

MUNICIPAL WASTEWATER TREATMENT PLANT

Bridge City, TX, USA

MODEL OF DEHYDRATOR

MDQ-354(2) CL

START OF OPERATION

2020 June

ISSUE

In the plant sludge drying beds for sludge dewatering were used. This method required lots of labor and constant maintenance. Due to this reason, the customer was looking for the efficient and minimal maintenance solution.

SOLUTION

On-site pilot tests were carried out, using mobile dewatering unit MDQ-201, to find the best dewatering technology. According to the test results EKOTON offered sludge dewatering complex based on Multi-disc Screw Press Dehydrator MDQ-354(2) CL. The complex includes – influent sludge feed pump, polymer feeder, three screw conveyors and service platform.

RESULTS

TYPE OF SLUDGE	aerobically digested excess sludge
OPERATING TIME	up to 8 h/day, 3 days/week
UNIT SLUDGE SUPPLY	up to 9 (18*) m ³ /h up to 320 (400*) kg DS/h
INLET SLUDGE DS CONTENT	3.5 %
CAKE DS CONTENT	approx. 22-23 %
POLYMER CONSUMPTION	14.6 l/tonDS
TSS CONCENTRATION IN FILTRATE	200 ppm
DS CAPTURE RATE	99.4 %

**in case of adding two additional dewatering drums.*

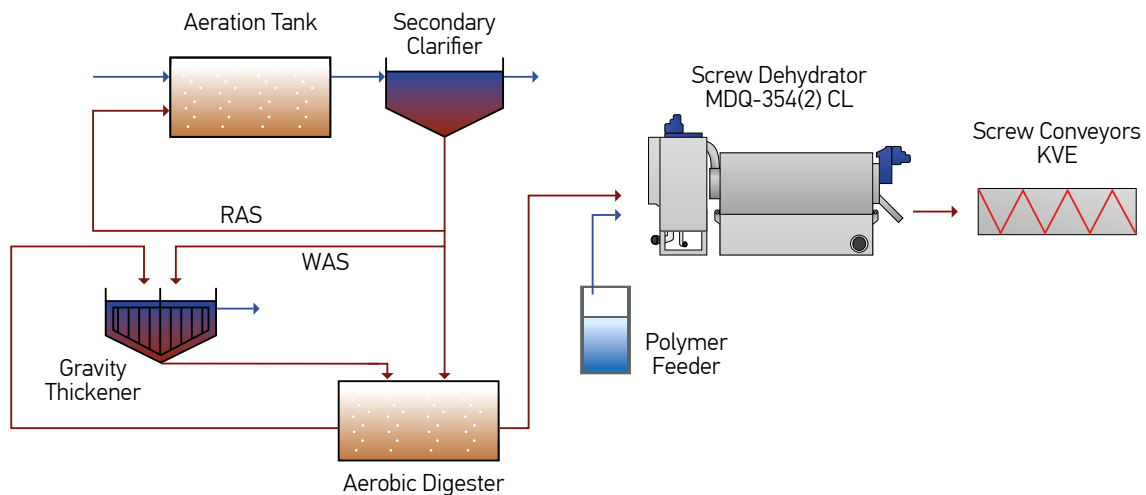


Figure 1. Technological scheme

