

5 MISTAKES THAT SHORTEN YOUR SANDER'S LIFESPAN

And how to avoid them to boost productivity

60 dB

SILENT

0,35 m/s²

VIBRATIONS

IP65

WATERPROOF

×10

LIFESPAN

INTRODUCTION

On construction sites, wall, ceiling, and floor sanders are essential production tools. Yet many professionals make usage errors that drastically reduce the lifespan of their equipment, increase costs, and slow down jobsites.

This guide identifies the 5 most common errors observed on jobsites and gives you concrete solutions to fix them. Result: equipment that lasts longer, less fatigued operators, and improved profitability.

INSIGHT On jobsites, conditions are demanding: noise, dust, vibrations, awkward postures. Good tools make the difference between a productive day and an exhausting one. This guide shows you how to equip your teams to work better, longer, and safer.



Ceiling sanding with Sept Tools system – up to 8 hours of continuous work without fatigue

01

NEGLECTING DUST EXTRACTION

It's the most common and costliest mistake. Insufficient dust extraction causes motor overheating, premature bearing clogging, and accelerated abrasive wear. The motor strains to compensate for air loss, and windings suffer. On carbon brush motors, brush lifespan drops 30-50%. Abrasives load with dust and lose cutting power.

Sizing: a key factor

Dust extraction must be sized to match the machine. A ceiling/wall sander requires a different airflow than a floor sander. An undersized vacuum = overheating + clogged abrasives.

Our Longopac vacuum extractor range

Model	Type	Cap.	Recommended use
IU33 Longopac	Cyclonic	33 L	Ceiling / wall sanders
IU40 Longopac	Cyclonic	40 L	Intensive ceiling / wall
IU51 Longopac	Cyclonic	51 L	Compact floor sanders
IU81 Longopac	Cyclonic	81 L	Large format floor sanders
IU200 Longopac	Cyclonic	200 L	Industrial sites
Turbo 7	Turbine	Big Bag	High volume / multi-site
RU80	Water	80 L	Wet sanding / tile



IU33 Longopac / Turbo 7 / RU80

All our vacuums use carbon brush motors (proven technology for extraction) and feature the Longopac system: continuous bag for uninterrupted emptying. Just pull, tie, and cut.



TIP Check the prefilter and microfilter every 2 hours. Test: hold your hand over the nozzle. No strong suction = clean immediately.

02 USING THE WRONG ABRASIVE

Each surface requires the right consumable. Wrong abrasive = no cutting: the operator applies excessive pressure that transmits to bearings, motor, and anti-fatigue systems. Vibrations exceed the regulatory threshold of 2.5 m/s^2 (Directive 2002/44/EC), and unplanned downtime multiplies.

The sanding chain

1 / PCD pads – Removal



Designed to tear away material: coatings, plaster, glue, resin, epoxy paint. Higher PCD = softer material (and vice versa). Choice depends on coating hardness.

2 / Diamond segment pads – Concrete sanding



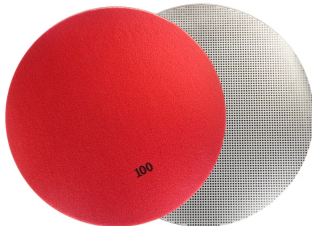
Different grains and binders depending on material. Softer binder = harder surface (and vice versa). Soft binder releases diamond to attack hard concrete. Hard binder holds diamond on soft surfaces.

3 / Ceramic pads – Transition



Cover the transition between removal and polishing. Raw surface > finish-ready surface. The step many skip – wrongly.

4 / Electrolytic velcro pads – Finishing



Used to either remove concrete laitance or polish concrete or other surfaces. Smooth and consistent finish.

❑ IMPORTANT Material type stays the same, but behavior varies by applied pressure, geography, and product quality. Always test first.

❑ TIP Check our configurator at sept-tools.com to find the right abrasive for your machine and surface.

03 IGNORING VIBRATIONS

Vibrations are a warning signal. Abnormal vibration indicates a mechanical problem (misaligned pad, worn bearing, loose fixture) or off-center abrasive. Bearings lose half their lifespan above 1 m/s^2 . For the operator: MSD (MSK) and carpal tunnel from 2.5 m/s^2 daily exposure.



Our ceiling/wall sanding systems and floor sander are designed for 0.35 m/s^2 , which is 7 times lower than the alert threshold. This lets your operators work 8 hours without fatigue and your equipment last 10 times longer.

Sept Tools wall sanding system with load balancer

0.35 m/s^2

SEPT TOOLS VIBRATIONS

x7

BELOW ALERT THRESHOLD

8h

CONTINUOUS WORK

x10

LIFESPAN

"Since we switched to Sept Tools sanders, our operators no longer complain about arm pain at the end of the day."

INSIGHT One MSD (MSK) sick leave costs the employer an average of €4,200. On a 6-month jobsite with 3 operators, cumulative MSD costs can exceed the price of a full Sept Tools system. Prevention is the best investment.

04

DEFERRING PREVENTIVE MAINTENANCE

Professional tools require regular maintenance. Deferring preventive bearing replacement costs much more long-term. Note: on carbon brush tools, we don't talk maintenance but consumables: brushes break, motors aren't economically repairable.

The calculation that makes you think

Part	Cost	Replacement frequency
Bearing set	€180	Every year (intensive) / 2 years (partial)
Complete motor	€890	6-8 years normal use

The brushless motor lasts 6-8 years (20,000 hours). A worn bearing not replaced damages the motor shaft, gears, or electronics. The bill jumps from €180 to €890 or more.

Recommended maintenance schedule

Frequency	Action	Why
Every day	Clean pad + check abrasive	Prevent imbalance / uneven wear
Every 2h	Check prefilter + microfilter	Optimal airflow
Every week	Inspect cables and connections	Prevent short circuits
Every 3 months	Check bearings (play, noise)	Anticipate replacement
Every year *	Replace bearings (preventive)	Protect motor

* Every 2 years if partial use

TIP With brushless, you eliminate "brush replacement" maintenance (saving 2-4 service calls/year) and remove electronic failure risk.

INSIGHT We repair what others discard. Our Roanne workshop guarantees spare parts for 10 years. Your tool breaks, it's our priority.

05 CHOOSING PRICE OVER TOTAL COST

Buying the cheapest sander seems logical. But true cost is measured over the entire lifetime: purchase price + motor consumables + production downtime + operator health impact.

A carbon brush motor lasts 300-500 hours. Brushes = pure consumable. When the motor fails, the tool is unrepairable. Replacement every 3-6 months. A Sept Tools brushless motor: 20,000 hours, or 6-8 years.

Calculate by cost per hour

	Carbon brush tool	Sept Tools brushless
Purchase price	€800	€9,000
Motor lifespan	300-500 h	20,000 h
Consumables / year	Replacement: €800	Bearings: €180
5-year cost *	€8,000 (10 tools)	€9,900 (1 tool + bearings)
Cost / hour	€5.33/h	€0.99/h

* Base: 1,500 h/year, 5 years

€5.33/h

CARBON BRUSH TOOL

vs

€0.99/h

SEPT TOOLS BRUSHLESS

INSIGHT The true cost of brushless = the cost of NOT having it. 1 lost jobsite day = €800-1,500. 1 MSD = €4,200. A Sept Tools system pays for itself in 3-5 jobsites.



Systems: ceiling (Gazelle) / ceiling (Eland) / floor (Tapir)

5 HABITS FOR ×10 LIFESPAN

- 01 Size and maintain your dust extraction**
Prefilter and microfilter every 2 hours. Longopac vacuum sized for your machine.
- 02 Choose the right consumable for each surface**
PCD > segments > ceramic > velcro. Our online configurator guides you.
- 03 Monitor vibrations**
Vibration change = mechanical problem to fix before it costs serious money.
- 04 Follow the maintenance schedule**
€180 preventive bearings beat €890 motor replacement.
- 05 Calculate by cost per hour**
€0.99/h brushless vs €5.33/h carbon. The math is clear.



Floor sanding with Fouine – productivity 19-26 m²/h

REQUEST A FREE DEMONSTRATION
of our brushless sanders at your jobsite

sept-tools.com/contact | adv@sept-tools.com