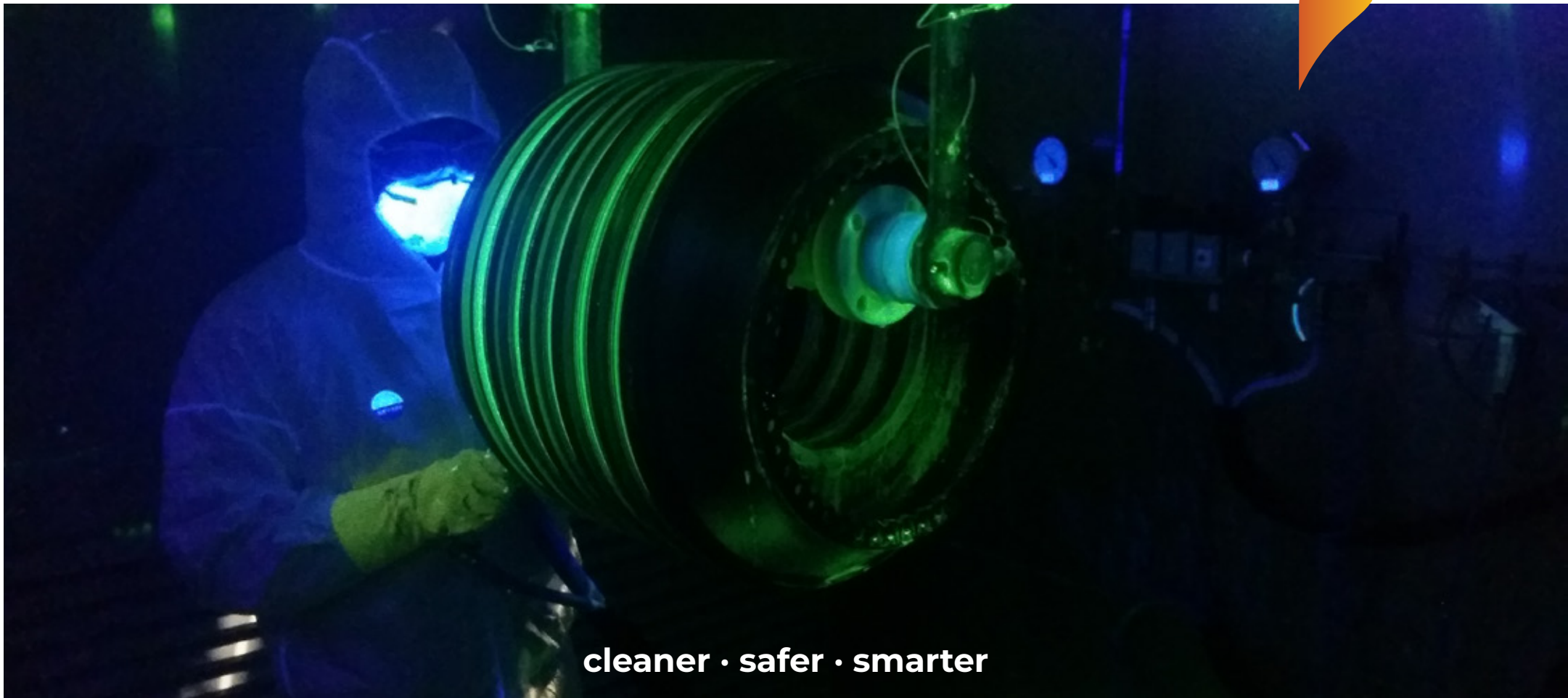


**LEADING PROCESS TECHNOLOGIES FOR
INTELLIGENT PARTS CLEANING AND FPI**



cleaner · safer · smarter

PARTS CLEANING AND NDT SYSTEMS FOR ALL MANUFACTURING AND MRO REQUIREMENTS

FINNSONIC SOLUTION OFFERS:

- » Process safety
- » Traceability
- » Intelligent technical implementation
- » Low operational costs
- » User-friendly ergonomics
- » Low consumption of process chemicals
- » Durability
- » Flexible automation
- » Small footprint



FinnSonic's automatic FPI line in Hong Kong, for inspecting jet engine parts. Line has been in use since 2010.

THE FINNSONIC SOLUTION FOR THE AVIATION INDUSTRY

FinnSonic provides a full range of equipment for cleaning parts and performing fluorescent penetrant inspections (FPI) in the aviation and aerospace industry. Applications range from the manufacturing of new parts to MRO of used parts.

FinnSonic solutions offer **process safety and traceability**, and process control ensures a repeatable operation of each batch within the set parameters. Full process automation, integrated wastewater handling and extraction systems with filtration render **cost savings in process chemicals, labor, and energy consumption**.

FinnSonic FPI systems have been approved for both manufacturing and MRO applications. Leading OEMs in aviation and MRO shops have already upgraded their facilities with FinnSonic equipment.



Benefits of automation

- » Flexible, simultaneous processing of several batches
- » Minimizes the need for labor
- » Removes the risk of human error
- » Low chemical consumption
- » Reduces noise and prevents vapours and smells
- » Data collection for quality control
- » Utilizes FinnSonic's Genius ultrasound technology

Applications

Complex parts including:

- » Jet engine parts
- » Structural parts
- » Machined airplane fuselage parts
- » Engine bearings
- » Wheel bearings and other small parts
- » Brake parts
- » Accessories

UPGRADE YOUR PRODUCTION CAPACITY

FinnSonic solutions support modern production facilities for streamlined material flow and logistics. Due to its **flexible automation**, multiple batches can be processed simultaneously. Process safety is secured through precise control of process parameters, data logging, and full traceability — all are standard features of FinnSonic automatic lines.

Automatic FPI lines can be fitted with integrated pre- and post-cleaning.

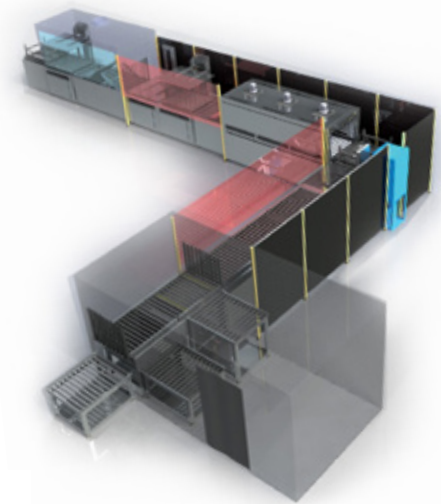
Automated line

An integrated process with pre and post wash



Roll conveyor immersion line

Automated high capacity system for mass production



Versa Genius Automatic line

An automated modular cleaning system with more cleaning capacity and safety



Automatic Cleaning Line for Aerostructures

Advanced cleaning of large components with minimal energy consumption



UPGRADE YOUR COST EFFICIENCY

Industry 4.0 compatibility with automatic service prompts and a preventive maintenance calendar will help your service team schedule equipment maintenance on time. All automatic FinnSonic lines are fitted with an encrypted connection link for **remote factory support**.

FinnSonic also provides **excellent energy efficiency**, due to heat insulation of tanks and booths, automatic stand-by lids, closed loop water recycling and intelligent air extraction. FinnSonic AquaSaver **optimizes wash water usage and heating costs**, and the air exhaust of encapsulated lines can be implemented with zero heat losses. As a respected supplier of industrial cleaning equipment, we provide **maximum cost efficiency and environmentally friendly solutions**. Ultrasonic cleaning is a proven efficient cleaning method in industrial parts cleaning.

"They are extremely reliable"

This customer comment sums up one aspect of the cost saving advantages that FinnSonic systems offer. When downstream production depends on reliable parts cleaning or inspection, there can be no compromises.

Full-sized FPI Line

Inspection of diverse parts of widebody jet engines



Automatic Bearing Cleaning Line

Critical cleaning of Engine Mainshaft Bearings



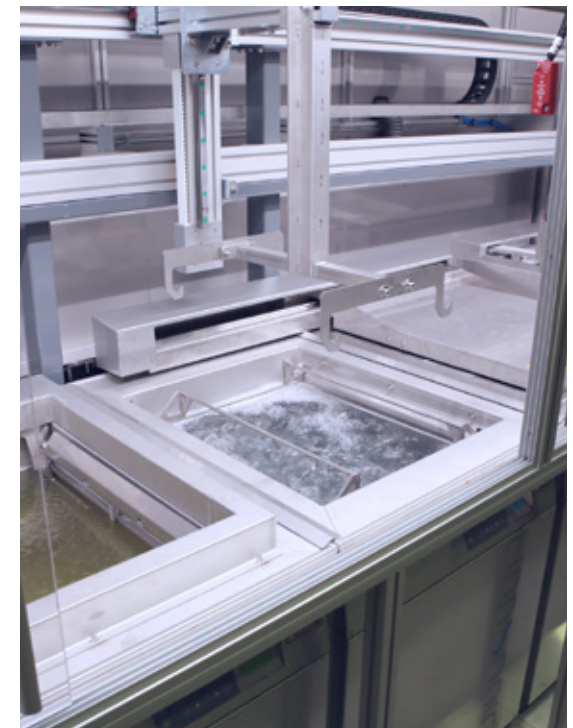
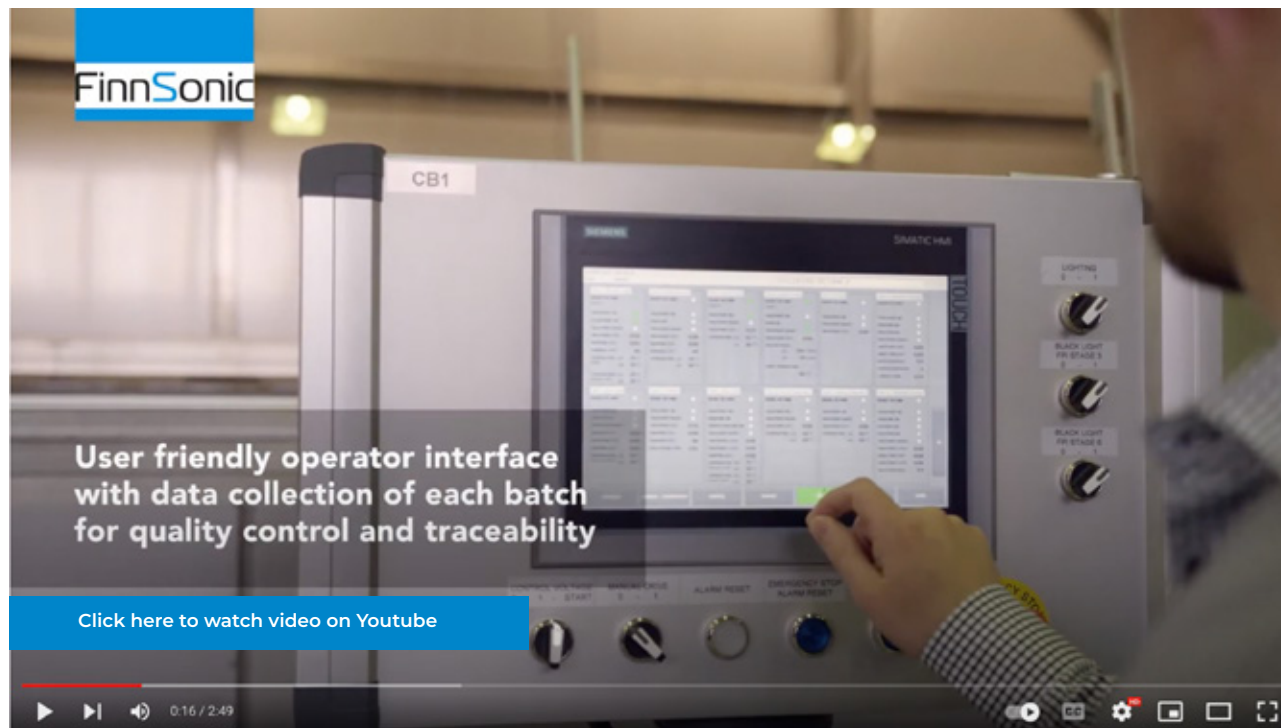
UPGRADE YOUR WORKING ENVIRONMENT

“From shop embarrassment to the pride of the company”

Old cleaning and FPI shops may not be the first thing a company wants to show its customers and auditors, as the above comment suggests. The current health, safety and environment (HSE) regulations are more stringent they were in the past.

FinnSonic can **upgrade your working environment to meet the demands**. Encapsulated cleaning and FPI lines **protect operators from gasses, vapours, heat, and chemical spill**. Also, insulated, ventilated and soundproof tanks and dryers eliminate burn and noise hazards.

Our customers have reported **fewer medical claims** since installation of FinnSonic equipment.



UPGRADE YIELD FROM YOUR INVESTMENT

One of our longstanding customers says, **“They last forever”**. Many of our customers share this same opinion.

FinnSonic equipment is proven to have an extremely long life expectancy. Some installations in the aviation industry have been commissioned for more than 30 years ago — and they are still going strong.

FinnSonic equipment uses **the highest quality mechanical and electrical components**. Combined with uncompromising design, high quality workmanship, and service made simple, any FinnSonic installation provides unparalleled value on investment.

Versa Genius – A Compact Multi-Stage System

For cleaning of wheel bearings, nuts and bolts and other small parts

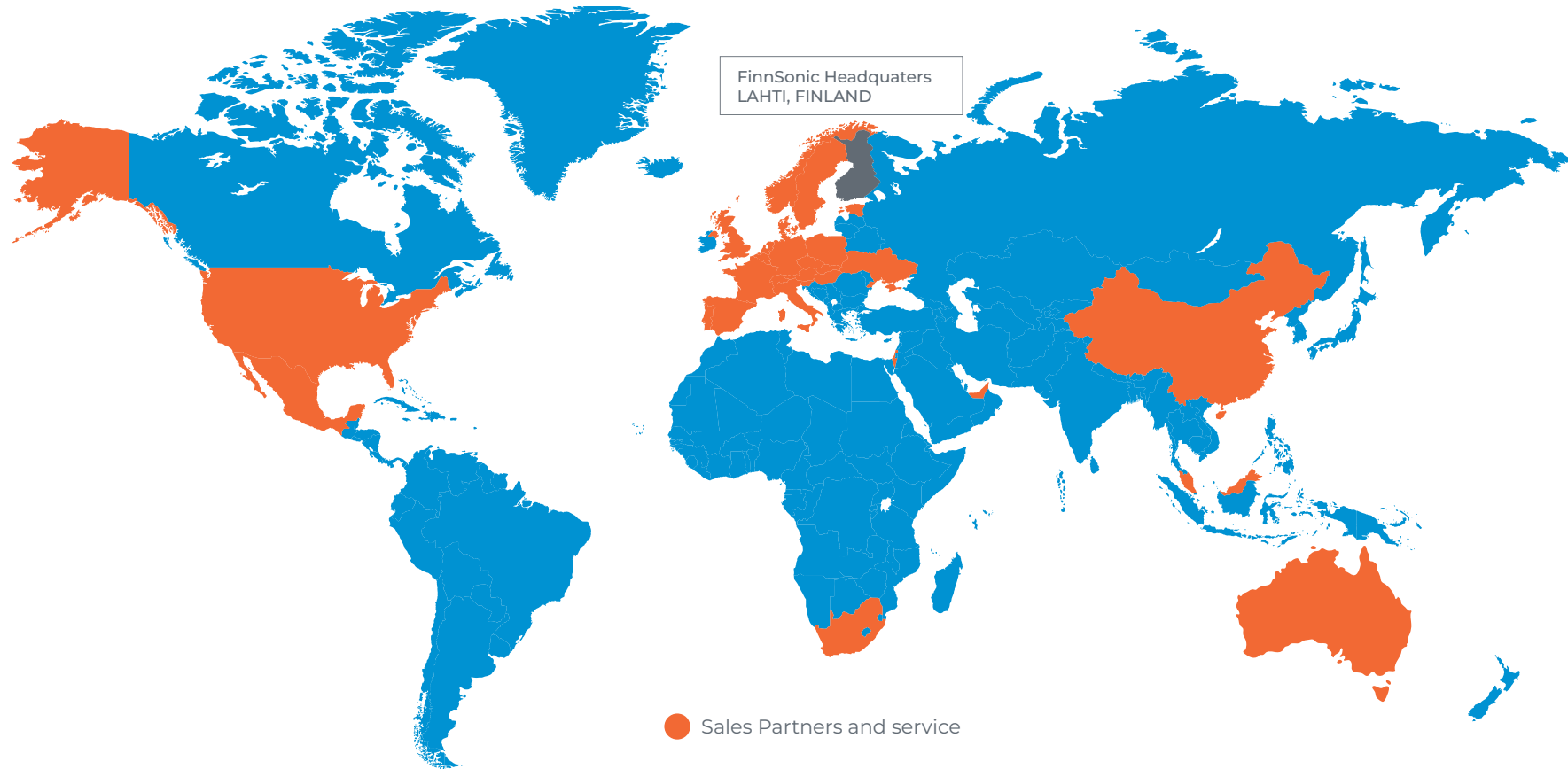


Optima – Automatic High-capacity Cleaning Line

Full-size automatic cleaning line for mass production



Global care and comprehensive know-how of industrial cleaning and FPI



World's leading aviation companies trust in FinnSonic solutions



For more information contact our aviation sales team or your nearest FinnSonic Distributor



Jari Mäkipää
Sales Manager, exports
+358 40 553 5509
jari.makipaa@finnsonic.com



Olli-Pekka Arhosuo
Sales Manager, exports
+358 50 526 4960
olli-pekka.arhosuo@finnsonic.com

Sales Team: sales@finnsonic.com

Technical Customer Service and spare parts: service@finnsonic.com

**CLEANER
SAFER
SMARTER**

