

OTR

The special solution for OTR-Tires

OTR 2400/2800 and 3800/4500

OTR 2400/2800 Based on the proven ITT concept for OTR tires with rotating measuring system and external loading of the tire, the OTR 2400 and -2800 is suitable for testing all tire types and constructions up to 2400mm or 2800mm outside diameter and up to 1.2m tire width. The system is available as single side loaded setup, with two doors with separate loading and unloading or inline in a conveyor system. For a higher test capacity the system can be equipped with a second measuring head.

OTR 3800/4500 The first SDS inspection system for tires up to 63" was introduced in 2005. The larger OTR test systems have a closed gantry frame to carry the complete 4-axis positioning system of the measuring device(s). The complete frame with the internal tire loading setup is isolated from the floor to maintain a reliable operation under the typical conditions. The complete chamber with the hydro-pneumatic door(s) and the isolated vacuum system is separated from the measuring system. The tire handling with a modular shuttle system loads the tire automatically centered into the chamber. The robust construction with the segmented belt system allows an easy loading / unloading by forklift or overhead crane.

A profitable solution The quality control by Shearography in the production of new tires will help to optimize the manufacturing process and to ensure a reliable detection of specific anomalies, for example to repair these findings. The inspection of used tires will help to classify the casing for further processing: retreading, repair or just wear off. After retreading, the inspection by Shearography will help to classify the final product.

Automated operation Defined testing programs ensure a repeatable and reliable testing of all tire sizes, manually or with barcode. The basic configuration with a single sided loading can be extended with a second door for unloading on the opposite side (inline operation). By using a second measuring head, the throughput will be increased. All OTR machine sizes can be equipped with different tire handling solutions: single side loading with automatic centering, hydraulic tipper, two shuttles for separate loading and unloading, or a load-through-configuration with two doors.

Excellent service By the SDS global service network and customer specific service contracts, SDS guarantees a close and fast follow-up of all customers.



OTR 2400 single door setup with hydraulic loader



OTR 2400 double door setup with conveyor setup



OTR 4500 double door with selfcentering loading shuttle



Hydraulic tipper for easy loading by crane or forklift



NON-DESTRUCTIVE TIRE TESTING BY SDS TECHNOLOGY

Technical data and options

Features	OTR 2400 / OTR 2800		OTR 3800 / OTR 4500	
Tire types	all tire types ; radial and bias construction			
Testing area	crown, shoulder and upper sidewall from inside without flipping			
	full bead to bead and turn-up area with tire flipping (manually or automated)			
Defect types	all kind of separations, trapped air, corrosion, loos wires, undercure, blister,..			
Display of results	overview of all scans, single scans, single sector display as result- and video image			
Data storage	automatic, ISO compliant, by a backup manager for archiving to various media			
Loading / Unloading	single side loading/unloading or optional second door with separate loading and unloading			
Conveyor System	optional various modules, individual layouts and several interfaces for logistic solutions			
Barcode	optional handheld barcode scanner or automated solutions, open data interfaces (FAR, etc.)			
Automatic Anomaly Detection	optional with adjustable sensitivity, evaluations zones, polygonized area, statistical output (CSV)			
Computer System / PLC *	Industrial PC, Windows XP or -7 / WAGO or optional Beckhoff, Rockwell			
Remote Control	via internet			
Number of Measuring Heads	1 or 2		1 or 2	
Dimensions L x W x H (m) single door	3,6 x 3,1 x 3,5 / 4,0 x 3,5 x 3,9		9,5 x 7,0 x 5,0 / 11,0 x 8,0 x 5,4	
Dimensions L x W x H (m) double door	3,6 x 3,1 x 3,5 / 4,0 x 3,5 x 3,9		depending on configuration	
Weight (single door, OTR with one shuttle)	ca. 7.000 kg / ca. 7.500 kg		total ca. 8.500 kg / ca. 10.000 kg	
Electrical connection	3 Phase with 50 or 60Hz, typ. 380 - 480 V / 20 A (ITT) 32 A (OTR) or country specific			
Pneumatic connection	R1/2", min. 7bar			
Ambient temperature **	+10°C to + 35°C			
Color (RAL)	blue (5002), silver (9007) or customer specific			
min. innerØ / min. outerØ ***	12" / 900mm	12" / 900mm	12" / 1.200mm	12" / 1.400mm
max. outerØ / max. weight	2.400mm / 1.5to	2.800mm / 3to	3.800mm / 5to	4500mm / 6to
min width / max. width	200mm / 1.200mm	200mm / 1.400mm	200mm / 1.500mm	200mm / 1.800mm
Test capacity tires/h. crown (1 or 2 head) ****	20 / 34	18 / 30	the test capacity depends on several factors a typical time/sector is 15-20 sec.	
Test capacity tires/h. bead to bead (1 or 2 head) ****	7 / 12	6 / 10		

* details on request; ** higher temperature ranges with air condition;

*** smaller diameter with adapter plate or manual loading;

**** with 8 sectors / 40mBar and typical resting times, Windows 7

SDS Systemtechnik GmbH
Rudolf-Diesel-Strasse 7
D-75365 Calw-Stammheim

www.sds-systemtechnik.com
info@sds-systemtechnik.de

SDS
Systemtechnik
GmbH



Technical consulting
Phone +49 (0) 7051 / 93154-0

Personal advice on-site.
Arrange an appointment:
Phone +49 (0) 7051 / 93154-0
Fax +49 (0) 7051 / 93154-99