

PHILIP MORRIS INT. – Tobacco industry

Highly flexible ETP for the Otopeni factory, Romania



The state-of-the-art factory of Philip Morris International (PMI) in Otopeni, located very close to Bucharest, was built in 1997. In the years 2018/19 the production capacity was extended by a new process line. The facility for treatment of industrial and domestic effluents no longer met

the new requirements with regard to volumes and pollution loads in line with the expansion.

WABAG was awarded to install a new WWTP serving the new production line and has designed a tailor-made multi-stage treatment plant employing advanced

technologies including the WABAG FLUOPUR® process to meet all requirements.

The plant is designed for a total capacity of 1.600 m³/day (800 m³/d of process water + 800 m³/d of utility water). Both streams are suitable for discharge or reuse.

Features

- Turnkey project
- Tailor-made design employing advanced technologies based on FLUOPUR® technology
- Plant capacity: 1,600 m³/d
- EPC & O&M



Client
PHILIP MORRIS International (PMI)

Type of contract
EPC – turnkey execution
O&M contract

Award of contract
November 2017

Commissioning
March 2019

Capacity
1,600 m³/d

Wastewater
Effluents from tobacco industry & utilities wastewater

Technology
DAF, FLUOPUR® (IFAS),
GAC-Filtration

Scope
Design & engineering, equipment supply, installation, commissioning and start-up.

O&M
01.05.2019 – 30.4.2022

Main Components/ Process Steps

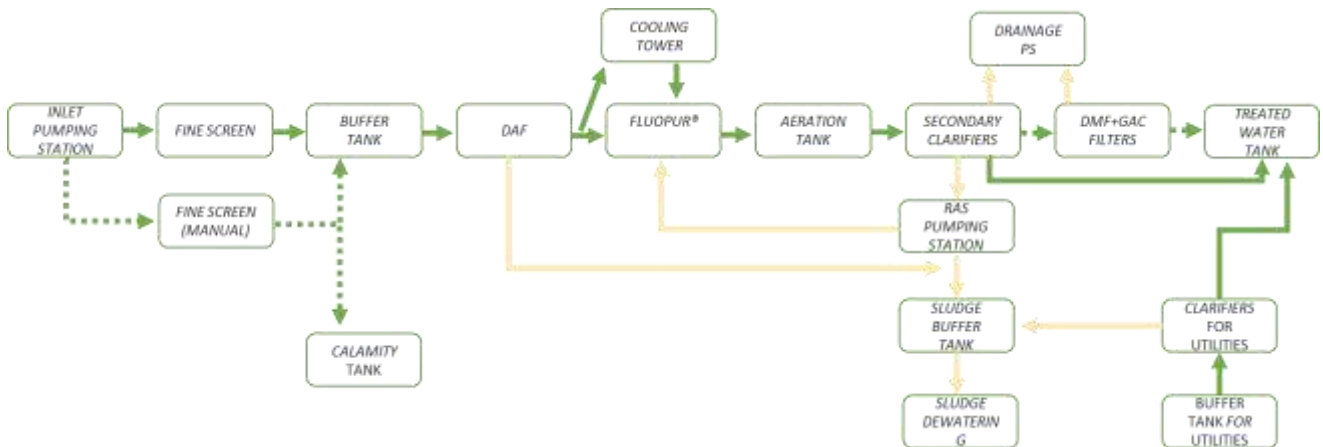
- Dissolved Air Flotation (DAF)
- Cooling system
- Biological treatment by moving bed process - FLUOPUR® (IFAS)
- Sludge treatment
- Dual Media Filter
- Activated Carbon (GAC) Filtration
- Odor control system



Parameter	Units	Inlet – Design values		Effluent limits *)
		Waste-water	Utilities Wastewater	
Flow rate	m ³ /d	800	800	
pH		4 - 9	6.5 - 9	6.5-9.0
TSS	mg/L	2,100	84	28
COD	mg/L	5,600	#	100
BOD ₅	mg/L	3,100	#	20

*) 20% under local water quality limits (NTPA001)

The FLUOPUR® technology guarantees a stable process together with high flexibility to manage fluctuations with regard to wastewater loads and volumes.



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