

# EKOTON TUBE AIR DIFFUSERS AT CHENGDU TIANFU INTERNATIONAL AIRPORT NEW CITY

Chengdu, China

<b>EQUIPMENT</b>	EKOTON Tube Air Diffusers
<b>SITE</b>	International Airport New City, Chengdu Tianfu
<b>YEAR OF COMMISSIONING</b>	2021

## INTRODUCTION:

Chengdu Tianfu International Airport New City project is located in the Eastern New District of Chengdu, China. The Eastern New District was established on April 28, 2020. On March 4, 2020 Chengdu proposed 308.6 billion yuan (47.7 billion USD) to be invested in the construction of the Eastern New District of Chengdu within the next 10 years. Among them, the investment in 2020 will reach 28.9 billion yuan (4.4 billion USD).

By 2025 major infrastructure and public service facilities will cover the New District of Tianfu International Airport's aviation hub is going to be completed by that time as well. Strategic emerging industries, modern service industries, legal governance will be established. The permanent population of the district is estimated to reach 800,000 and the regional GDP - 48 billion yuan.

Airport New City, relying on Chengdu Tianfu International Airport, gathers the functions of aviation economy, international finance, international trade, technological innovation, international education and cultural exchange. According to the development plan, 15 municipal WWTPs will be built in the Airport New City. EKOTON tube air diffusers are used at No. 6, No. 9 and No. 15 water plants.



Pic. 1. During installation

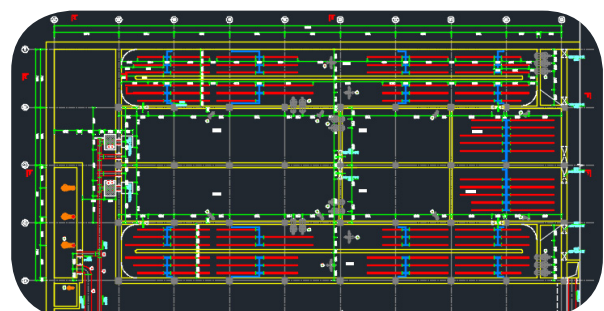
## EKOTON TUBE AIR DIFFUSERS PARAMETERS

<b>OUTER DIAMETER</b>	120 mm (Threaded to DN100)
<b>TOTAL LENGTH</b>	1020/2025 mm
<b>DISPERSER LENGTH</b>	940/1945 mm
<b>DRY WEIGHT</b>	4/8 kg
<b>DESIGN AIR FLOW</b>	8-25/16-50 Nm <sup>3</sup> /h

## PROJECT OVERVIEW

Chengdu Tianfu Airport New City **WWTP no. 6** is located to the west of Jiangxi River and to the south of the New Airport Expressway. It's estimated capacity is 40 000 m<sup>3</sup>/day. It is planned to serve mainly for innovative manufacturing, with the service area of about 1057 ha;

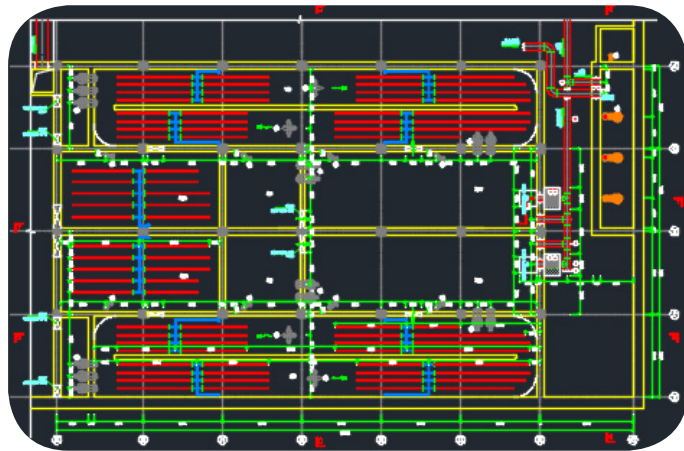
<b>AERATION SYSTEM LENGTH</b>	1 550 r.m.
<b>AIR VOLUME OF THE BLOWERS</b>	14 040 m <sup>3</sup> /h (3 in use; 1 stand-by)
<b>AIR VOLUME PER DIFFUSER</b>	12 m <sup>3</sup> /(m <sup>3</sup> /h/m)
<b>TANK BOTTOM COVERAGE</b>	10,4%
<b>DISTRIBUTION OF AERATORS</b>	0.6 m of aerator per 1 m <sup>2</sup> of the tank bottom
<b>SOTE</b>	47 % (SSOTE 6.6% depth 7.2 m)
<b>PRESSURE LOSS</b>	80 mm H <sub>2</sub> O



Pic. 2. WWTP no. 6

The **9th WWTP's** capacity is 32 000 m<sup>3</sup>/day. It is located in the Jiangxi Henan Group West Area on the south side of the Jiangxi River in the Airport Industrial New City. It is planned for economics, high-end industries, hotel services, medical education, administrative offices and residences. The service area is about 1450 ha;

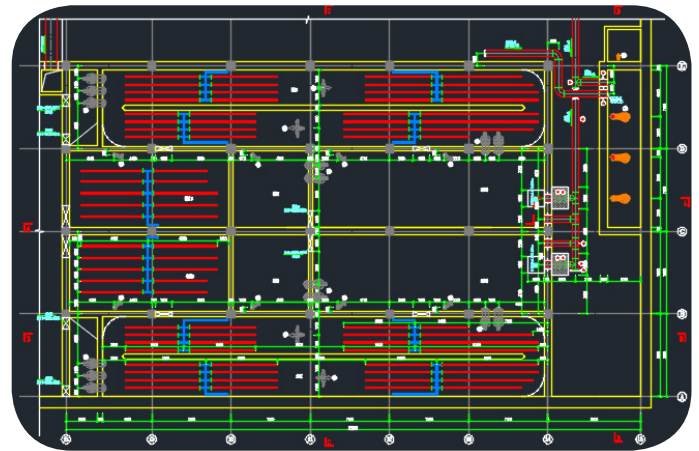
<b>AERATION SYSTEM LENGTH</b>	1 190 r.m.
<b>AIR VOLUME OF THE BLOWERS</b>	9 000 m <sup>3</sup> /h (3 in use; 1 stand-by)
<b>AIR VOLUME PER DIFFUSER</b>	9 m <sup>3</sup> /(m <sup>3</sup> /h/m)
<b>TANK BOTTOM COVERAGE</b>	13,1%
<b>DISTRIBUTION OF AERATORS</b>	0.7 m of aerator per 1 m <sup>2</sup> of the tank bottom
<b>SOTE</b>	49 % (SSOTE 6.9% depth 7.2m)
<b>PRESSURE LOSS</b>	75 mm H <sub>2</sub> O



Pic. 3. WWTP no. 9

The **15th WWTP** has a design of 30,000 m<sup>3</sup>/day. It is located to the east of Jiangxi River in the starting area of the Airport Industrial New City, on both sides of the New Airport Expressway, and close to the new Chengdu Airport, which is currently under construction. It is planned for industrial and logistic purposes. The service area is about 581.6 ha.

<b>AERATION SYSTEM LENGTH</b>	1 250 r.m.
<b>AIR VOLUME OF THE BLOWERS</b>	10 800 m <sup>3</sup> /h (3 in use; 1 stand-by)
<b>AIR VOLUME PER DIFFUSER</b>	10 m <sup>3</sup> /(m <sup>3</sup> /h/m)
<b>TANK BOTTOM COVERAGE</b>	12,7%
<b>DISTRIBUTION OF AERATORS</b>	0.7 m of aerator per 1 m <sup>2</sup> of the tank bottom
<b>SOTE</b>	50 % (SSOTE 7% depth 7.2 m)
<b>PRESSURE LOSS</b>	76 mm H <sub>2</sub> O



Pic. 4. WWTP no. 15