BSR Tools

BSR Quality

BSR Checker

BSR Scanner

BSR Observer

BSR Inspector

BSR Probe

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BSR Checker

Propagates innovation in Buzz, Squeak and Rattle measurements

BSR Tools

Quasi-Static BSR Checker

BSR Checker

Provides means to detect stick-slip noise on a car assembly. The ergonomic design allows you to press down the part under test with sensitive thumb-down design, while an embedded load cell records the applied force and an embedded microphone listens and analyses generated BSR Signal

Features

Hardware

- Intuitive one-hand thumb-down grasp device for sensitive manipulation
- Shock-absorber non-slip tip for better feeling of force response
- LCD indicating SPL and force values

Real-time Software

- Real-time data display
- Pass/fail test
- Tracking of test history
- Basic and advanced setup options
- User calibration of microphone and load cell sensors
- File saving

Post-processing software

- File loading, wav replay & export
- Component quality report
- FFT analysis of SPL

Specifications

Sensor 1 - Microphone	
Mic. Type	Electret Microphone
Number of Mic.	1
Standard Power	4.5 V DC

Sensor 2 – Load Cell	
Rated Capacity	20 kgf
Rated Output	0.7 ~ 1.5 mV/V
Operating Temp	-20 ~ 50 °C
Permission Overload	150 %
Limit overload	300 %

Data Acquisition and Processing	
Sampling Rate	Max 41.1 kS/s
Meas. Mode	Simple Trigger
Analysis	Spectrogram, SPL

Physical Characteristics	
Weight	200g
Dimensions	130 x 110 x 30 (mm)

Applications

- Quantitative evaluation method instead of previously used subjective evaluation
- Measuring vehicle noise which occurs in excited body or various component joints
- Assembly condition check in end of line tests

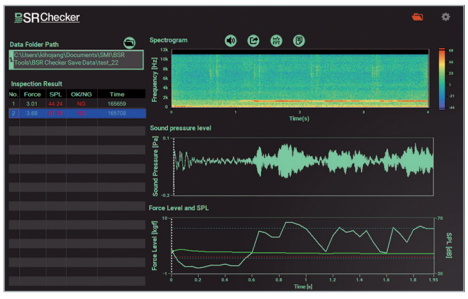
- 01 Load Cell with non-slip tip
- 02 Microphone
- 03 OLED display
- 04 Handle

System configuration

Hardware configuration

· All sensors connected through integrated circuit board and powered through single microphone USB
· Design of the device handle follows rules for intuitive haptic sensation.
· Shock-absorber cylinder allows user to feel the applied force
· Thumb-down grasp stimulates feeling of previously used, but now obsolete technique
· Non-slip tip is replaceable for softer rubber or harder plastic material
· For precise measurements, calibration for microphone and load cell is provided

Software configuration



· Apply a constant force and measure noise SPL
· Display pass/fail result after analysis of measured data
· In post processing, replay wav file or export
· Detect noise that occurred due to applied force, not only in the measurement contact point