Example of a Lower Level, Function-based FMEA

Machine/Process: Onboard compressed air system

Subject: 1.2 Compress air to 100 psig

Description: Compress intake air to 95 to 105 psig with enough volume to meet production tool/ machine needs

Next higher level: 1. Provide compressed air at 100 psig

Failure Mode	Effects			Causes	Indications	Safeguards	Recommenda-tions/Remarks
	Local	Higher Level	End				
A. Compressor starts prematurely	Unexpected compressor operation	Unexpected air pressure/flow Possible high pressure in the system	Possible injury (especially during maintenance work) Possible system damage from high pressure	Compressor control system sends false signal Manual override of compressor control system	Operating compressor when it is supposed to be stopped	Lockout/tagout of compressor during maintenance Pressure relief valve at the discharge of the compressor for preventing equipment damage	Consider removing the manual override button for the compressor Calibrate pressure sensing switch annually
B. Compressor fails to start on demand	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•