

Solve issues with cooling capacity, acceptable noise levels and mechanical failures.



Issues with cooling capacity

Consequences:

- Loss of production and income
- Limited/no potential for production growth
- Low product/process quality (i.e. high temperatures)
- Increased maintenance costs
- Detrimental emergency solutions damaging cooler components

Main causes:

- Poor cooler design
- Poor fan selection
- Changed process parameters
- Increased cooling demand due to production increase

Solution options:

- Increase airflow (+10% airflow = 5–7% capacity)
- Install a high efficient fan
- Increase fan speed
- Increase motor power
- Optimise fan blade angle
- Replace entire fan unit



Issues with acceptable noise levels

Consequences:

- Exceeding noise regulations
- Imposed noise cancelling by production restrictions
- Fines
- Complaints
- Unhealthy working environment

Main causes:

- Poor fan selection
- Increased cooling demand
- Changed environmental regulations

Solution options:

- Install a low noise fan
- Decrease fan speed
- Install variable speed drive
- Increase fan efficiency (same performance, less noise)
- Change entire fan layout



Issues with mechanical failures

Consequences:

- Significant cooler downtime and production loss
- High maintenance costs on a continual basis

Main causes:

- End of life fan
- Poor design
- Tough operating conditions
- Changed conditions

Solution options:

- Change fan layout
- Replace critical components
- Replace entire fan unit, including motor, transmission, fan housing etc.
- Repair of the blades on site or refurbish in-house

For further information get in touch with our team today:

aftermarket-hnl@howden.com | www.howdencoolingfans.com

