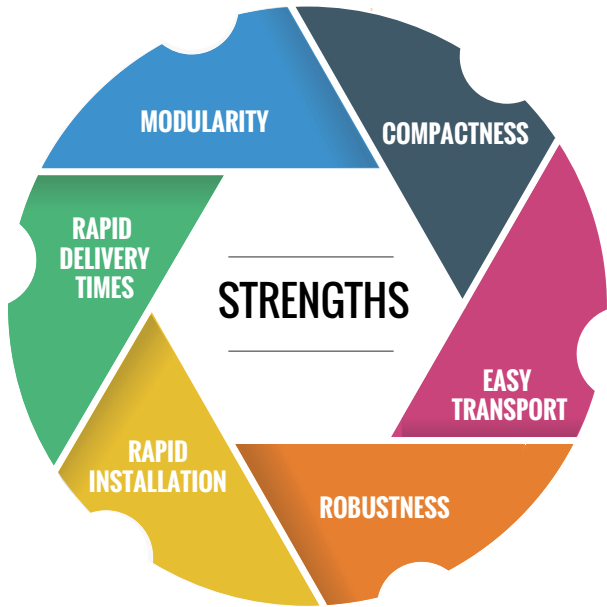


PERFORMANCE OF RECOVERY PLANTS

The standard size of the recovery plants in containers is 1000 m3/day, modular in multiple parallel lines, based on needs.

The main characteristics of the waste water and those recovered for reuse are outlined in the following table:



CHARACTERISTICS OF TREATED WASTE WATER						
PARAMETER	UNITE MEASUREMENT	PURE WATER (*)	Output MBR/UF	Output RO 2 st.	Output RO 3 st.	Output RO 4 st.
pH		7 ÷ 8	7 ÷ 8	5,5 ÷ 6,5	5,5 ÷ 6,5	5,5 ÷ 6,5
Temperature	°C	< 40	< 40	unchanged	unchanged	unchanged
COD	mg/L	< 160	≤ 100	trace	trace	trace
BOD5	mg/L	≤ 30	≤ 5	trace	trace	trace
Suspended Solids (TSS)	mg/L	≤ 50	≤ 1	0	0	0
Dissolved Solids (TDS)	mg/L	≤ 6.000	≤ 6.000	≤ 180	≤ 300	≤ 300
Oil and Grease	mg/L	< 1	trace	0	0	0
Hydrocarbons	mg/L	trace	trace	0	0	0
Heavy Metals	mg/L	trace	trace	0	0	0
RECOVERY (**)				65 ÷ 70%	70 ÷ 82%	82 ÷ 90%

(*) Limits on input to the recovery plant

(**) Depending on TDS and other specific parameters



IDRO REUSE COMPACT PLANTS TO RECOVER WASTE WATER



IDRO REUSE COMPACT PLANTS TO RECOVERY WASTE WATER

The compact plants for recovery and reuse of waste water are tertiary treatment modules created in containers, transportable via land or sea, easily installed, with accessory works in concrete reduced to the minimum. The Idra Reuse modules, installed downstream of the purification plants, allow recovery of drainage water with different qualities based on their purpose for reuse: from irrigation to reuse in production processes.

The Idro Reuse solution is particularly ideal in cases where the spaces available are reduced, or in the presence of a waste water purification system where reuse is necessary of the water due to water scarcity or high disposal costs (strict limits on drainage water).

The Idro Reuse compact plants for waste water recovery were designed to be modular and therefore to treat various percentages of water based on reuse needs.

They are ideal solutions for the industrial sector, especially where water consumption is very high as is the case in the textile industry.

SECTION OF IDRO REUSE MODULES FOR WASTE WATER REUSE

DESIGN AND OPTIMISATION OF EXISTING PLANT

Based on the type of waste water to treat and the intended use of the recovered water, one or more sections can be installed. Standard sections guarantee improved quality; multiple parallel sections increase the fraction of recovery.



The first phase that Idra Group proposes to implement, independent of the quality or quantity of the water you want to use, is the efficiency of the existing purification system.

Efficiency will be obtained through evaluation/ improvement of the existing screening, or by installing a microfiltration system after it of the raw waste water.

The microfiltration systems of Idra Group were designed for this purpose, optimised in the dimensions and composed of continuously operating discs that separate and extract all the particles with dimensions over 200 microns from the waste water.

SECTIONS OF IDRO REUSE PLANTS IN CONTAINER FOR WASTE WATER REUSE

- Quartzite filtration and disinfection
- Ultrafiltration and chemical products dosing units
- 2-stage reverse osmosis for chemical products dosing units
- 3-stage reverse osmosis
- 4-stage reverse osmosis
- Technical premises

Where possible, as a variant, the existing biological treatment plant can be modified in a modern MBR system, increasing the flow rate and purification efficiency, and then installing the only section for reverse osmosis without other pre-treatments.

The Idro Reuse system can be created using remote monitoring systems that allow remote verification of the main operating and signalling parameters by mobile phone of any alarms.

IDRO REUSE plants by Idro Group can be manufactured with remote monitoring systems that allow remote supervision of the main operating parameters and signalling of any alarms on the system.



IDROREUSE IDEAL SOLUTIONS IN CASE OF:

- **REDUCED SPACES**
- **WATER SCARCITY**
- **OTHER DISPOSAL COSTS**
- **STRICT LIMITS FOR DRAINAGE WATER**

 **INSTALLATION
START-UP**

 **TRAINING**

 **MANUALS IN LANGUAGE**

MADE IN ITALY

100% quality

