

Machine Issue Reasons and Suggested Actions

Reason	Action
The air temperature is too low, which might be causing the machine to underperform.	Increase air temperature to within the acceptable range (150K - 500K).
The air temperature is too high, which could be causing the machine to overheat.	Reduce air temperature to avoid overheating, maintain it within the acceptable range (150K - 500K).
The process temperature is below the normal range, possibly affecting machine efficiency.	Increase process temperature to within the acceptable range (150K - 500K).
The process temperature is too high, which might lead to overheating.	Lower process temperature to avoid overheating, maintain it within the acceptable range (150K - 500K).
The rotational speed is too low, causing the machine to operate inefficiently.	Increase rotational speed to within the acceptable range (500 - 1500 rpm).
The rotational speed is too high, which might be causing excessive strain on the machine.	Reduce rotational speed to prevent strain, keep it within the acceptable range (500 - 1500 rpm).
The torque is too low, which may indicate that the machine is not operating at its full capacity.	Increase torque to within the acceptable range (100 - 800 Nm).
The torque is too high, possibly putting excessive stress on the machine's components.	Reduce torque to avoid stress on components, keep it within the acceptable range (100 - 800 Nm).

The tool wear is minimal, but routine checks are still recommended to prevent future issues.

Monitor tool wear regularly to prevent unexpected breakdowns.

The tool wear is high, and the tool may need to be replaced soon to maintain optimal performance.

Replace the tool as needed to maintain optimal machine performance.