

# **NEXTChem Process Analyzers, Inc.**

## **On-Line Ferrous Iron**

***Industry: Metal Plating, Metal Finishing and Chemical***

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Sample Filtration is eliminated, in samples with high solids. For samples requiring dilution  $\leq 2$ mm particles can easily be handled. For non-dilution samples  $\leq 6$ mm particles pose no problem. No other system can match this rugged design.

NEXTChem Analyzers can provide accuracy only matched by the most precise laboratory equipment. Our reagent precision pumps deliver titrants with  $\pm 0.001$  mL reproducibility. Potentiometric analyses are utilized thus eliminating errors caused by electrode drift.



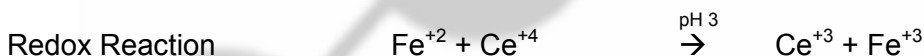
## ***Analysis of Ferrous Iron***

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The concentration of Ferrous Iron is determined by a redox titration. Ceric sulfate is the titrant and the endpoint is determined with an ORP electrode.

### ***Reactions:***

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### ***Reagents:***

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0.1 N Ceric Sulfate w/ 2N Sulfuric Acid, 6 N Sulfuric Acid

### ***Sensor:***

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ORP Electrode

### ***Detection Limits / Interferences:***

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Dilution: 192,500 – 38 ppm

Non-Dilution: 366 – 0 ppm (lower detection limit 1 ppm)

Interferences: Redox Agents

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