

# ANDERSON®

A Division of The Clark•Reliance Corporation

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## **INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS FOR ANDERSON AFS SERIES FILTER SEPARATOR WITH ASSOCIATED EQUIPMENT**

### **GENERAL OVERVIEW**

1. THANK YOU FOR PURCHASING THE ANDERSON AFS FILTER SEPARATOR FOR YOUR GAS POLISHING REQUIREMENTS. WE BELIEVE THE UNIT YOU HAVE PURCHASED IS OF THE HIGHEST QUALITY AVAILABLE TODAY AND WILL PROVIDE YOU WITH YEARS OF CLEAN FILTERED PROCESS GAS.
2. TAKE THE TIME TO ORIENT YOURSELF WITH THE FILTER AND THE SUPPLIED DRAWING AND DOCUMENTATION. READ THIS LITERATURE IN GREAT DETAIL. IF NO DRAWING IS AVAILABLE, LOCATE THE INFORMATION ON THE NAMEPLATE TO CONTACT THE FACTORY FOR A CERTIFIED DRAWING.
3. UPON RECEIPT OF THE FILTER AND RELATED PROCESS EQUIPMENT PURCHASED THROUGH ANDERSON, PLEASE NOTE ANY DAMAGE TO THE EQUIPMENT OR CONTAINER. IF ANY DAMAGE EXISTS, PLEASE IMMEDIATELY CONTACT THE SHIPPING FIRM FOR A DAMAGE CLAIM FORM. OPEN CRATES IMMEDIATELY TO INSURE ALL QUANTITIES ON THE BILL OF LADING/PACKING LIST ARE CORRECT. IF ANY DISCREPANCIES ARE FOUND, PLEASE NOTIFY THE FACTORY WITHIN 48 HOURS OF RECEIPT WITH DETAILED DESCRIPTION OF DISCREPANCIES.

### **INSTALLATION INSTRUCTIONS**

1. INSTALL THE FILTER SO THAT THE DIRECTION OF FLOW CORRESPONDS TO THE FLOW ARROW ON THE VESSEL OR INLET AND OUTLET MARKINGS ON THE DRAWINGS. IF NEITHER AVAILABLE, CONSULT THE CATALOG OR THE FACTORY FOR PROPER INSTALLATION DOCUMENTATION.
2. PROPER DRAINAGE OF THE FILTER IS ESSENTIAL FOR PROPER OPERATION. CONNECT THE DRAIN TO A DRAIN TRAP, OR WHATEVER MECHANISM YOU INTEND TO USE IN ORDER TO REMOVE THE SEPARATED LIQUIDS FROM THE SEPARATOR. SHOULD THE TRAP OR DUMPING MECHANISM REQUIRE AN EQUALIZING LINE, OR INSTRUMENT SUPPLY GAS, THIS SHOULD BE CONNECTED TO THE VENT CONNECTION OR INSTRUMENT SUPPLY.
3. CONNECT THE FILTER BY THE STANDARD PIPING METHODS AS PRESCRIBED BY LOCAL, STATE, AND GOVERNMENT AUTHORITIES. PIPE ALL CONNECTIONS ON FIRST AND SECOND STAGES INDEPENDENTLY. GAUGE GLASS, LIQUID LEVEL CONTROLS, AND DRAINS SHOULD NEVER BE MANIFOLDED BETWEEN THE INLET (PRIMARY) AND OUTLET (SECONDARY) STAGES. ALL ELECTRICAL WIRING

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SHOULD BE PERFORMED IN ACCORDANCE WITH ALL LOCAL STATE AND NATIONAL FIRE AND SAFETY CODES FOR THE HAZARDOUS DESIGNATION OF THE AREA OF OPERATION.

## **INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS FOR ANDERSON AFS SERIES FILTER-SEPARATOR WITH ASSOCIATED EQUIPMENT**

**(CONTINUED)**

4. DO NOT OPERATE WITHOUT FIRST REMOVING THE CLOSURE HEAD TO MAKE SURE THE ELEMENT'S HOLD DOWN NUTS ARE TIGHT.
5. VERIFY THAT THE CLOSURE IS SECURELY FASTENED PER CODE STANDARDS. BUILD UP PRESSURE IN SYSTEM, CHECK ALL FIELD CONNECTIONS AND CLOSURES FOR LEAKS. IF LEAKS EXIST DE-PRESSURIZE SYSTEM AND REPAIR LEAK SITES BY APPROVED METHOD.
6. IF NO LEAKS ARE FOUND, CHECK TO INSURE THAT ALL INSTRUMENTS ARE READY FOR ON-LINE OPERATION. REFER TO THE SPECIFIC OPERATION MANUAL FOR THE APPROPRIATE PIECE OF EQUIPMENT FOR PROPER ON-LINE OPERATION AND MAINTENANCE.

### **OPERATING INSTRUCTIONS**

1. ONCE THE ANDERSON AFS FILTER SEPARATOR IS INSTALLED, IT NEEDS NO OTHER ACTION BY THE OPERATOR. THE FILTER SEPARATOR IS COMPLETE IN ITSELF, AND WILL FUNCTION WHENEVER THERE IS FLOW THROUGH THE UNIT. PLEASE READ EACH MANUAL FOR EACH INSTRUMENT SUPPLIED ON THE UNIT FOR THE PROPER OPERATION AND INSTALLATION PROCEDURES.
2. IF POSSIBLE, AN INITIAL CHECK OF DIFFERENTIAL PRESSURE SHOULD BE MADE ACROSS THE FILTER ELEMENT FOR REFERENCE. IF SOLIDS ARE PRESENT IN THE GAS, THE FILTER CARTRIDGE WILL GRADUALLY BECOME PLUGGED AND THE DIFFERENTIAL PRESSURE WILL INCREASE.
3. AFTER THE FILTER HAS BEEN IN SERVICE FOR A FEW HOURS, CHECK THE GAGE GLASSES IN THE TWO STAGES FOR THE AMOUNT OF CONDENSATE THAT HAS COLLECTED. JERGUSON® BRAND GAGE GLASSES ARE HIGHLY RECOMMENDED FOR PROPER LEVEL MONITORING IN THIS HIGHLY CRITICAL OPERATION. IF AUTOMATIC DRAINING DEVICES ARE NOT INSTALLED, THE CONDENSATE MUST BE REMOVED MANUALLY ON A REGULAR INSPECTION SCHEDULE PER THE CYCLE LOAD REQUIREMENTS.

### **MAINTENANCE INSTRUCTIONS**

1. THERE IS VERY LITTLE REQUIRED MAINTENANCE WITH THIS FILTER SEPARATOR, EXCEPT FOR THE PERIODIC CLEANING/REPLACEMENT OF THE FILTER ELEMENTS OR PERIODIC BLOWDOWN OF THE VESSEL HOUSING..
2. GENERAL REQUIREMENTS FOR FILTER REPLACEMENT:

Represented By: Northeast Controls, Inc. & Northeast Process Controls Company  
NJ Tel: 201-327-7660 NJ Fax: 201-327-3242 NY Tel: 518-622-0310 NY Fax: 518-622-0311  
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- A. WHEN DIFFERENTIAL PRESSURE REACHES 7-8 PSID, OR
- B. WHEN DIFFERENTIAL PRESSURE REACHES CUSTOMERS LIMIT, OR
- C. ONCE A YEAR.

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**(CONTINUED)**

IT IS RECOMMENDED THAT AFTER THE FILTER SEPARATOR SHOWS A PRESSURE DROP ACROSS THE ELEMENTS OF 4-6 PSI, THE UNIT TO BE TAKEN OFF-STREAM, DE-PRESSURIZED, AND THE FILTERS TO BE INSPECTED FOR THE AMOUNT OF DIRT, WAX, SCALE, ECT.. THAT HAS CAKED UP ON THE ELEMENTS.

DO NOT VIOLENTLY BACKFLOW THIS UNIT!! IT IS RECOMMENDED THAT THE ELEMENTS BE REMOVED MANUALLY AND CAKED DIRT BE BRUSHED OFF BY A LIGHT BRUSH. IF THE ELEMENT SOCK IS TORN, WAXY, OR OTHERWISE DAMAGED IT IS RECOMMENDED THAT THE ELEMENT BE REPLACED. CHECK THE SPARE PARTS LIST, OR NAMEPLATE FOR PROPER PART NUMBER FOR REPLACEMENT.

3. **IMPORTANT\*\*\* USE ONLY ANDERSON SUPPLIED AND SPECIFIED FACTORY WARRANTED FILTER ELEMENTS. THE USE OF OTHER NON-FACTORY SUPPLIED ELEMENTS CHANGES THE PERFORMANCE OF THE SECOND STAGE SEPARATION ELEMENT AND VOIDS ALL PERFORMANCE WARRANTIES OF THE EQUIPMENT SUPPLIED.**
4. WHEN CHANGING FILTER ELEMENTS, OPEN UP DRAIN CONNECTIONS AND BLOWDOWN / WASH OUT ANY DEBRIS. THE PRIMARY SEPARATION STAGE & SUMP WILL HAVE THE HIGHEST CONCENTRATION OF DEBRIS AND SHOULD BE WASHED OUT FREQUENTLY.
5. FOLLOW ALL LOCAL, STATE, AND GOVERNMENT CODES AND REGULATIONS WHEN ISOLATING AND DE-PRESSURIZING FILTER FOR MAINTENANCE.
6. IF ANY DIFFICULTIES ARE EXPERIENCED WITH THE ANDERSON AFS FILTER SEPARATOR, PLEASE CONTACT THE FACTORY FOR THE NAME OF AN AUTHORIZED REPRESENTATIVE CLOSEST TO YOUR LOCATION.
7. THANK YOU FOR PURCHASING WHAT WE BELIEVE IS ONE OF THE HIGHEST QUALITY FILTER SEPARATORS THAT ARE OFFERED IN THE MARKETPLACE TODAY. WE ARE CONSTANTLY INNOVATING TO ENGINEER FOR YOU THE MOST COST-EFFECTIVE SOLUTION TO YOUR SEPARATION AND FILTRATION NEEDS.