

Operation Manual

Sheet Nibbler

63027



Illustration similar, may vary depending on model

Read and follow the operating instructions and safety information before using for the first time.

Technical changes reserved!

Due to further developments, illustrations, functioning steps, and technical data can differ insignificantly.

Updating the documentation

If you have suggestions for improvement or have found any irregularities, please contact us.



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If you should find a mistake or wish to make a suggestion for improvement, we look forward to hearing from you.

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Introduction

Thank you for purchasing this quality product. **To minimise the risk of injury we urge that our clients take some basic safety precautions when using this device. Please read the operation instructions carefully and make sure you have understood its content.**

Keep these operation instructions safe.

Warning symbols and their meaning

	Sign indicating a safety hazard. It is intended to draw your attention to a possible risk of injury. Therefore, follow all safety instructions that follow this sign. This will help you avoid possible injury or even death.
	Sign indicating a dangerous situation which, if not avoided, will result in serious injury or death.
	Sign indicating a dangerous situation which, if not avoided, might result in serious injury or death.
	Sign indicating a dangerous situation which, if not avoided, could result in minor or moderate injury.
Note! Attention!	Sign not associated with a risk of injury.

Important safety instructions

The following safety warnings draw your attention to the risk of fire, electric shock, or personal injury. Basic precautions should always be taken when using tools, including but not limited to the following. To avoid the risk of fire, electric shock, or injury, carefully read this manual before using the tool.

Work area safety

- Keep your work area clean and provide adequate lighting. Untidy workbenches and insufficiently lit work areas increase the risk of electric shock, fire, and injury.
- Do not use the tool in environments with a risk of explosion, for example near flammable liquids, gases, or dust. When using the tool, sparks can be created, which can ignite these substances.
- Keep spectators, children, and visitors away from the work area when operating the tool. Distractions may cause you to lose control of the tool.

Personal safety

- Remain attentive. Focus your full attention on what you are doing and use common sense. Do not use the tool when being tired or under the influence of alcohol, drugs, or medication. A moment of carelessness while using the tool increases the risk of injury.
- Dress appropriately. Do not wear loose clothing, jewellery, or other accessories. Tie up or cover long hair. Keep long hair, clothing, accessories, and gloves away from moving parts. Otherwise, they might get caught by them, which increases the risk of injury.
- Avoid unintentional start-ups of the tool. Make sure that the switch is in the “off” position before connecting the air supply. Do not put your finger on the trigger of the tool while carrying it and do not connect it to the air supply with the switch in the “on” position.
- Remove all keys before using the tool. A key still attached to a rotating part increases the risk of injury.
- Do not lean too far. Make sure to have a secure stand and always keep your balance. A secure stand and balance allow for better control of the tool if an unexpected situation arises.
- Always wear appropriate safety equipment consisting of, but not limited to a dust mask, non-skid safety shoes, thick work gloves and a helmet, when working with the tool.
- Protect your eyes. Wear approved safety glasses when working.



- Always wear ear protection when using the tool. Long-term exposure to noise can damage your hearing.



Safety when using and maintaining the tool

- Secure and support the workpiece with the help of clamps or similar devices mounted to a solid surface. If the workpiece is held in your hand or against your body, you may lose control of it.
- Do not exceed the maximum material thickness of 1.29 mm (1/16") when working on sheet metal.
- Do not use the tool with excessive force. Always use the tool suited for the job at hand. A suitable tool used at a speed it is intended for will make work safer and more efficient.
- Do not use the tool if it cannot be turned on and off using the switch. A tool that cannot be operated with the switch is dangerous and must be repaired before any further use.
- Disconnect the tool from the air supply before making adjustments, replacing accessories, or storing it. This safety precaution reduces the risk of the tool unintentionally starting up. Turn off and disconnect the air supply, carefully releasing any remaining compressed air and releasing the trigger and/or flipping the switch to the off position before leaving the work area.
- Store the tool when it is not in use and keep it inaccessible to children and other inexperienced individuals. A tool used by inexperienced individuals is dangerous.
- Carefully maintain the tool. Keep cutting tools sharp and clean. A properly maintained tool with sharp cutting surfaces is less prone to get stuck and therefore easier to control.
- Check for any moving parts that are misaligned, jammed, damaged, worn or in any other condition that might affect the proper use of the tool. A damaged tool must be serviced before further use. Many accidents are caused by poorly maintained tools. A damaged tool can break.
- Only use accessories approved by the manufacturer for the respective tool model. Non-approved accessories increase the risk of accidents when being used.

Safety during maintenance

- Maintenance work may only be carried out by qualified personnel.
- When servicing a tool, only approved spare parts of at least equal quality may be used.
- Only use lubricants supplied or specified by the manufacturer.

Air supply safety

- Never connect the tool to an air supply that can generate air pressure exceeding 13.79 bar (200 psi). Excessive pressure on the tool can cause it to break and cause abnormal behaviour and serious injury. Only use clean, dry, and regulated compressed air, the pressure of which corresponds to the information on the device. Always verify that the compressed air source is set to the correct air pressure or pressure range before using the tool.
- Never use oxygen, carbon dioxide, flammable gas, or bottled gas as a source of compressed air for this tool. Such gases can cause explosions and serious personal injury.

 **Keep these instructions.**

Symbols, units, and special safety instructions

Symbol	Meaning
psi	Pressure in pounds per square inch
bar	Pressure in bar
strokes/m	Strokes per minute (spm)



	Flow in cubic feet per minute (cfm)
	Flow in litres per minute (lpm)
	Warning regarding risk of eye injuries – wear approved safety glasses!
	Warning regarding the risk of hearing loss – wear hearing protection!
	Warning regarding respiratory dangers – wear an approved respiratory/dust mask!
	Warning notice regarding risk of explosion

Special safety instructions

- The warnings and safety precautions mentioned in this manual cannot cover all circumstances and scenarios that may occur. The user must be aware that common sense and caution are essential when using the tool.
- **Warning:** Certain dusts generated during grinding, sawing, sharpening, drilling work or similar procedures contain chemical components known to be carcinogenic, to cause birth defects or other reproductive harm. These are e. g.
 - lead from lead-containing paint,
 - crystalline silica from bricks, cement, or other masonry materials,
 - arsenic and chromium from chemically treated timber.

The risk depends on the frequency and duration of the exposure to these substances. To reduce the associated hazards, always work in well-ventilated areas and wear approved safety equipment, such as a respirator specifically designed to filter out microscopic components.
- **Warning:** The brass parts of this device contain lead which can cause birth defects and other reproductive harm.
- Always follow the instructions contained in the operating instructions for the compressed air device that is used with the tool.
- Mount an in-line shut-off valve with which you can regulate the air supply immediately in an emergency, even in case of the compressed air hose tearing.
- Always hold the tool with both hands during operation. Holding the tool with only one hand may cause loss of control.
- Do not put the tool down until it has come to a complete standstill. Rotating parts might otherwise might contact with the surface and pull the tool out of your area of control.

Protection against vibrations

The tool vibrates during operation. Frequent or prolonged exposure to these vibrations can cause temporary or permanent physical damage, especially to your hands, arms, and shoulders. To reduce the damage caused by vibrations, please note the following:

- Before a regular or long-term exposure to vibration, every person affected should first be examined by a doctor and then be examined regularly afterwards. This way, health problems caused by using the tool might be prevented or already existing conditions might not be worsened. Pregnant women or people with impaired blood flow in their hand as a result of injury, people with a damaged nervous system, people with diabetes or Raynaud's syndrome should not use this tool. If you experience symptoms caused by vibrations (tingling, numbness, white or blue fingers), consult a doctor as soon as possible.
- Do not smoke while using the tool. Nicotine reduces the blood supply to the hands and fingers and increases the risk of injury from vibration.
- Wear suitable anti-vibration gloves.
- Use the tool at the lowest possible speed if you have a choice.
- Schedule times during the day when you will not be exposed to vibrations.

- Hold the tool in your hand as loosely as possible, but ensure to always have control over it. Let the tool do the work.
- To reduce the vibration, service the device as described in this operation manual. Stop using the tool immediately, if abnormal vibrations should occur.

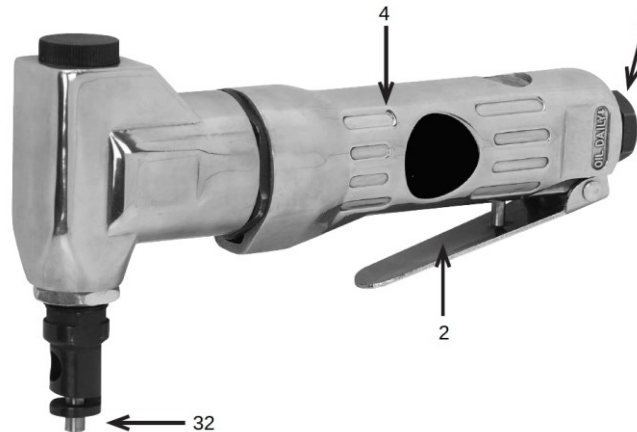
Functional description

Technical specifications

Max. air pressure (bar)	6.21 (90 psi)
Outer diameter of air inlet (mm)	13.62 (1/4")
Max. strokes (strokes/m)*	3.180
Air consumption (l/min)	169.9 (6 ft ³ /m) at 6.21 bar
Max. sheet thickness (mm)	1.29
Recommended hose inner diameter (mm)	15 (3/8")

* Max. number of strokes at maximum air pressure; higher air pressure is dangerous and can cause the tool to exceed the maximum allowable stroke rate.

Main components and control switches



Nº	Name	Nº	Name
1	Air inlet	4	Housing
2	Trigger	32	Die

Initial set-up and assembly

First read the important safety information section completely and do not forget the text under the subheadings. Only then can you use this tool.

Notes:

- For additional information on the parts mentioned on the following pages, please refer to the exploded view at the end of these operation manual.
- In certain cases, the air inlet has a protective cover that protects it during transport. Remove it before setting up the tool.



Compressed air supply

Warning!



To prevent serious injury from explosion, only use clean, dry, regulated compressed air to operate this tool. Under no circumstances should you use oxygen, carbon dioxide, flammable gases, or other bottled gas as a power source for this tool.

1. For the smoothest possible operation of the tool, install a filter, a pressure regulator with manometer, an oiler, an in-line shut-off valve as well as a quick-release coupling. **An in-line shut-off valve is an important safety device, as it regulates the air supply even if the air hose is torn. The shut-off valve should be a ball valve because it can be closed quickly.**

Note: If an automatic oiler system is not being used, add a few drops of pneumatic tool oil to the air-line connector before operation. Add a few more drops after every hour of continuous use.

2. Connect an air hose to the air outlet of the compressor. Connect the air hose to the air inlet of the tool. Other accessories, such as a coupler plug and a quick coupler, make operation more efficient, but are not essential.



WARNING! TO PREVENT SEVERE INJURY DUE TO UNINTENDED START-UP: Do not install a quick connector with female thread. Such a coupling has an air valve through which the compressed air tool can retain pressure, which means that it may accidentally start operating even after the air supply has been switched off.

Note: The airflow and the tool performance dependent thereon can be affected by accessories that are too small. The compressed air hose must be long enough to reach the work area and to have length left to allow you to move freely while working.

3. Close or set the trigger of the tool to off. A description of the control elements can be found in the section "Operation."
4. Close the in-line shut-off valve between the compressor and the tool.
5. Turn on the air compressor according to the manufacturer's instructions and wait for it to build up pressure and turns off.
6. Adjust the air compressor capacity regulator so that the air capacity is sufficient for the tool and enables it to operate properly. However, the performance must not exceed the maximum air pressure of the tool at any time. Gradually adjust the pressure while keeping an eye on the outlet pressure gauge to set the correct pressure range.
7. Check the air connections for leaks. In case of leaks, repair all of them.
8. If the tool is not in use, turn off the air supply and disconnect it from the tool. Carefully release the remaining air pressure and release the trigger and/or turn the switch to the "off" position to avoid accidental activation.

Note: After the tool has been disconnected from the air supply, there should be no residual air pressure. For safety reasons, however, check this by carefully pulling the trigger again after disconnecting the air supply to ensure that there is no longer any residual air remaining in the device.

Operation



First read the section with the important safety information completely and do not forget the text under the subheadings. Only then can you use this tool. Examine the tool before use; check for damaged, worn, loose, and missing parts. If you discover any problems, have the tool repaired before further use.



Setting up the workpiece and work zone



Warning!

To prevent serious injuries, do not under any circumstances use any unauthorised settings not explained in this operation manual. Incorrect adjustments may cause the tool to malfunction and become very dangerous.

1. Only work in a clean and well-lit area. The work area must not be accessible to children or pets. This will prevent distractions and the accidents caused by them.
2. Safely route the air hose to the work area. It must not become a trip hazard, and the hose must not be damaged on its way. The air hose needs to be long enough to reach the work area and to have sufficient length left to enable you to move freely while working.
3. Secure the workpiece with a vice or clamps (not included) so that it safely remains in place while being worked on.
4. There must be no dangerous objects (public lines or foreign bodies) in the vicinity of the tool, so that no hazards arise during the work.

General operating instructions

1. If an automatic oiler is not used, add a few drops of pneumatic tool oil to the air line connector before use. Add a few more drops after every hour of continuous use.
2. Make sure that the sheet that you want to work on does not exceed the maximum thickness the sheet nibbler is intended for:
 - 1.29 mm ($\frac{1}{16}$ ") for sheet steel,
 - 1.98 mm ($\frac{5}{64}$ ") for aluminium sheet.
3. Mark the line or the shape to be cut out on the sheet metal.
4. Grasp the sheet metal nibbler firmly and press the trigger **(2)** to begin cutting.
5. Apply light pressure as you move the sheet metal nibbler through the sheet metal. If the nibbler gets stuck while you cut, release the trigger to turn the tool off. Then pull the tool out about an inch and start cutting again.
6. Should more force be required for the work, make sure that the tool receives sufficient, unobstructed air flow ($\frac{1}{2}$ min), and increase the pressure (bar) of the regulator to the maximum air pressure level of this tool.

ATTENTION! TO AVOID INJURY FROM MALFUNCTIONING TOOL OR ITS ACCESSORIES:
Do not exceed the maximum air pressure of the tool. If the tool still does not have enough force at maximum pressure and sufficient airflow, a larger tool may be required.

7. To prevent accidents, turn off the tool, disconnect it from the air supply, carefully release the air pressure remaining in the tool and release the trigger and/or turn the switch to the off position after use. Clean the outside of the tool with a clean, dry cloth and apply a thin layer of tool oil. Then keep the tool indoors out of children's reach.

User-maintenance



Maintenance work that is not expressly explained in this manual should only be carried out by a qualified technician.



Warning!

TO AVOID SERIOUS INJURY FROM UNINTENDED OPERATION: Switch the tool off, disconnect it from the air supply, carefully release the compressed air remaining in the tool and release the trigger and/or turn the switch to the "off" position before carrying out any kind of inspection, maintenance, or cleaning work.

TO AVOID SERIOUS INJURY CAUSED BY MALFUNCTIONS OF THE TOOL: Do not use damaged devices. If unusual noises or vibrations occur or if air escapes in the wrong places, have the error rectified before further use.



TO AVOID SERIOUS INJURY FROM EXPLOSION: Only lubricate the tool with the specified lubricants. Only lubricate the air inlet with pneumatic tool oil. Only lubricate the internal mechanism with white lithium grease. Other lubricants can damage the mechanism and be highly flammable, which can cause an explosion.

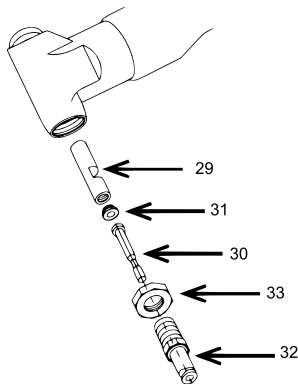
Cleaning, maintaining, lubricating the tool

Note: The measures described here apply in addition to the regular checks and maintenance procedures explained as part of normal operation of this compressed air tool.

1. **Daily – air supply maintenance:**

Maintain the air supply every day according to the manufacturer’s instructions. Check the oil level in the lubricator and top up with lubricant if necessary. Empty the moisture filter regularly. Routine maintenance of the air supply will make the tool safer to operate and reduce wear and tear.

2. Regularly check the condition of the cutting knife **(30)**. If it is dull or damaged, it must be replaced. Exchange as follows:



No	Name
29	Connecting rod
30	Cutter
31	Screw
32	Die
33	Nut

- a) Unscrew and remove the die **(32)**, nut **(33)** and screw **(31)**.
 - b) Pull the cutter out of the connecting rod **(29)**.
 - c) Insert the new cutter and make sure that the tip of the cutting edge fits exactly into the connecting rod.
 - d) Reverse the above steps to reassemble the sheet metal nibbler.
3. **Trimestrial (every 3 months) – disassembling, cleaning, and checking of tool:**
Have a qualified technician clean, inspect, and lubricate the inner mechanism. If the vanes need to be replaced, replace them all.



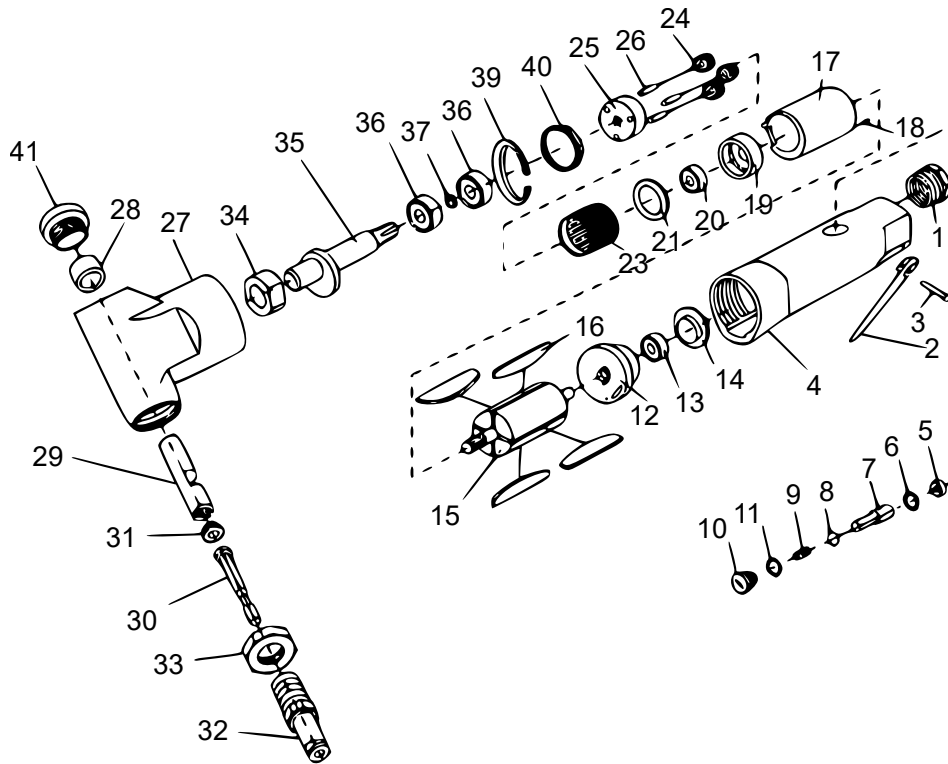
Troubleshooting

Problem	Possible cause	Solutions
Power decline	No sufficient air pressure and/or air flow	Check for loose connections, make sure that the air supply leads sufficient air flow ($\frac{1}{2}$ _{min}) at required pressure (bar) to the air inlet of the tool. Do not exceed maximum pressure!
	Obstructed trigger	Clean around trigger to ensure free movement.
	Incorrect or insufficient lubrication	Lubricate with air tool oil and grease according to instructions.
	Clogged air inlet screen (if present)	Clean screen to remove build-up.
	Air leaking from loose housing	Check if housing is correctly mounted and air tight.
	Mechanism contaminated	Have a qualified technician clean and lubricate the mechanism; install in-line air filter (see above).
	Vanes worn or damaged	Replace all vanes.
Housing becomes hot during use.	Incorrect or insufficient lubrication	Lubricate with air tool oil and grease according to instructions.
	Parts worn	Have a qualified technician check mechanism and replace parts if necessary.
Severe air leakage (slight air leakage being normal, especially with old tool)	Cross-threaded housing components	Check housing for badly aligned parts and uneven gaps. If parts are cross-threaded, disassemble housing, replace damaged parts before further use.
	Loose housing	Tighten housing parts; if non possible, bad inner parts alignment possible.
	Valve or housing damaged	Replace damaged parts.
	Valve contaminated, worn, or damaged	Clean or replace valve assembly.



Follow all safety precautions when checking or servicing the tool. Unplug it from the air supply before servicing.

Exploded view and parts list



Nº	Name	Nº	Name
1	Air inlet bushing	21	Washer
2	Trigger lever	23	Gear case
3	Handle pin	24	Idler gear
4	Handle sleeve	25	Rear spindle
5	O-ring holder	26	Idler gear pin
6	O-ring	27	Nibbler head
7	Valve stem	28	Connecting rod bushing
8	Valve ball	29	Connecting rod
9	Spring	30	Cutter
10	Plug	31	Screw
11	O-ring	32	Die
12	Rear end plate	33	Nut
13	Bearing	34	Drive bushing
14	End plate cap	35	Shaft
15	Rotor	36	Bearing
16	Vane	37	Washer
17	Cylinder	39	Snap ring
18	Pin	40	Nut
19	Front end plate	41	Plug
20	Bearing		

Disposal regulations

EU guidelines regarding the disposal of scrap electric appliances (WEEE, 2012/19/EU) were implemented in the law related to electrical and electronic equipment and appliances.

All WiTec electric devices that fall under the WEEE regulations are labelled with the crossed-out wheeled waste bin logo. This logo indicates that this electric equipment must not be disposed with the domestic waste.

The company WiTec Technik GmbH has been registered in the German registry EAR under the WEEE-registration number DE45283704.

Disposal of used electrical and electronic appliances (intended for use in the countries of the European Union and other European countries with a separate collection system for these appliances).

The logo on the article or on its packaging points out that this article must not be treated as normal household waste but must be disposed to a recycling collection point for electronic and electrical waste equipment. By contributing to the correct disposal of this article you protect the environment and the health of your fellow men. Environment and health are threatened by inappropriate disposal.



Material recycling helps reduce the consumption of raw materials.

Additional information on recycling this article can be provided by your local community, municipal waste disposal facilities, or the store where you purchased the article.

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