

MUNICIPAL WASTEWATER TREATMENT PLANT

Webster, Texas, USA

MODEL OF DEHYDRATOR

MDQ-354 C

START OF OPERATION

2018 August

ISSUE

The customer had an interest in reducing sludge disposal costs in their municipal wastewater treatment plant by obtaining lower maintenance costs and lower energy consumption. The plant treats wastewater from nearby residential areas and numerous local restaurants and generates about 120 gallons of aerobically digested sludge from their digesters per minute.

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 C. The complex includes – macerator, polymer feeder and service platform.

RESULTS

TYPE OF SLUDGE	aerobically stabilized excess sludge
OPERATING TIME	9-10 h/day, daily
UNIT SLUDGE SUPPLY	20 m ³ /h 310 kg DS/h
INLET SLUDGE DS CONTENT	1.3-1.5 %
CAKE DS CONTENT	16-18 %
POLYMER CONSUMPTION	8.8 g/kgDS
TSS CONCENTRATION IN FILTRATE	70 ppm
DS CAPTURE RATE	up to 99.7 %

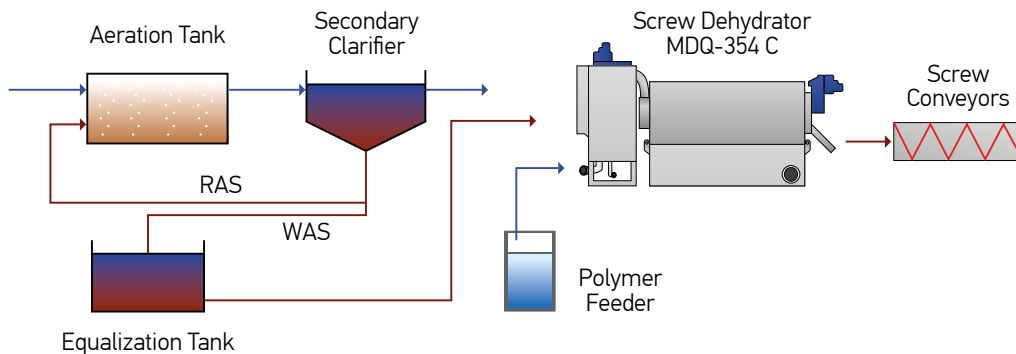


Figure 1. Technological scheme

