Algeria Soft Drink Factory Selects DOW™ Ultrafiltration SFD-2880 for Water Treatment System expansion

Fast Facts

Project
Water treatment system expansion

Location
Bejaia, Algeria

End User
IFRI Soft Drinks Factory

OEM
Hytec Industrie

Manufacturer name
Adh2oc Industrial

Capacity
375 m3/h (UF);
250 m3/h (RO)

Start Up
Original 3 DOW UF new lines+ RO system (2013) and New expanded UF + RO system (2016)

Challenge

The water treatment system of the soft drink factory was an ultrafiltration (UF) train installed in 2013, featuring Dow's competitor's UF modules. The end user was not satisfactory about the system, complaining about the poor operational performance and high cost of the replacement and spares. Meanwhile the OEM and end user were not extremely knowledgeable in UF. They were in search for highly reliable, operationally easy technology.

Solution

- To address these challenges, Hytec Industrie engaged Adh2oc Industrial for design, engineering, installation, supervision and commissioning services to upgrade the UF train. The OEM selected DOW™ Ultrafiltration products to replace the existing UF modules supplied by Dow's competitor. Adh2oc's proposal included modifying the cleaning sequences in order to keep operation as automatic as possible and reduce the frequency of manual operations (e.g. intensive Cleaning in Place - CIP). In that sense, Backwash (BW) and Short Cleaning in Place (Short CIP) are performed regularly.
- Membrane equipment included 60 DOW™ Ultrafiltration SFD-2880 modules along with DOW™HRLE-440i RO elements. The UF train produces 375 m^3/h of total net ultrafiltration flow, and the RO system downstream consists of 3 lines in a 2-stage configuration to produce 250 m^3/h of permeate at 70% recovery rate.

Results

DOW™ Ultrafiltration's higher operating efficiency and productivity enabled the end-user to reduce the CIP to save daily operational expense. Also Dow UF's high performance ensures the stable and safe operation, helping the end-user reduce the cost of replacing/changing spares.

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