History

1954: Ono Sokki Co., Ltd. was established in Yokohama. Manufactured the first tachometer in Japan for use with jet engines.
1955: Started manufacture of a wide variety of digital instrumentation.
1961: For the first time in Japan, Ono Sokki manufactured transistorized digital instrumentation.
1963: Developed digital torque measurement instruments which were widely acclaimed throughout Japan and the world.
1963: Completed and delivered computer on-line data management device for use in engine development.
1968: Introduction of IC technology into all products.
1973: Development of CF-type statistical analysis system using a built-in minicomputer.
1977: Development of ultra-rugged high-reliability linear gauge.
1979: Developed the first portable dual channel FFT analyzer with 64-K byte mass-storage memory, model CF-500 and put on mass-production line.
1986: Listed on the First Section of the Tokyo Stock Exchange.
1986: Ono Sokki Technology Inc. was established.
1989: New Technical Center was established in Yokohama.
1990: Acoustics Lab. was established in Technical Center.
1992: Ono Sokki Beijing Office was established.
1996: Conformance to ISO 9001 was certified.
1997: Conformance to ISO 14001 was certified.
2004: Automotive Testing Lab. was established in Technical Center.
2006: Ono Sokki (Thailand) Co., Ltd. was established.
2007: Automotive Testing Lab. Unsunomiya was established in Unsunomiya factory.
2009: New office building was established in Shin-Yokohama. Relocation of head quarter and Software Development Center to the new building in Shin-Yokohama.
2012: Ono Sokki India Private Ltd. was established.
2012: Ono Sokki Shanghai Technology Co., Ltd. was established.
2015: Automotive Testing Lab. Unsunomiya II was established in Unsunomiya Technical & Product Center.

OVERSEAS SUBSIDIARIES AND OFFICES

India
Ono Sokki India Private Ltd.
Plot No.20, Ground Floor,
Sector-3, IMT Manesar Gurgaon - 122050, Haryana, INDIA
Phone : +91-124-421-1807
Fax : +91-124-421-1809
E-mail : osid@onosokki.co.in

USA
Ono Sokki Technology Inc.
2171 Executive Drive, Suite 400
Addison, IL 60101, U.S.A.
Phone : +1-630-627-9700
Fax : +1-630-627-0004
http://www.onosokki.net
E-mail : info@onosokki.net

Thailand
Ono Sokki (Thailand) Co., Ltd.
1-293-4 Moo.9 T.Bangphud,A.Pakkred
Nonthaburi 11120, Thailand
Phone : +66-2-584-6735
Fax : +66-2-584-6740
E-mail : sales@onosokki.co.th

China
Ono Sokki Shanghai Technology Co., Ltd.
Room 506, No.47 Zhiyong Road, Yangpu District,
Shanghai, 200433, P.R.C.
Phone : +86-21-6503-2656
Fax : +86-21-6506-0327
E-mail : admin@shonosokki.com

Worldwide
Ono Sokki Co., Ltd.
1-16-1 Hakusan, Midori-ku,
Yokohama, 226-8507, Japan
Phone : +81-45-935-3018
Fax : +81-45-930-1818
E-mail : overseas@onosokki.co.jp

ONOSOKKI-OVERSEAS COMPANY PROFILE

Ono Sokki has been manufacturing digital instruments since the word "digital" was not popular at all. "Do what others do not do" is the words describing Ono Sokki spirit very well. The measurement technology has been contributing technological evolution of modern industries, and now it is also a key element to realize comfortable environment for human being. Ono Sokki is one step ahead providing tools and solutions to create better quality of both industry and human life.
As a company specializing in measurement, control and information-handling technologies, Ono Sokki plays an active role in the global development of both basic and leading-edge industries, such as the automobile, shipbuilding, aeronautical, machinery and electronics industries. Ono Sokki also offers technologies and products that serve as key solutions for various needs relating to environmental issues and energy conservation. We at Ono Sokki are dedicated to meeting the needs of users from not just these, but a variety of industry sectors, by developing total system solutions which make use of our sensing, metering, data-processing and precision-machining technologies. This strategy of continually adding value to our products is what keeps Ono Sokki progressive and one step ahead of the competition.
## LEADING PRODUCTS OF

### ONOSOKKI

### Revolution and Torque Measurements

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIGITAL TACHOMETER (TM series)</td>
<td>Compact and lightweight. Conforms to DIN standard size (96 x 48 mm). Can be connected with various detectors, meeting requirements for various measurements.</td>
</tr>
<tr>
<td>DIGITAL TORQUE DETECTOR (TH series)</td>
<td>Assured high accuracy, stability and durability against overtorque. Various types of detectors cover entire range from microscopic to gigantic torque.</td>
</tr>
<tr>
<td>DIGITAL HANDHELD TACHOMETER (HT series)</td>
<td>Both contact and non-contact types are available. Non-contact type is small size and lightweight. Very handy for speed measurements.</td>
</tr>
<tr>
<td>ADVANCED TACHOMETER (FT series)</td>
<td>FFT computing type, small size and lightweight. Measures rpm of a rotating shaft without any marker attached on, or even if the shaft itself is not come out.</td>
</tr>
<tr>
<td>ELEVATOR SPEEDOMETER (EC-2100)</td>
<td>Designed for maintenance, adjustment and inspection of elevators. Wide measurement range up to 2,000 m/min, saving calculation time with 18 ms. Useful for a high speed elevator. The distance measurement function (option) can measure actual moving distance of an escalator after emergency stop.</td>
</tr>
<tr>
<td>FIBER OPTIC DETECTOR (FG-1300 + FS-540)</td>
<td>A high-performance non-contact type amplifier to be used with an optical fiber sensor. Perfect for measuring rotating thin shafts of micro-motors, or rotation measurements of narrow spaces.</td>
</tr>
<tr>
<td>DIGITAL TORQUE METER</td>
<td>Measures motor torque property with high accuracy and high response. Wide variety of MT series detectors support various motors. Link function to secondary processing software (OC-1300 series / OA-2000 series - option) allows further analysis.</td>
</tr>
<tr>
<td>DIGITAL ENGINE TACHOMETER</td>
<td>Used with a variety of sensors, it can measure rotational speed for virtually all types of engines. Its speed comparison function can be used to give the alarm of abnormal engine speeds.</td>
</tr>
<tr>
<td>VOLUMETRIC FLOW METER (DF/FM &amp; FP series)</td>
<td>A complete series of volumetric flow meters, used for measuring and controlling fuel consumption of various types of engines. It is highly accurate and covers a wide range of flow rate. Convenient for measuring on board.</td>
</tr>
<tr>
<td>ENGINE TACHOMETER</td>
<td>Measures rpm of a rotating shaft without any marker attached on, or even if the shaft itself is not come out.</td>
</tr>
<tr>
<td>ENGINE TESTING SYSTEM (FAMS-R5)</td>
<td>Capable of continuous measurement by the principle of the Coriolis force without being affected by temperature or pressure. It is also available to measure density.</td>
</tr>
<tr>
<td>COMBUSTION ANALYSIS SYSTEM (DS-3000 series)</td>
<td>Capable of measuring speed, distance and other vehicle-related items by satellite signals of GPS/GLONASS. Multipoint interpolation of GPS and IMU enables measurement of high accuracy and high function. It allows measurement even at a limited speed. Easy to see, easy to operate with a touch panel.</td>
</tr>
</tbody>
</table>

### Automotive Related

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MULTI INJECTION MEASURING SYSTEM (FJ-8000 series)</td>
<td>Multi-stage injection analyzer supports more accurate injection measurement of a diesel engine that uses common rail systems. By measuring a variety of events close to an actual vehicle environment, such as injection quantity, injection rate, injection timing, and period of injection.</td>
</tr>
<tr>
<td>ENGINE TESTING SYSTEM FOR CARS</td>
<td>Simulating actual road load conditions of the vehicle under test, the chassis dynamometer system measures various parameters on driving performance, exhaust gas emission, etc. indoors.</td>
</tr>
<tr>
<td>CHASSIS DYNAMOMETER FOR MOTORCYCLES</td>
<td>For a wide range of motorcycle tests on driving performance, durability and exhaust gas emission.</td>
</tr>
<tr>
<td>CHASSIS DYNAMOMETER FOR BICYCLES</td>
<td>For a wide range of bicycle tests on driving performance, durability and exhaust gas emission.</td>
</tr>
<tr>
<td>GEAR TESTING SYSTEM</td>
<td>Gear mesh noise is proved to be a major noise source in quarter vehicle interactive. It analyzes gear mesh harmonics in the range of actual operation rpm or under various torque conditions.</td>
</tr>
</tbody>
</table>
Acoustic and Vibration Data Processing

**Sound Calibrator for Microphone**

<table>
<thead>
<tr>
<th>Model name</th>
<th>SC-3120</th>
<th>SC-2120A</th>
<th>SC-5000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microphone</td>
<td>1/4-inch</td>
<td>1/2-inch</td>
<td>1/4-inch</td>
</tr>
</tbody>
</table>

**Sound Level Meter**

- **Type**: Basic type, High Performance type
- **Application**: Class II, Class 1, Class 2
- **Applicable microphones**: 1/2-inch, 1/4-inch

**Sound Intensity Analysis System**

- **System**: Combination of PS series amplifiers or accelerometers
- **Features**: Measurement of Lp, Leq, Lmin, Lmax, and Lpeak
- **Wide linearity range**: 100 dB
- **Possible to measure and record while listening via headphones**
- **Performs more than just a sound level meter**

**Time-Series Data Analysis Software**

- **Series**: CS-2000 series
- **Features**: Reads various data formats quickly, analyzes sound and vibration data easily
- **Maximum data in a screen simultaneously**
- **FFT analysis, sound quality evaluation, sound fluctuation analysis, etc.**

**Portable 2-CH/4-CH FFT Analyzer**

- **Series**: CR-9200/9400 series
- **Features**: All-in-one portable FFT analyzer
- **FFT analysis operations can be performed easily with the hardware keys and the Capacitance type touch panel**
- **Continuous cordless operation up to 5 hours**

**FFT Comparator (CF-4700)**

- **Features**: Makes accurate Pass/Fail judgment and quality inspection by analyzing the frequency signal of sound vibration on production lines. Pass/Fail judgment function allows precise inspection of various products. Measurement data and judgment results can be managed in a PC by means of copying those data in USB memory.

**Dimension and Displacement Measurement**

- **Digital Gauge (High-resolution type)**
  - **Features**: For conductors and semiconductors
  - **Resolution**: 0.1 μm
  - **Optional resolution**: down to 0.02 μm

**Non-Contact Thickness Meter**

- **Features**: Hall splined bearing and development of new optical system achieve both of high resolution and environment resistance (IP66/67)
- **Detected signal can be obtained as square wave to connect PLC directly.**

**Sound Source Visualization System by Beamforming Software**

- **System**: Consists of DS series FFT Analyzer and the MI-6420 three-dimensional sound intensity measurement system, which has four microphones configured as the four apexes of a regular tetrahedron.
- **With this configuration**, the MI-6420 is capable of three-dimensional sound intensity measurement.

**SOUND SOURCE VISUALIZATION SYSTEM BY BEAMFORMING SOFTWARE**

- **System**: Combination of PS series amplifiers or accelerometers
- **Features**: Measurement of Lp, Leq, Lmin, Lmax, and Lpeak.
- **Wide linearity range**: 110 dB

**SOUND INTENSITY ANALYSIS SYSTEM**

- **System**: Consists of DS series FFT Analyzer and the MI-6420 three-dimensional sound intensity measurement system, which has four microphones configured as the four apexes of a regular tetrahedron.
- **With this configuration**, the MI-6420 is capable of simultaneous acquisition of data for the three components of X, Y, and Z sizes of a three-dimensional intensity vector.

**ULTRAMINIATURE MICROPHONE**

- **Model**: MB-2200M10
- **Features**: Ultra compact, super lightweight microphone
- **Sound pressure**: Measured in a quiet space
- **Tedes supported sensor**

**MICROPHONE (M series)**

- **Features**: A series of microphones, including high sensitivity type and wide-band type
- **Wide bandwidth**: 100 dB
- **Simple and easy data processing via RS-232C or USB**
- **Comparator output function (option)**

**microphone 1/2-inch 1/4-inch**

**Accelerometer (NC series)**

- **Features**: Accelerometers are available in both charge output and built-in amplifier types
- **Application**: High accuracy, high performance
- **Microphones**: ULTRAMINIATURE MICROPHONE, Sound pressure level, etc.

**Vibration Comparator (VC-2200/3200)**

- **Features**: Useful for maintenance and constant monitoring of production facilities with high accuracy, high functions, and low cost in a single unit
- **Easy sensor setting by TEDS function**
- **Visual and auditory** monitoring of sound and vibration by headphones and on-screen numerical displays and bar graphs.

**LASER DOPPLER VIBROMETER (LV series)**

- **Features**: A non-contact laser vibrometer using a laser Doppler technique
- **Applications**: Measurement, vibration, etc.
- **Detected signal**: Can be obtained as square wave

**Sound & Vibration Real-Time Analysis System (DS-3000 series)**

- **Features**: PC-based FFT Analyzer with high functions and high performance
- **Wide linearity range**: 128 channels
- **Various software of sound and vibration analysis are provided such as FFT, mid-time, etc.**

**Portable Data Recorder for Acoustics & Vibration (DR-7100)**

- **Features**: Simultaneous recording of sound and vibration is possible with ease and high speed
- **User-friendly**: Easy to use with various features

**Rotary Encoder (RP series)**

- **Features**: The series has general purpose industrial type and ultra-compact type
- **Applications**: Measurement range: Max. 160 mm + 1 μm
- **Resolution**: 0.17° ± 10 μm
- **Various types of gauge sensors**
- **Please use with the DG series gauge counter**

**Digital Gauge (Sensor) (BS/GS series)**

- **Features**: Measurement range: Max. 160 mm ± 1 μm
- **Resolution**: 0.17° ± 10 μm
- **Various types of gauge sensors** (including space-saving type) are available

**Digital Gauge (Counter) (DG series)**

- **Features**: Combined with the B/S-GS series gauge sensors
- **DIN 72 standard models** which are easily mounted on a variety of panels.
1954: Ono Sokki Co., Ltd. was established in Yokohama. Manufactured the first tachometer in Japan for use with jet engines.

1955: Started manufacture of a wide variety of digital instrumentation.

1961: For the first time in Japan, Ono Sokki manufactured transistorized digital instrumentation.

1963: Developed digital torque measurement instruments which were widely acclaimed throughout Japan and the world.

1963: Completed and delivered computer on-line data management device for use in engine development.

1968: Introduction of IC technology into all products.

1973: Development of CF-type statistical analysis system using a built-in minicomputer.

1977: Development of ultra-rugged high-reliability linear gauge.

1979: Developed the first portable dual channel FFT analyzer with 64-K byte mass-storage memory, model CF-500 and put on mass-production line.

1986: Listed on the First Section of the Tokyo Stock Exchange.

1986: Ono Sokki Technology Inc. was established.

1989: New Technical Center was established in Yokohama.

1990: Acoustics Lab. was established in Technical Center.

1992: Ono Sokki Beijing Office was established.

1996: Conformance to ISO 9001 was certified.

1997: Conformance to ISO 14001 was certified.

2004: Automotive Testing Lab. was established in Technical Center.

2006: Ono Sokki (Thailand) Co., Ltd. was established.

2007: Automotive Testing Lab. Utsunomiya was established in Utsunomiya factory.

2009: New office building was established in Shin-Yokohama. Relocation of head quarter and Software Development Center to the new building in Shin-Yokohama.

2012: Ono Sokki India Private Ltd. was established. Ono Sokki Shanghai Technology Co., Ltd. was established.

2015: Automotive Testing Lab. Utsunomiya II was established in Utsunomiya Technical & Product Center.

Ono Sokki has been manufacturing digital instruments since the word "digital" was not popular at all. “Do what others do not do” is the words describing Ono Sokki spirit very well. The measurement technology has been contributing technological evolution of modern industries, and now it is also a key element to realize comfortable environment for human being. Ono Sokki is one step ahead providing tools and solutions to create better quality of both industry and human life.