



Water & Wastewater Treatment Capabilities Overview

Contact

SRIHARI [Director - MENA]

M : +971 56 115 6701

T : +971 4 554 2049

E : srihari@mechartes.com

Himanshu [Key Account Manager]

M : +971 56 115 6702

T : +971 4 554 2049

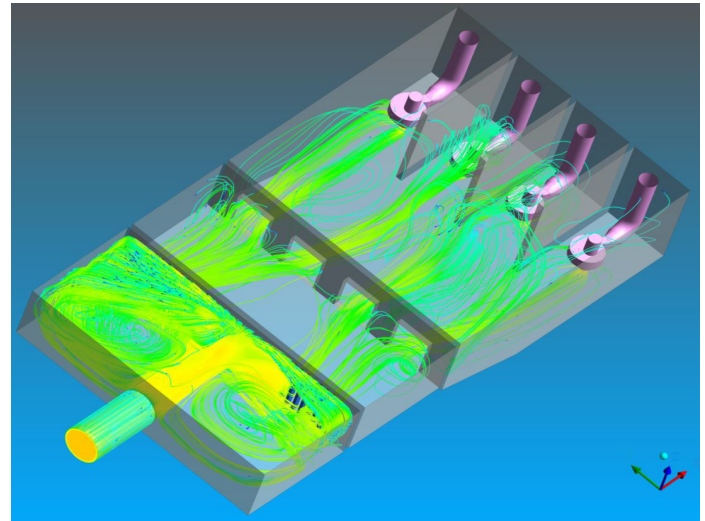
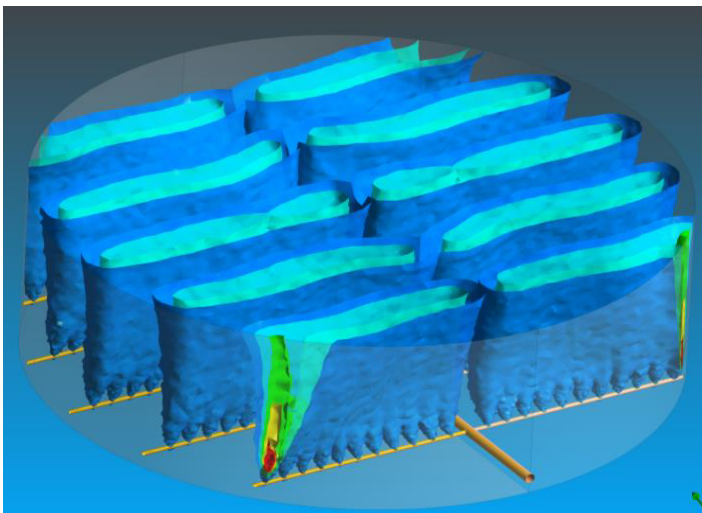
E : himanshu@mechartes.com

Engineering Services For Water & Waste Water Treatment Plants

Mechartés specializes in providing advanced engineering services for drinking water, industrial water & municipal wastewater treatment plants using analysis tools like Computational Fluid Dynamics (CFD) , Finite Element Analysis(FEA) to verify the various processes and equipment in the treatment plants.

Application of CFD Modelling

- Water intake & outlet channel facilities design
- Flow assessment & optimization of flow splitting
- Pumping Station optimization.
- Flow distribution through filters & screens inside the tanks & channels
- Analysis of Sedimentation tanks to verify & improve the flow profiles and to study the sludge settlement
- Analysis of Coagulation & Flocculation to verify the process of floc formation
- Residence time distribution (RTD) CFD analysis of water treatment basins & retention tanks
- Analysis of Aeration process to verify the dissolved oxygen concentration in the aeration tanks and activated sludge systems
- Analysis of mixing process in mixing tanks to study the performance & optimize the mixing process
- Analysis of primary clarifier's, secondary clarifier's and digester's



Application of Finite Element Analysis

- Pipe Stress Analysis and Support Design
- Surge Analysis
- Hydraulic Analysis
- Acoustics Study
- Structural Fire Analysis
- Seismic Analysis
- Vibration Analysis
- Mechanical and Structural Analysis
- Pulsation Analysis

