

# ZLD (ZERO-LIQUID DISCHARGE)



## **Description:**

**One of the ways to reduce water consumption and industrial wastewater recycling is ZLD (Zero-Liquid Discharge) system.**

**Zero liquid discharge means the recovery of 100% of water from wastewater, which includes wastewater thickeners and crystallizers, and the basis of its work is evaporation while using thermal energies and converting wastewater into pure water and solid salt, which can be buried or used in different industries.**

**ZLD is not only a technology but also an engineering thinking and creativity.**

**For construction of ZLD, experienced industrial people with a long history of working in water and wastewater treatment systems are required.**





# **Advantages of ZLD**

**Production of high quality water same as  
distilled water with TDS less than 50**

**High efficiency of 87-95%**

**Lower investment cost compared to foreign  
models**

**Lower operating and energy costs compared to foreign  
models**

**No need for chemicals and pre-treatment**

**Maintains its effectiveness against changes in all types  
of pollution**

**Using produced salt in industry**

# Application of ZLD

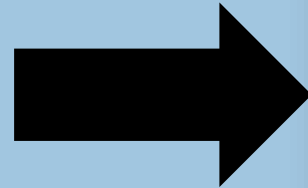
Full and maximum recycling of:

❑ Food, textile, pharmaceutical and... wastewater

❑ Produced sewage of power plants, refineries, steel, etc.

❑ Wastewater from reverse osmosis systems

❑ Leachate





# Test Results of Pilot of Textile and Dyeing Industries:

ISO 9001:2008  
ISO 14001:2004  
ISO 18001:2007  
ISO/IEC 17025:2005

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WASTEWATER CHEMISTRY & PHYSICS LABORATORY  
WASTEWATER ANALYSIS-F-433-23090

APPLICANT:  
SAMPLING PLACE AND SOURCE:  
SAMPLING DATE:  
RECEIVE DATE:  
TEST DATE:  
FREE DESIGUAL CHORINE:  
REF. No:

تاریخ نمونه برداری: 1403/02/16  
تاریخ دریافت نمونه: 1403/02/16  
تاریخ آزمایش: 1403/02/16  
کار کار باقی مانده: 32066 / 1

Test / Unit	Result	Unit	Method	Uncertainty
Chlorine (mg/L)	11	mg/L	APHA 4500-Cl-19	±0.5
COO (mg/L)	24.10	mg/L	APHA 4500-Cl-19	±0.5

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SPECIFIC CONDITION SAMPLE:  
REMARK:  
STATEMENT: In case of sample collecting by the customer, the results are valid only for this sample.

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Produced water from ZLD	Raw Sewage	Test
0.7	3250	COD (mg/l o2)
21	34166	Color (Pt/co)
26	36810	TDS (mg/l)

 **Textile Factory**

Produced water from ZLD	Raw Sewage	Test
24.1	5800	COD (mg/l o2)
31	13167	Color (Pt/co)
39	95510	TDS (mg/l)

 **Dyeing Factory**





**THANK YOU FOR YOUR ATTENTION!**

