

Wedeco UV TotalCare Services Proposal

Improving Performance, Reducing Costs



Spektron 250e x 3

Webb County (Rio Bravo WTP) Rio Bravo, TX

ATTN: Tomas Sanchez

**Wedeco Project #: U15019
Wedeco Quote #: J22021017354
Wedeco Contact: Jenny Banci
Date of Contract Proposal: October 20, 2022**

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Xylem TotalCare Services

Introduction

TotalCare Preventative Maintenance (PM) Services are the most economical, and also the most popular of all TotalCare services. With the Preventative Maintenance service, a Xylem technician will visit your site to perform all necessary inspections and minor maintenance work.

Xylem TotalCare Services will enable you to reduce the total cost of ownership by providing technical and process support. Our TotalCare services work because we are committed to supporting you and your Wedeco UV system throughout its operational life; ensuring that you achieve the lowest cost of equipment ownership through increased reliability, reduced energy consumption and proactive maintenance.

Keeping maintenance costs down

With resources tight and cost-cutting measures in place across the board, companies are looking for smart ways to extend asset life and reduce costs for unplanned work, such as breakdowns and emergency callouts.

A preventive maintenance service program is proposed that is completely tailored to your needs. Yearly, semi-annual or quarterly planned visit by a Xylem Field Service Technician specifically trained in the maintenance of the Wedeco UV System will be carried out utilizing a well-defined service schedule.

Xylem's Wedeco UV systems are required to perform 24/7. To guarantee this performance level, regular inspection and maintenance combined with the use of genuine OEM spare parts is essential. Key benefits that you can expect from a Xylem TotalCare preventive maintenance service program include:

- Plant optimization with focus on reducing plant operational costs
- Priority in service scheduling
- Custom tailored preventative maintenance plans
- Unlimited phone support
- Discounts on spare parts
- Additional on-site training
- Knowledgeable factory trained UV service technicians
- Confirm instrument calibration and set-up
- Reduce system down time

Total Care Activities – Closed Vessels UV Systems	
Typical Tasks	BX/LBX/Spektron/K-Reactor Systems
System Review	<p>Pre-visit:</p> <ul style="list-style-type: none"> Identify outstanding issues from prior visits as well as new issues. Recommend parts required for upcoming work. <p>Onsite:</p> <ul style="list-style-type: none"> Review system history and alarm log since last visit– identify key tasks to resolve during visit.
Control Cabinets	<ul style="list-style-type: none"> Inspect cabinets for dust and/or corrosion. Clean as necessary. Confirm adequate cooling and or airflow through cabinet. Check for hot spots that could cause temperature faults. Replace filters as need from spares stock. Troubleshoot and resolve faulty ballasts. Replaced failed ballasts from spares stock as needed. If indicated, measure incoming, voltage, current, neutral, and ground of supplied system power. Identify deficiencies and diagnostic recommendations. Validate proper operation and set points of HMI, adjust as needed. Validate proper operation and set points of internal UV system controllers, adjust as needed. Validate proper function of all signal isolators. Replace from onsite spares as needed. Perform basic functional test of AC units if present. Validate proper function of all safety circuits. Check remote communications if applicable.
Cable Assemblies	<ul style="list-style-type: none"> Examine cables and associated hardware for proper function. Replace faulty hardware with onsite spares. Identify and provide recommendations for unusual wear, rust and/or corrosion of components. Replace as needed from onsite spares.
Modules, Lamps, Reactor, Sleeves & Connectors	<ul style="list-style-type: none"> Check reactor for leakage. Identify resolution. Identify and provide recommendations for unusual wear, rust and/or corrosion of components. Replace as needed from onsite spares. If the reactor is accessible, check quartz sleeves for excessive surface abrasions, replace as needed from onsite spares. Identify and resolve any loose connections. Validate cable connector functionality. Replace O-rings, or connector assembly from onsite spares as needed. Check intensity sensors for proper operation, clean if needed, replace from onsite spares as necessary. If the reactor is accessible, examine Intensity sensor cleaning brushes. Replace from onsite spares as needed. Examine a representative sampling of lamps for signs of excessive aging, replace as needed. Identify source of problem if premature. Troubleshoot failed components and replace from onsite spares as needed. Validate proper operation of air relief valves. Repair or replace as needed from onsite spares.

	<ul style="list-style-type: none"> • Provide guidance and instruction to open and clean reactor if necessary.
Control Philosophy	<ul style="list-style-type: none"> • Identify chronic alarms - root cause and resolve. • Validate intensity readings. • Root cause and resolve UV intensity issues if system related. • Validate incoming flow signal. Identify any inconsistencies. • Validate basic PLC function in Manual, Maintenance and Automatic modes
Wiper Cleaning Systems	<ul style="list-style-type: none"> • Validate operation and set points of mechanical wiper system. Repair as necessary for proper operation.
Control Instrumentation	<ul style="list-style-type: none"> • Clean & calibrate onsite transmittance monitor.
Physical and Mechanical Components	<ul style="list-style-type: none"> • Validate proper manual and auto operation of all control fixtures. Adjust set points, and torque settings as necessary
Water Quality	<ul style="list-style-type: none"> • Provide guidance and instruction to open and clean reactor if necessary. • If the reactor is accessible, check fouling of quartz sleeves. Provide instruction and recommendations on cleaning if necessary. • Compare process water transmittance against system design requirements if applicable. Identify possible sources of discrepancies.
Operational	<ul style="list-style-type: none"> • Provide informal operation, maintenance, and/or safety training as requested. • Identify maintenance and/or operation concerns and associated improvement recommendations • Identify spares utilized and recommendations for replacement or adjustments to existing levels. • Identify approximate future timeline for consumables (lamps, ballasts, sleeves, wiper rings, etc.) replacement. • Identify operational enhancements (power settings, timer adjustments, etc.). • Review Xylem 24/7 contact information.



Maintenance Contracts

Preventative Maintenance Package

All preventative maintenance contract agreements will begin on the commencement signature date and will expire on the term of 12 months. Contracts are invoiced 100% at the time of contract and in advance of service. Pricing for preventative maintenance services is as follows:

Each visit will be TWO (2) full day(s) on site. TWO (2) visits per year. This includes one (1) full set of lamps (12 lamps per set) of replacement lamps. Lamps will be changed out at approximately 12,000 hours run time. Also included in the 3 year contract is parts allowance of \$25,000 for any additional parts or service. Parts ordered during the term of this agreement will be given a 12% discount from our list price.	
3 YEAR CONTRACT	\$66,225
1 YEAR CONTRACT PRICE	\$13,742

With the purchase of a TotalCare Preventative Maintenance contract, the customer can choose to add additional days to their onsite visits. Additional days can be added to any level service at a rate of **\$1,761.00** for each day added.

**The number of days presented under the contract description, represent the amount of time required to complete the specific scope of work as originally presented. If during the term of the contract, the customer asks for work in addition to the outlined scope of work, additional compensated days must be added to the contract prior to the work being performed to cover the additional tasks requested. If during the term of the contract, new tasks are requested in lieu of items contained in the original contract scope of work supplied, additional days may be required as indicated above. Additionally, the customer acknowledges that Xylem is only responsible for the new work that they are requested to perform and the remaining contract scope not excluded by the customer. There will be no warranties, actual, or implied where no work was performed.*



Spare Parts - Recommended spare parts

Description	Part No.	Price
AS REQUIRED		



Training (Optional)

UV Training with Troubleshooting Package

Xylem can offer comprehensive and tailored UV training packages, which are designed to keep site operators fully trained on UV methodology, operation and troubleshooting. This course will consist of one (1) full day of onsite training by one of our senior technicians.

UV Instructional Training Package
One (1) day on site. Training will be performed by Sr. Technician.
\$1,761.00*

*Price based when scheduled as an additional service during maintenance visit

SELECT OPTION BY CHECKING BOX:

- PMA PACKAGE 3 YEAR CONTRACT with LAMP CHANGE OUT** **\$66,225**
- PMA PACKAGE ONE YEAR with LAMP CHANGE OUT** **\$13,742**
- ADDITIONAL DAY ON SITE PER DAY (OPTIONAL)** **\$1,761**

For questions regarding this preventative maintenance proposal, please contact one of the following:

Jenny Banci
Aftermarket Territory Manager - Treatment
Phone: (951) 903-8509
Email: jenny.banci@xylem.com

THE PARTIES ACKNOWLEDGE THAT EACH HAS READ THIS AGREEMENT, UNDERSTANDS IT, AND AGREES TO BE BOUND BY ITS TERMS AND CONDITIONS.

Terms & Conditions: This quotation is subject to the Standard Terms and Conditions of Sale - Xylem Americas effective on the date the order is accepted which terms are available at <http://www.xylem.com/en-us/Pages/terms-conditions-of-sale.aspx> and are incorporated herein by reference and made a part of the agreement between the parties

This Agreement has been executed in two (2) counterparts, of which the parties have received one (1) each.

AGREED TO:

SUPPLIER BY	<u>Xylem Water Solutions, USA, Inc.</u>	PURCHASER BY	_____
NAME	<u>Jenny Banci</u>	NAME	_____
TITLE	<u>Aftermarket Territory Manager - Treatment</u>	TITLE	_____
DATE	<u>October 20, 2022</u>	DATE	_____