



**WAGNER-MEINERT LLC**  
 Engineers – Contractors  
 www.wagner-meinert.com

7617 Freedom Way  
 Fort Wayne, IN 46818  
 Phone: 260-489-7555  
 Fax: 260-489-7473

Refrigeration & HVAC  
 Mechanical & Plumbing  
 Food Process  
**PSM-RMP & Safety Services**  
 Controls & Automation  
 Planned Maintenance

## Annual Ammonia Inspection / Mechanical Integrity Inspections

Every facility with extremely hazardous chemicals, specifically ammonia, needs to perform a yearly Mechanical Integrity Inspection. This requirement is spelled out in IIAR Bulletin 109 Section 5.2, “Each owner should ensure an ammonia system safety check is conducted annually.”, and in Guidance for Implementation of the General Duty Clause Clean Air Act Section 112 (r) (1), “EPA believes that owners and operators who have these (extremely hazardous) substances must adhere, at a minimum, to recognized industry standards and practices (as well as any government regulations) in order to be in compliance with the general duty clause.”

Wagner-Meinert, LLC, offers an Annual Ammonia Inspection per IIAR Bulletin #109 as well as a more detailed Mechanical Integrity Inspection.

The Mechanical Integrity Inspection performed by WMI goes beyond the basic inspections conducted in accordance with IIAR Bulletin 109. During a Mechanical Integrity Inspection we conduct field tests on equipment and equipment safeties per our prepared checklist. Wagner-Meinert, LLC uses a checklist designed to incorporate the questions provided by IIAR and supplemented in those areas that were, in our opinion, lacking. Below is a comparison of the Annual Ammonia Inspection and Mechanical Integrity inspection.

Category	Number of Questions included for each Component	
	Annual Ammonia Inspection	Mechanical Integrity Inspection
Compressors	15	71
Purgers	Included as an Evaporator with no specific Purger questions	45
Vessels	26	53
Heat Exchangers	26	57
Evaporators	10	26
Air Cooled Condensers	Included as a Heat Exchanger with no specific questions for the Air Cooled Condenser	36
Evaporative Condensers	26	44
Refrigerant Pumps	12	40
Condenser Pumps	Not Included	40
Non-pressurized Tanks (Sump Tanks)	Not Included	15
Piping	12	18

**“Our Reputation is Our Future”**

MEMBER OF: IIAR-ASHRAE-RETA-MCA-MSCA-NCPWB-NFPA-ICC

“Each owner should ensure an ammonia system safety check is conducted annually.”

*IIAR Bulletin 109 Section 5.2*

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*Guidance for Implementation of the General Duty Clause Clean Air Act Section 112(r)(1)*



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# Mechanical Integrity Solutions



All IIAR Bulletin #109 inspections are not equal. We offer an Annual Ammonia Inspection per IIAR Bulletin #109 guidelines, as well as a more detailed Mechanical Integrity Inspection that goes well beyond the basic inspection criteria required within IIAR Bulletin #109.



Wagner-Meinert, LLC's Safety Services is committed to providing quality Mechanical Integrity / Annual Ammonia Inspection.

**Call to make your appointment today!**

# Inspection Options

Annual Ammonia Inspection

Mechanical Integrity Inspection

Mechanical Integrity Inspection  
With Non-Destructive Testing Services

Inspection Follow-Up Services

“PSM RMP” and “ARM”  
Team Leadership Services



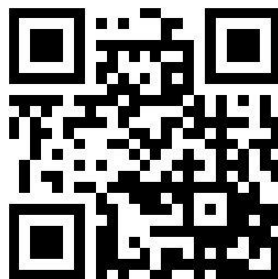
Wagner –Meinert, LLC can provide Non-Destructive Services in conjunction with our Mechanical Integrity Inspection. We believe a two part process (a Mechanical Integrity Inspection followed by Non-Destructive Testing of identified areas) to be the best approach. Non-Destructive Testing points are determined by the recommendations of the Inspection Team.



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