windows based measuring computer



- for safe takeoff and landing

"In this business,
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is always best"



■ PRODUCTSHEET SFTT

SARSYS FRICTION TESTER TRANSPORTER

SARSYS FRICTION TESTER TRANSPORTER

built into the VW-Transporter, is one of the most advanced friction measuring systems on the market. It is primarily designed for friction measuring on airport runways and taxiways, but can also be used for measuring on roads.

The SFTT is programmed to measure in accordance with regulations issued by authorities such as the ICAO and FAA and is designed for both operational and maintenance measuring.

The VW-Transporter is a high-performance front-wheel drive car offering excellent manoeuvrability in combination with a good weight class working environment for the operator. Engine type (Petrol or Diesel) and horsepower can be combined in different ways, all front wheel options can be used.

The large space in the back provides unimpeded access to the measuring system, making service and maintenance work easy and comfortable. There is still room for a good load of extra equipment, such as spare wheels, tools etc., a valuable feature when a number of airports are to be visited for regular maintenance measuring.

An important guideline for the design of the SFTT has been to make full use of the prime advantage of self-contained configuration: Speed and smoothness in operation.

The entire measuring system is contained within the van with unchanged driving qualities and without need to hook up a trailer.



■ SARSYS FRICTION TESTER
TRANSPORTER

In the operational situation, the vehicle is immediately available for a measuring run and a runway friction report is also available to airport operations or to traffic control within just a few minutes after the start of the run.

The speed of the reporting can be further increased by using a freewave modems transferring the measured data directly to a PC at the receiving end.

For measuring on wet runways, stipulated for maintenance measuring, the SFTT is available with a water system. Its water tank has a volume of 785 liters, sufficient for 10 000 meters of runway with a 1 mm water layer.

The measuring wheel can be fitted with a standardized measuring tyre, as stipulated by ICAO and FAA for this type of measuring.

MAIN PRODUCT FEATURES (SFTT)

- Measuring programme in accordance with ICAO and FAA
- Approved by FAA and SCAA (Swedish Transport Agency, Civil aviation department)
- Approved and CE –certified according to Machine Directive
- Modern technology and operational efficiency
- Original Volkswagen Transporter rear axle
- Excellent ergonomics, fingertip control
- Outstanding manoeuvrability
- Total operator comfort
- Easy service and maintenance
- Windows based (Touchscreen) measuring computer

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U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of Airport Safety and
Standards

800 Independence Ave., SW.
Washington, DC 20591

DEC - 2 2003

Mr. Stig Svensson
Managing Director
Scandinavian Airport and
Road Systems AB
Box 31
SE-231 21 Trelleborg
SWEDEN

Dear Mr. Svensson:

The Federal Aviation Administration (FAA) accepts your certification that the SARYS Trailer Friction Tester (STFT) complies with paragraph 3.a., 3.b. and 3.d. of FAA Advisory Circular (AC) 150/5320-12C.

The new model number will be listed in FAA Advisory Circular 150/5320-12C, *Measurement, Construction, and Maintenance of Skid Resistant Airport Pavement Surfaces* at such time that the document is updated. Until a change is published, you may rely on this letter as confirmation of FAA approval.

Sincerely,

A handwritten signature in cursive script that reads "Rick Marinelli".

Rick Marinelli, P.E.
Manager, Airport Engineering Division, AAS-100



U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of Airport Safety and
Standards

800 Independence Ave., SW
Washington, DC 20591

DEC 14 2011

Mr. Christian Svensson
Managing Director
Scandinavian Airport
and Road Systems AB (SARSYS)
Box 31
SE-231 21 Trelleborg
SWEDEN

Dear Mr. Svensson:

I am happy to inform you that the SARSYS Friction Tester Transporter (SFTT) has been found to meet all requirements by the Federal Aviation Administration (FAA) for performing airport pavement friction tests for both maintenance and operational purposes.

Your certification to us outlining compliance to FAA Advisory Circular (AC) 150/5320-12C, Measurement, Construction, and Maintenance of Skid-Resistant Airport Pavement Surfaces, is hereby acknowledged as well as the approval by the Swedish Transportation Institute Agency (Civil Aviation Department). We also acknowledge identical system electronics and friction measurement systems to previously approved SARSYS Volvo SVFT and Saab SFT. Since this is an added model designation, a change in the AC will be necessary. You may rely upon this letter as confirmation of FAA approval of the new model until the AC is changed.

Please feel free to refer any questions regarding FAA approval to me. I may be reached at (202) 267-7669, or by email to John.Dermody@faa.gov.

Sincerely,

John R. Dermody, P.E.
Manager, Airport Engineering
Division, AAS-100