

CASE STUDY

HYDRISEQ 1750

CHEMISTRY FROM HYDRITE KEEPS
CUSTOMER WITHIN PERMITTED ZINC LEVELS

Hydrite finds solution to heavy metal removal at
plating facility.



RESULTS

Reliable and stable
effluent zinc readings.

Zinc reduced to
0.14 mg/l with
Hydriseq 1750 versus
a hydroxide
precipitation control
sample result of
2.17 mg/l at pH 9.8.

Zinc level brought
within permit level.

Hydriseq 1750 - Non-toxic, heavy metal precipitant
Facility Type - Zinc phosphate metal finishing and paint facility

CHALLENGE

Wastewater consisted of zinc phosphate mixed with acid pickle, alkaline cleaners and rinse water at a 10 gpm flow rate. The equipment comprised of an equalization tank, neutralization tank, flocculation mix tank, lamella clarifier and plate and frame sludge press. Zinc effluent discharge levels above state permit levels of 2.61 mg/l daily max and 1.48 mg/l monthly average.

OBJECTIVE

Reduce zinc effluent levels by feeding Hydriseq 1750 in addition to hydroxide precipitation, coagulation and flocculation.

SOLUTION

Add Hydriseq 1750 to an area of good mixing with a minimum retention time of 5 minutes with pH level of 8 to 10. Feed prior to flocculant polymer addition. Typical dosage is 100-200 ppm or 0.1-0.2 gallons of Hydriseq 1750 per 1000 gallons of wastewater.

FIELD TEST DATA

Product	Dosage (ppm)	Zinc (Mg/l)	pH
Control	---	2.170	9.8
Hydriseq 1750	100	0.278	9.8
Hydriseq 1750	200	0.136	9.8

Providing Creative Solutions

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