Air Bag Filters

TM217

Course Overview:

This course will enable participants to acquire knowledge and develop skills on how to implement a systematic and effective preventive maintenance and performance monitoring procedure for air bag filters also it will enable participants to be ready as a competent person to operate air bag filters after complying with other requirements. also it will be good for the industry by minimizing the occurrence of breakdown of cyclones that may result in non compliance with emission standards.

Course Objective:

- -Introduced to the principal similarities of and differences between bag filters and other filters
- -Able to identify the two major applications and two major limitations of both bag filtration and other filtration.
- -Able to identify the main components of bag filtration systems.
- -Able to identify the characteristics of source water that can impact the effective operation of a bag filter system.
- -Aware of the reasons why site specific piloting should be considered prior to installing a bag filter system.
- -Receive an explanation of the advantages and disadvantages of air bag and filtration systems.

Course Outline:

Overview of Filter Bag (Bag house) Basics of Baghouse operationo Principles of operationo Basic operating parameters Mechanisms of filtration Air to cloth ratio Bag cleaningo Types of baghouses Shaker Reverse-Air Pulse-Jeto Specific maintenance concerns for each type of dust collectoro Industry best practice guidelines for engineering: New dust collection systems Upgrading or replacing old systems Configuring existing unitso Combustible dust overview Types of combustible dust Implications of combustible dust on dust collection systems How to conduct hazard analysis for combustible dust applications Prevention and protection against combustible dust hazards Maintenance procedureso Bag changingo Structure repairo Hopper cleaningo Airlock/conveying systemo Leak testingo Diaphragm/solenoid valve repairo Troubleshooting common problems Common problems Possible causes Remedieso Preventative maintenance Suggested Maintenance Planning & Schedulingo Sample suggested scheduleo How to determine when to conduct various procedureso Conducting inspectionso Identifying problems during inspectionso Identifying remedies for common problems Operation Guidelineso Differential pressure rangeso Factoring filter service lifeo Startup procedureso Shutdown procedureso Inlet/outlet temperatureo Cleaning cycle settingso Emissions compliance and monitoringo Maintenance/Upgrade planning Baghouse safety procedureso Bag change outo Inspectionso Structural repairso Leak testingo Inspections Bag changingo How to remove bags in the fastest, most efficient wayo How to avoid damaging bags during installo How to ensure proper installation of bags to prevent leakso How to diagnose problems with the system during a bag change out (this is the best time to identify problems with the unit) Baghouse inspectionso What to look for during an inspectiono Easily overlooked indicators of problemso Developing and implementing a preventative maintenance program for dust collection systems Baghouse repairo How to repair leakso Dealing with corrosion issueso Insulating the unit Dust Collector Leak testingo Conducting a leak testo How to detect leaks in the bags, structure, inlet/outlet, pickup points, etc.o How to calculate how much leak powder to use, etc.

Who Should Attend:

Training Language:

EN / AR

Training Methodology:

- -Presentation & Slides
- -Audio Visual Aids
- -Interactive Discussion
- -Participatory Exercise
- -Action Learning
- -Class Activities
- -Case Studies
- -Workshops
- -Simulation

Operations and Industry personnel who have been given the task to operate or supervise the operation of air bag filters on industrial premises