**AO2000 Continuous Gas Analyzer** 

# Contract Services – Process Analytics Maintain systems and equipment operation at peak performance

ABB delivered Preventive and Corrective maintenance services based on Life Cycle Management deliver on-site advanced diagnostic and repair practices to help maximize the performance of your equipment.



#### **Benefits**

- Preventive Maintenance schedules based on Life Cycle Management
- Consumables included

## Product Life Cycle Management

Product life cycle management maximizes the value of equipment and maintenance investments by ensuring spare part and competence availability throughout the life cycle.

- enabling efficient product support & maintenance for improved reliability
- · adding functionality to the initial product by following the upgrade path
- providing a smooth transition to new technology at the end of a product's lifecycle
- helping the end user to decide when an upgrade, retrofit or replacement is required

#### Preventive Maintenance

A preventive maintenance schedule consists of regular inspections and component replacements according to the product specific maintenance schedule. Maintenance schedules are based on ABB's decades long experience of manufacturing and maintaining its products. Adopting preventive maintenance schedules reduces the risk of failure and increases the lifetime of the product, thus lowering the overall operational costs. Regular predefined preventive maintenance facilitates budgeting. Preventive maintenance can be carried out on site by certified field service engineers who utilize preventive maintenance kits for performing all scheduled maintenance tasks. Engineers are factory trained and have the latest maintenance know-how and experience. Preventive maintenance kits contain all the genuine parts defined by a maintenance schedule. They are more economical to purchase compared with purchasing the spare parts separately.

#### Maintenance schedule – AO2000 Continuous Gas Analyzer

Maintenance schedules are product specific and include consumables.

#### **Contract Services**

A basic contract includes:

- Minimum of 8 hours on-site time. Travel time and travel related expenses are not included and invoiced separately
- Maximum of 2 CEMS (typical O2, CO, NOx, Probe, SCS) supported per contract day

8 hours

\$1,920

Maximum of 1 FID supported per contract day

8 hours

\$1,920

# **AO2000 CEMS**

	Task	Daily	Weekly	Monthly	Quarterly	Bi-Annual	Annually	Comments
	AO2000 - Rountine Maintenance							
1.00	System							
1.00	- Oystem							
1.10	Check system status	Customer						
	Visual inspection	Customer						
	Check sample system flows	Customer						
	Check for liquid in sample lines	Customer						
	Check for leaks in sample system		Customer		ABB			
	Check calibration bottles		Customer		ABB			
	Check/replace condensate trap		Customer		ABB			
	Replace pump diaphram						ABB	
1.18	Replace acid filter				ABB			
2.00	Comula Droha	1				1	I	
2.00	Sample Probe							
2 10	Replace filter element					ABB		
	Replace orings					ABB		
	Tropiace dillige					7.55		
3.00	Uras 26							
3.10	Check manual calibration		Customer		ABB			
3.11	Check offset/amplification drift			Customer	ABB			
	Check for leaks in tubing			Customer	ABB			
	Check sample cell				ABB			
	Perform optical alignment				ABB			
	Perform phase alignment				ABB			
	Perform basic calibration if needed				ABB			
	Save all data files				ABB		400	
3.18	Replace thermal fuse						ABB	
4.00	Magnos 206							
4.00	wagiios 200							
4.10	Check manual calibration	+	Customer		ABB			
	Check offset/amplification drift		Guotomor	Customer	ABB			
	Check for leaks in tubing			Customer	ABB			
	Perform basic calibration if needed				ABB			
4.14	Save all data files				ABB			
4.15	Replace thermal fuse						ABB	
5.00	SCC-K							
	Replace catalyst cartridge					ABB		
5.11	Replace orings					ABB		
0.00	1 1844 0 44		I	<u> </u>			I	
6.00	LIMAS 11							
6 10	Check lamp signals		Cuctomor		ABB	-		
	Check manual calibration		Customer Customer		ABB	1		
	Check offset/amplification drift		Customer	Customer	ABB			
	Check for leaks in tubing			Customer	ABB	<del>                                     </del>		
0.13	Check sample cell	1		23.3.0.11101	ABB			
	ICHECK Sallible Cell							
6.14					ABB			
6.14 6.15	Perform basic calibration if needed Save all data files				ABB ABB			

### FID 14 / FIDAS

	Task	Daily	Weekly	Monthly	Quarterly	Bi-Annual	Annually	Comments
	AO2000 - Routine Maintenance							
1.00	FID (TOC)							
1.10	Check manual calibration		Customer		ABB			
1.11	Check offset/amplification drift			Customer	ABB			
1.12	Check pressures and flows detectors		Customer		ABB			
1.13	Replace protection filter						ABB	
1.14	Replace sample gas inlet filter						ABB	
1.15	Replace 1/8" air filters						ABB	
1.16	Replace detector sealing set						ABB	
1.17	Replace Injector O rings						ABB	
1.18	Replace sample gas sealing set						ABB	
1.19	Check/Replace nozzle holder						ABB	
1.20	Check/Replace combustion air nozzle						ABB	
1.21	Check/Replace H2 nozzle						ABB	
1.22	Check/Replace sample inlet nozzle						ABB	
1.23	Check/Replace ignitor						ABB	
1.24	Check/Replace injector	· · · · · · · · · · · · · · · · · · ·					ABB	

## Contract Services -

For more information, please contact your local ABB Products & Services Representative or ABB @

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