



## Airends (Screw Element): New and Rebearing

### Technical Information Bulletin - #6

**This technical bulletin is designed to provide more information about the best practice compressed air system recommendations made during your recent service.**

#### Best practice airend rebearing or replacement schedule

The lifespan of an airend depends on its operation and maintenance, however the average lifespan is between 20,000 and 40,000 running hours. After this point, a new airend or rebearing of your existing airend is recommended.

#### Benefits of rebearing or replacing your airend on schedule

Replacing or rebearing your compressor's airend (depending on your service technician's recommendations), can help reduce energy consumption, improve performance, and minimise downtime for your operations.

Rebearing or replacing your compressor's airend will also reduce the load on the motor and extend your motor's life.

#### Risks of not rebearing or replacing your airend on schedule

If your airend is not maintained correctly or replaced, your compressor will not operate efficiently. You may experience lower discharge pressure, higher discharge temperatures, excessive vibration or noise levels, oil carryover (leading to contamination), breakdowns or a catastrophic failure of your machine.



#### Why has a new airend or a rebearing been recommended?

A new airend or a rebearing of your compressor's existing airend has been recommended because your airend either:

- exceeds the best practice operating hours recommended by your compressor manufacturer, or
- shows specific signs of failure or compromised operations/efficiencies.

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### How can you prolong the life of your compressor's airend?

There are a number of ways to prolong the life of your compressor's airend, including:

- Regular servicing, cleaning, and inspection
- Maintaining oil levels
- Monitoring and addressing vibration issues
- Replacing worn parts including seals, bearings, and gaskets
- Following your manufacturer's maintenance schedule.

Your NPS service technician has the experience and technical knowledge to help maximise the life of your compressed air system.

### More information

Our service team is always happy to provide more information or talk through our best practice recommendations for your compressor.

Call us on [1300 290 638](tel:1300290638) or email [info@nesscopressure.com.au](mailto:info@nesscopressure.com.au) for more information.

### About airends

The airend (or air end) is the part of your compressor that includes the rotors and the housing they're in; it is the screw element and the most important part of any screw compressor.

Airends are the part of your compressor where the actual air compression takes place. Inside the airend are female and male rotors that rotate in opposite directions. They physically squeeze the air by an external force.

The air gets sucked in on one side (cold, low-pressure) and gets trapped between the rotors, before being discharged out the other side (hot, high pressure).

Your airend determines your compressor's performance, efficiency, and energy consumption.

