

# NEXTChem Process Analyzers, Inc.



## About NEXTChem Process Analyzers

NEXTChem Process Analyzers, Inc. produces chemical process analyzers for industries such as semiconductor, metal pre-treatment, metal finishing, chemical, mining, and wastewater.

NEXTChem utilizes non-proprietary electronics which means as new products become available in industrial automation market our analyzers can seamlessly incorporate these improvements.

NEXTChem is dedicated to producing, servicing and continuously improving the best process analyzers in the world.



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## MICROChem Process Analyzers

The MICROChem is designed for semiconductor chemical measurements.

Its sample system is configured to measure very high concentration chemistries. All wetted surfaces are constructed completely of PFA Teflon valves and fittings. In addition; the MICROChem is also capable of collecting two different sample sizes. These sample sizes can be between 0.25 – 2.00 mL.

Two types of measurement methods are used for almost all NEXTChem analyzers: titration and (ion selective) standard addition. Both types of measurement methods can be used on all NEXTChem analyzers making each type of analyzer extremely flexible.

All NEXTChem analyzers utilize modern electronics. Modbus is a standard feature of all analyzers. Ethernet and a GSM/SMS modem are also available.

## MICROChem Technical Specifications

User Interface	1	2.4" Black & White
Sample Streams	1	¼" (6 mm) Sample Line
Total Analyses	2	Titration and/or Ion Selective
Analog Outputs	2	4 – 20 mA (Souring)
Precision Pumps	2	± 0.001 mL
Probe Inputs	2	pH / ISE / ORP / Color
Process Control Points	0	not available
Alarm Relay	1	2 A (24 VDC)
Serial Outputs	1	RS232 / Modbus
DeviceNet / Profibus-DP	0	not available
Ethernet	1	not available
Titration		dilution ± 0.5%, non-dilution ± 0.2 %
Ion Selective		dilution ± 5.0 %, non-dilution ± 2.0 %

## Analyses For Fabs

The MICROChem is designed to operate in a wide variety of difficult chemistries.

ECD: Copper (Cu<sup>+2</sup>), Sulfuric Acid (H<sub>2</sub>SO<sub>4</sub>)

SC1 Clean: Hydrogen Peroxide (H<sub>2</sub>O<sub>2</sub>), Ammonium Hydroxide (NH<sub>4</sub>OH)

SPM Etch: Hydrogen Peroxide (H<sub>2</sub>O<sub>2</sub>), Sulfuric Acid (H<sub>2</sub>SO<sub>4</sub>)

MAE: Nitric Acid (HNO<sub>3</sub>), Hydrofluoric Acid (HF)

BOE Etch: Ammonium Hydroxide (NH<sub>4</sub>OH), Ammonium Fluoride (NH<sub>4</sub>F)

ITO Etch: Hydrochloric Acid (HCl), Nitric Acid (HNO<sub>3</sub>)

Hot Phos: Phosphoric Acid (H<sub>3</sub>PO<sub>4</sub>)

KOH: Potassium Hydroxide (KOH)

**Ask NEXTChem to see if we can automate your chemical analysis!**