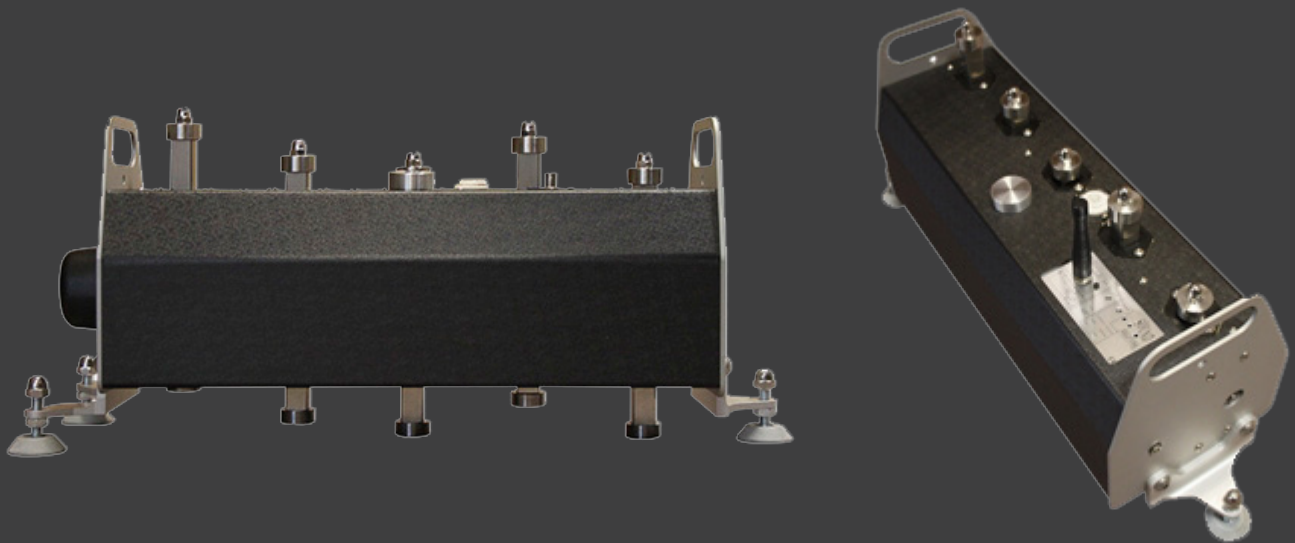


Sound | Solutions
Products Limited



Technical Data Sheet Series 2 Tapping Machine

The Tapping Machine Designed By Acousticians

**“This is a Tapping
Machine designed
by acousticians for
acousticians”**

-Peter Attwood, Lead Acoustic
Consultant/Engineer & Inventor

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SECTION 01

INTRODUCTION

Sound Solutions Products Limited is a British company offering our customers a new simple and reliable tapping machine.

A subsidiary of our long established Acoustic Consultancy Practice, Acoustic Associates Sussex Ltd, Sound | Solutions Products Limited aims at [offering products designed by acousticians for acousticians](#). After many field measurements, as the tapping machines available on the market did not meet our expectations, our engineers at Sound | Solutions Products Limited developed our own tapping machine, the main feature of which are reliability, quality and efficiency.

KEY FEATURES

THE IMPACT NOISE TAPPING MACHINE

THE IMPACT NOISE TAPPING MACHINE IS DESIGNED TO CARRY OUT IMPACT SOUND MEASUREMENTS IN ACCORDANCE WITH CURRENT BUILDING REGULATIONS AND STANDARDS.

Applications include:

- Building Acoustics
- On-Site measurement of impact noise level
- Laboratory measurement of impact noise level

The tapping machine includes the following technical features:

- Light and robust
- 2 hours of continuous operating life (integrated battery)
- Verification through an optical system of the hammers' impact rate and sequence
- Visual (LED) and sound (change of rate) information in case of non standardised impact frequency
- No lubrication required for the hammers
- Programmable continuous operating time (5 or 20 min)
- Remote operating through remote keyfob (provided)
- PTB Type Approved

GENERAL DESCRIPTION



AN INSTRUMENT OF WHICH ITS MAIN FEATURES ARE RELIABILITY, QUALITY AND EFFICIENCY

The tapping machine consists of an aluminium frame standing on 3 rubber feet, the height of which can be adjusted. It includes a camshaft that drives 5 hammers with a mass of 500g each, set 10 cm apart one from another. The machine allows for the hammers falling from a 40-mm effective height with a time interval of 100 ms between the drop of each hammer.

The machine includes a lead-acid gel battery that allows for an optimum and standardised continuous operation time of 2 hours.

A pushbutton is used to manage the operation of the machine. Depending on the length of time the button is pressed, the following actions can be achieved:

- Power-up of the machine: Short push (< 850 ms)
- Operating for 5 min: Short push
- Operating for 20 min: Long push (850-2,500 ms)
- Turn-off of the machine: Long push (> 2,500 ms)

The machine is supplied with a radio frequency remote control that allows for remote start and stop. The remote control is effective through the walls and floors normally built in residential and office buildings (the emitter's range in direct field is greater than 100 m).

LISTEN TO YOUR MACHINE

THE TAPPING MACHINE SPEAKS TO YOU

The tapping machine includes an electronic speed controller that integrates an optical unit for information feedback. This system allows for the validation of the proper impact rate for the hammers.

If the battery is too low to ensure the proper rate, the tapping machine delivers visual information through a red LED. Furthermore, the machine changes the impact rate so that it becomes irregular. This feature is particularly useful when the user is in the receiving room. He/she will then be able to remotely diagnose a dysfunction of the machine.

DELIVERABLES AND OPTIONS

THE TAPPING MACHINE IS DELIVERED WITH THE FOLLOWING ACCESSORIES

The tapping machine is delivered with the following accessories:

- Battery (integrated into the machine)
- Power supply
- Wireless remote control (battery provided and receiver integrated into the machine)
- Antenna for signal reception
- Hammer drop height adjustment gauge
- Wrench for feet adjustment
- Calibration certificate

TECHNICAL SPECIFICATIONS

Reference standards

ISO140 parts VI, VII and VIII
ISO 717
DIN 52210
BS 5821
ASTM E-492
ASTM E-1007

EC compliance

EN50081-1 and EN50082-1

Features of the hammers

Number: 5
Material: Stainless steel
Weight: 500 g +/- 6 g
Diameter: 30 mm +/- 0.2 mm
Separating distance: 100 mm
Rated drop height: 40 mm
Rate: 10 impacts per second
Sequence: 1, 3, 5, 2, 4

Calibration

Each machine is delivered with its conformance certificate

Overall dimensions

L x H x D: 650 x 215 x 275 mm (25.6 x 8.6 x 10.8")

Weight

10.2 kg / 22.5 lb (including battery)

Stabilising feet

Number: 3
Adjustable height with provided wrench
Drop height gauge provided

Power supply

External charger
Input: 100-240V CA, 50/60Hz, 1.0A
Output: 18V 2.22A
Consumption: 40W max.

Battery

Type: lead acid gel with no maintenance
Operating life: > 2 continuous hours (guaranteed impact rate)
Charging time: about 8 hours

Multifunction pushbutton

Short push: ON / Operating (5 min) / Pause
Long push: Operating (20 min)
Longer push: OFF

Remote control

Number of keys: 1
Frequency: 433 MHz, EMC compliant with European standard
Operating range: 100 m in free field
L x H x D: 6.7 x 1.7 x 3.6 mm (0.26 x 0.07 x 0.14")
Weight: 26 g / 0.06 lb

Temperature

Operation: from -10 to +50° C / 90% RH
Storage: from -20 to +70° C / 90% RH

Maintenance

No lubrication required
Conformance checking is advised every 2 years

Warranty

2 years for parts and labour

Available options

FL01 carrying case
- Weight: < 5 kg
- Dimensions: 705 x 270 x 350 mm (29.5 x 10.6 x 13.8")

