# Product Information ST Series Seals

# WSI "Sealing Power"

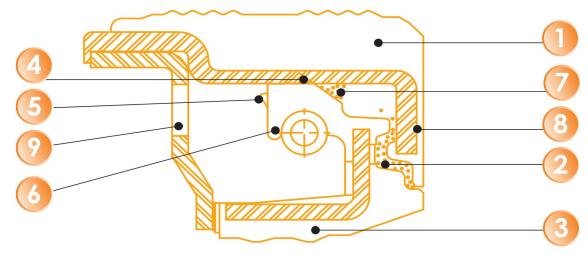
ST Series Hub Seals are high-durability wheel hub seals for medium to heavy duty vehicles. They are made by integrating multiple components to offer the best sealing and service life for the heavy haulers of the trucking industry. The labyrinthine design of dust lips effectively prevents mud penetration and reduces generation. The special style of hydrodynamic aid increases pumping rate and reduces temperature rise and rubber wear. Besides, they are easy to install.



### **Product Description** Introducing the Newest Innovation for Truck Wheel Hub Protection-WSI "Sealing Power" ST5 Series Hub Seals!!



WSI ST Hub Seal family includes many variations to suit a wide range of operating conditions. Among all the ST5 Seals, the is the latest innovation featuring easy installation, excellent sealing, long service life and high quality.



1. G style (grooved) rubber covered OD enables easy housing installation.

2. Labyrinthine dust lips effectively prevent mud from entering into the seal body and reduce heat generation.

3. G style (grooved) rubber covered ID enables easy shaft installation.

4. Special style of hydrodynamic aid increases pumping rate, enhancing sealing and reducing lip temperature and rubber wear.

5. Spring retained lip offers a better radial load, ensuring sealing and prolonging service life.

6. The sealing element is made of high performance rubber that has superior wear and heat resistance.

7. The seal uses high performance grease to prevent temperature rise and prolong service life.

8. The outer side of the seal is designed with a flat face to prevent sticking and gathering of contaminants which may hurt the rubber composite.

9. The hole on the metal shell enables excellent heat transfer and better lubrication.

### **Technical Information** Comparative Testing of WSI "Sealing Power" ST and Competitor Seals

To ensure the performance and quality of WSI ST Seals, comparative tests have been conducted by both WSI factory and WSI customer. Results show that WSI ST Seals are superior to competitor seals in terms of press fit, torque, pumping rate, and dynamic durability.

Regarding durability, both WSI factory and WSI customer have conducted tests. In WSI factory lab we have done the endurance test under the following conditions: (1) Fluid: EP Gear oil SAE 80W-90 (2) Fluid Temperature: Normal, 82°C (3) Fluid Pressure: 0 bar (4) Fluid Level: 1/2 Full (5) Speed: 0 rpm, 150 rpm, 700 rpm (housing rotation). The test result-ST seal

passed 1,000 hours of testing, qualified for endurance.

In year 2007 WSI customer tested WSI ST Seals and competitor seals in conditions similar to that of which they will be operating. Dynamic tests were running and a daily log was kept. Seals were left to run until they started to leak oil, the time they were considered to have failed and the tests were ended.

Based on the data of the dynamic testing program, WSI customer concluded that WSI ST Seals are high quality seals. From the seals that were tested, they found that WSI ST Seals performed many times longer than did competitor seals.







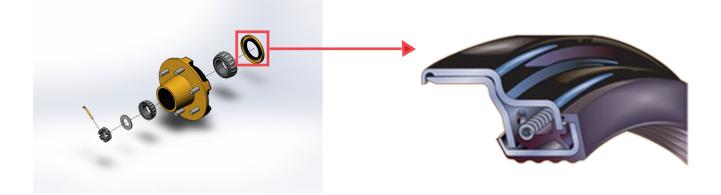


## Application Variations and Custom Designs Available

WSI offer "Sealing Power" ST Hub Seal in both standard range and variations to suit a wide range of rigorous operating conditions.

#### ST Series litth Seals

Application	SKF <sup>®</sup> /CR Classic	National <sup>®</sup> Red	Stemco <sup>®</sup> Voyager	DANA®
Trailer	46305	370025A	373-0143	—
Drive	47697	370003A	393-0173	—
Steer	35066	370001A	383-0136	—
Trailer	42623	370065A	373-0123	—
Drive	38780	370023A	393-0112	—
Steer	43764	370048A	383-0164	—
Trailer	40136	370036A	373-0113	—
Drive	45099	370022A	393-0103	—
Drive	42672	370031A	393-0104	—





#### WELL OIL SEAL INDUSTRIAL CO., LTD

ISO 9001 : 2008 Tel: +886-4-8651759 Fax: +886-4-8652883 Website: <u>www.wsioilseal.com.tw</u> E-mail: <u>sales@wsioilseal.com.tw</u>