

# PNEUMATIC DIE GRINDER

## SAFETY & MAINTENANCE INSTRUCTIONS



FEB 2025



ACE PNEUMATICS PVT. LTD.

[WWW.ACEPNEUMATICS.COM](http://WWW.ACEPNEUMATICS.COM)

# INDEX

INTRODUCTION	3
PRODUCT DESCRIPTION	3
ABOUT THE SAFETY AND MAINTENANCE INSTRUCTIONS	4
PNEUMATIC DIE GRINDER DESIGN & FUNCTIONS	4
GENERAL PRODUCT SAFETY INFORMATION	4
SAFETY INSTRUCTION	5
PRODUCT SAFETY INSTRUCTION-WHEN PLACING THE TOOL IN SERVICES.	5
PRODUCT SAFETY INSTRUCTION-WHEN USING THE TOOLS.	5
INSTALLATION	7
COMPRESSED AIR HOSE SAFETY	8
DAILY MACHINE INSPECTION	8
TOOLS MAINTENANCE INSTRUCTIONS.	8
PERIODIC MAINTENANCE	8
STORAGE	9
DISPOSAL	9



# INTRODUCTION:



## **Thank You for Choosing Ace Pneumatic Die Grinder.**

Since our inception, we have been dedicated to delivering innovative, high-performance solutions for construction, mining, and demolition. Our ergonomic designs of ACE Scabbler enhance productivity and simplify daily operations. With a strong global network of distributors and experts, we provide exceptional service and support to ensure you achieve maximum efficiency. Wherever you are, Ace Pneumatics is committed to helping your business succeed. For more information, please visit [www.acepneumatics.com](http://www.acepneumatics.com).

## PRODUCT DESCRIPTION:

A pneumatic die grinder is a versatile and powerful rotary tool driven by compressed air. It is primarily used for grinding, polishing, deburring, and shaping materials, making it an essential tool in metalworking, woodworking, and automotive industries.

# ABOUT THE SAFETY AND OPERATING INSTRUCTIONS

These instructions are designed to equip you with the knowledge needed to operate the pneumatic die grinder efficiently and safely. They also include guidance on performing regular maintenance to ensure optimal performance and longevity. It is essential to read and fully understand these instructions before using the pneumatic die grinder for the first time.

## DIE GRINDER DESIGN AND FUNCTION

The pneumatic die grinder DG 3050 & DG 9107 is a compact and lightweight rotary tool designed for precision and power, driven by compressed air. Its ergonomic design ensures comfortable handling, allowing operators to work in tight or hard-to-reach areas. Equipped with a variety of attachments, such as grinding, polishing, and shaping tools, it is perfect for grinding, deburring, and polishing a range of materials, including metal, wood, and plastic. The tool's high-speed rotation and precision control make it ideal for fine detailing and refining surfaces. Widely used in metalworking, woodworking, automotive, and other industries, it delivers consistent and efficient performance, helping users achieve smooth finishes and sharp edges with ease.

## GENERAL PRODUCT SAFETY INFORMATION

Failure to follow these warnings may lead to death or serious injury:

- Read and understand this manual and all related documents before using, maintaining, or repairing this product.
- Only qualified operators should install, adjust, or use this tool.
- Ensure all users are informed of this safety information.
- Identify and mitigate any specific application hazards before use.
- Follow all applicable laws, regulations, and standards during installation, operation, and maintenance.
- Operate and maintain the tool as instructed to minimize risks from noise, vibration, dust, and fumes.



# SAFETY INSTRUCTION



Wear Respiratory Protection



Wear Eye Protection



Wear Hearing Protection



Read Manuals Before Operating Product



## **DANGER**

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

## **WARNING**

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

## **CAUTION**

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or property damage.

## **NOTICE**

Indicates information or a company policy that relates directly or indirectly to the safety of personnel or protection of property.

## PRODUCT SAFETY INSTRUCTION - WHEN PLACING THE TOOL IN SERVICE

- Before starting any job, the operator or employer must assess and control potential risks. Always use clean, dry air at a maximum of 90 psig (6.2 bar/620 kPa) unless specified otherwise. Exceeding the maximum pressure can lead to hazardous situations.
- Ensure an emergency shut-off valve is installed and accessible, and make others aware of its location. Install a Safety Air Fuse and anti-whip device to prevent hose whipping in case of failure. Lock pins must be used with universal twist couplings.
- Avoid using damaged hoses or fittings, and check that all connections are secure before applying air pressure. Only use recommended accessories that comply with the product manual to reduce hazards.

## PRODUCT SAFETY INSTRUCTION - WHEN USING THE TOOL

### WORKPLACE HAZARDS:

- Slips, trips, and falls are common injuries. Keep work areas clean, clutter-free, well-ventilated, and well-lit. Be mindful of slippery surfaces and trip hazards from air lines.
- Wear safety helmets for overhead work and assess risks to operators and others.
- Maintain a safe distance from others or ensure they wear proper PPE.
- This tool is not for use in explosive atmospheres, near fumes, dust, or flammable materials.
- This tool is not insulated against electric shock.
- Avoid damaging cords, conduits, pipes, or hoses containing electrical wires, explosive gases, or harmful liquids.

## **PROJECTILE HAZARDS:**

- Always wear eye protection when using or maintaining this tool. Choose impact-resistant glasses, goggles, or a face shield as needed.
- Secure workpieces with clamps or Vises.
- Workpiece failure or debris can create high-speed projectiles.

## **NOISE HAZARDS:**

- Always wear hearing protection when using this tool.
- Prolonged exposure to high noise can cause hearing loss and tinnitus.
- Implement controls to reduce noise, like using damping materials to prevent "ringing."
- Ensure the tool's silencer is in place and functioning.

## **DUST AND FUME HAZARDS:**

- Wear proper respiratory protection when dust or fumes are present.
- Dust from power tools can cause serious health issues like cancer, birth defects, asthma, and dermatitis. Control dust at the source.
- Work in a well-ventilated area and use safety equipment, like approved dust masks.
- Do not use the tool on materials that create flammable or explosive dust/fumes.
- Direct exhaust to minimize dust disturbance.
- Use and maintain dust collection accessories as per manufacturer instructions.
- Inspect and replace worn accessories to prevent excessive dust or fumes.

## **ENTANGLEMENT HAZARDS:**

- Keep loose clothing, jewelry, hair, gloves, and other items away from the tool's working end to avoid entanglement.
- Entanglement can cause choking, lacerations, broken bones, or severed extremities.

## **VIBRATION HAZARDS:**

- Vibration can damage hands and arms. Seek medical advice if numbness or pain occurs.
- Grip the tool lightly; avoid excessive force.
- Wear warm clothing and keep hands dry in cold conditions.
- Support the tool with a stand when possible.
- Inspect and replace accessories to reduce vibration.
- Avoid holding the tool with your free hand.
- Keep handles cantered and avoid pushing them into end stops.

## REPETITIVE MOTION HAZARDS:

- Repetitive motions or poor posture can harm your body. Stop using the tool if you experience discomfort, pain, tingling, or stiffness.
- Seek medical advice before resuming use.

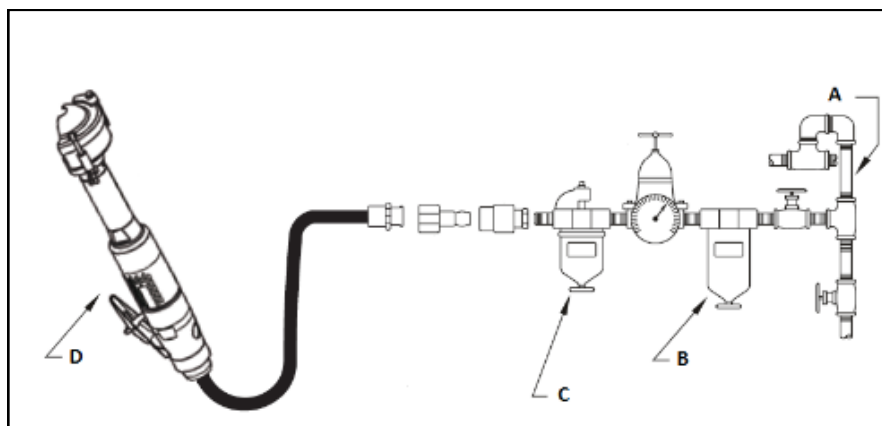
## SLIPPING, TRIPPING, AND FALLING HAZARDS:

- Tripping on hoses or objects can cause injury.
- To reduce risk:
  - Ensure hoses and objects are clear of pathways.
  - Stand with feet shoulder-width apart for stability and balance.

## CONCEALED OBJECT HAZARD:

- Concealed wires and pipes can cause serious injury.
- To prevent risk:
  - Check material composition before use.
  - Watch for hidden cables and pipes (electricity, water, gas, etc.).
  - If the tool hits a concealed object, turn off the machine immediately.
  - Ensure safety before resuming.

# INSTALLATION



- A. Compressed air source
- B. Water separator (optional)
- C. Oiler (optional)
- D. Max. 10 feet (3 meter) compressed air hose between the oiler and the machine.

### **a) COMPRESSED AIR HOSE SAFETY:**

- Use the correct operating pressure: 87 psig (6 bar (e)).
- Do not exceed the maximum air pressure: 90 psig (6.2 bar (e)).
- Blow out impurities from the air hose before connecting it.
- Choose the right hose size:
- For up to 100 feet (30 meters), use a hose with a  $\frac{3}{4}$ " (19 mm) internal diameter.
- For 100 to 330 feet (30 to 100 meters), use a hose with a 1" (25 mm) internal diameter.

### **b) DAILY MACHINE INSPECTION:**

- Clean and inspect the machine before use.
- Check tool retainer for wear and function.
- Inspect for leaks and damage.
- Ensure the air inlet nipple is tight and the claw coupling is undamaged.
- Check chisel bushing for wear to avoid excessive vibration.
- Ensure vibration-absorbing handles move freely.
- Replace damaged or worn parts promptly.
- Maintain attached equipment (hoses, water separators, oilers).

## **TOOL MAINTENANCE INSTRUCTIONS:**

- Perform regular maintenance to ensure safe operation, including checking speed and vibration.
- Avoid exposure to hazardous dust or substances when maintaining the tool. Use approved cleaning solvents in a well-ventilated area.
- Do not remove or damage labels. Replace damaged labels and ensure all information is legible.

## **PRODUCT SAFETY INSTRUCTION- WHEN MAINTAINING THE TOOL**

Ensure safe operation with regular maintenance, including checks on speed and vibration. Avoid inhaling hazardous dust or substances when maintaining the tool. Use only approved cleaning solvents that meet safety standards, and clean in a well-ventilated area. Do not remove labels; replace any damaged labels and ensure all information on the tool is legible.



### Periodic Maintenance:

- Dismantle and clean the machine every 150 impact hours or twice a year.
- Maintenance should only be performed by authorized and trained personnel.
- Use an insertion tool with the correct shank dimensions.
- Ensure the machine receives the appropriate amount of lubricant; excess can affect performance.
- Verify the air system provides adequate pressure for optimal power.
- Confirm air hose dimensions and length meet recommended specifications.

## STORAGE

- Clean the machine properly before storage, in order to avoid hazardous substances. See “Dust and Fume hazard”
- Pour approximately ½ oz (5 cl) of oil directly into the air inlet nipple, connect the machine to the Compressed air supply and start it for a few seconds.
- Always store the machine in a dry place.

## DISPOSAL

- A used machine must be treated and disposed of in such a way that the greatest possible portion of the Material can be recycled and any negative influence on the environment is kept as low as possible, and in respect to local restrictions.

