

# دستگاه مه افکن

## SpadFlow Fog Cannon

▶ Mist Cannon

▶ Evaporator

▶ Dust Suppression

◀ خنک سازی

◀ افزایش تبخیر سطحی

◀ غبار نشان



**SPADFLOW**  
گروه صنعتی اسپاد فلو  
SPRAYING SYSTEMS AND NOZZLES

دانش بنیان

SCAN ME



۰۲۱ ۲۲۸۵۷۷۸۰ ☎

۰۳۱ ۳۴۲۰۷۳۷۷ ☎

۰۹۹۱۲۱۴۴۵۷۰ 📞

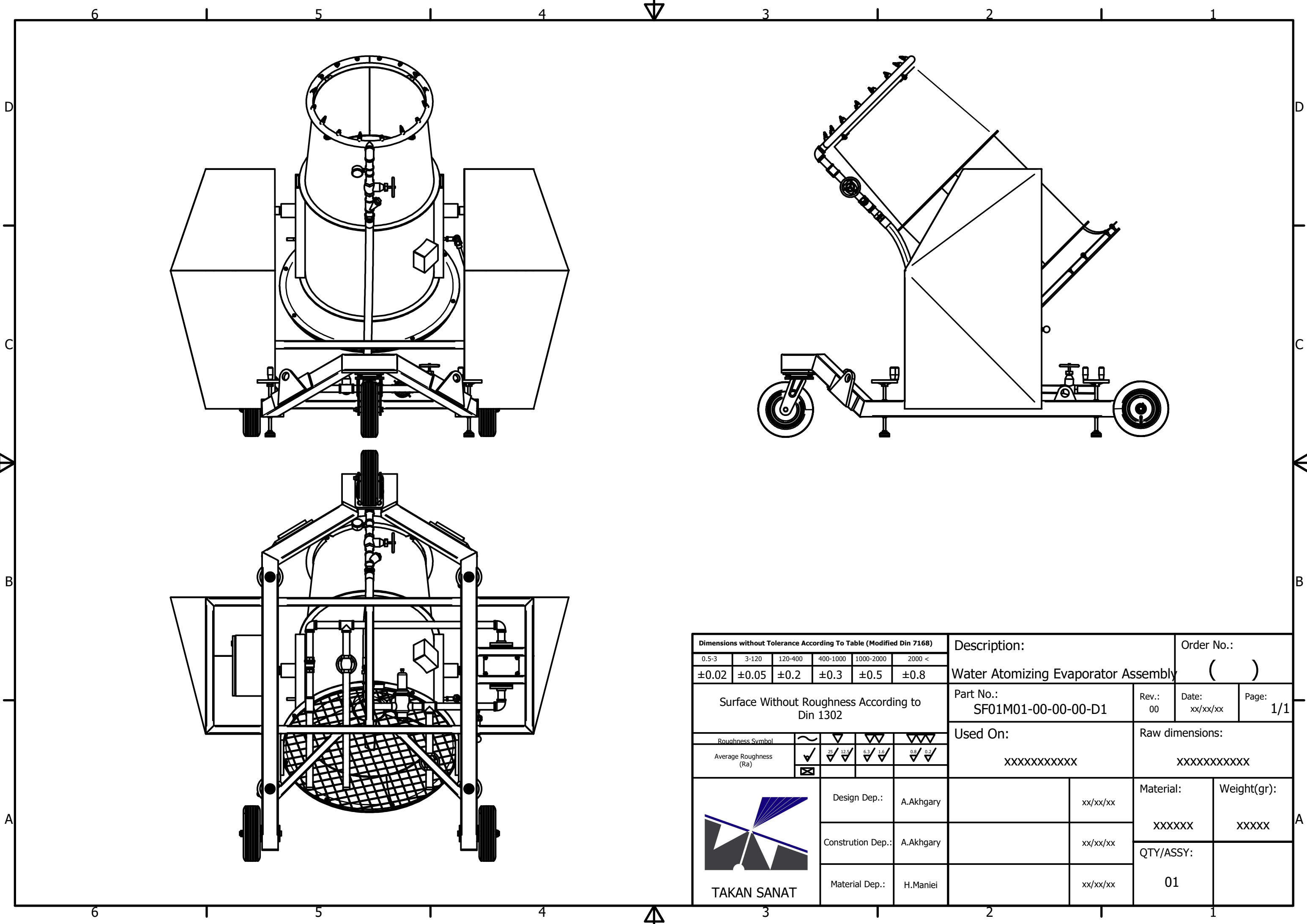
تهران، پاسدارن 📍

اصفهان، امام خمینی

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THE POWER OF FLOW IN YOUR HANDS

قدرت جریان در دست شماست



Dimensions without Tolerance According To Table (Modified Din 7168)

0.5-3	3-120	120-400	400-1000	1000-2000	2000 <
±0.02	±0.05	±0.2	±0.3	±0.5	±0.8

Surface Without Roughness According to Din 1302

Roughness Symbol	~	▽	▽▽	▽▽▽
Average Roughness (Ra)	✓	25/12.5	6.3/1.6	0.8/0.2
	☒			



Description:		Order No.:	
Water Atomizing Evaporator Assembly		( )	
Part No.:	Rev.:	Date:	Page:
SF01M01-00-00-00-D1	00	xx/xx/xx	1/1
Used On:	Raw dimensions:		
XXXXXXXXXXXX	XXXXXXXXXXXX		
Design Dep.:	A.Akhgari	xx/xx/xx	Material:
Construction Dep.:	A.Akhgari	xx/xx/xx	Weight(gr):
Material Dep.:	H.Maniei	xx/xx/xx	QTY/ASSY:
			01

# SPADFLOW Evaporator Cannon

## OVERVIEW

SPADFLOW evaporator cannon is designed to efficiently vaporize water into the atmosphere using high-volume air input, ensuring rapid evaporation at high velocity. The system continuously replenishes the evaporation field with low-humidity ambient air, maximizing effectiveness. Utilizing large-orifice spiral vaporizing technology, SPADFLOW evaporators offer low-maintenance, non-fouling operation. With an exceptionally high air-to-water ratio, they create ideal conditions for optimal "flash evaporation," performing effectively even in high-humidity environments. The current model is cost-effective, lightweight, and compact. Equipped with off-road wheels, it is easy to transport and can be set up within hours. This system not only provides a safer and more comfortable environment but also reduces labor costs, making it an efficient and reliable solution.

## Application

Waste Water

ETP, RO Reject

Tailing Dams, Production Water, Rainstrom water

## Technical Specification

<b>General Specs</b>	
Jet Fan	30 inch Diameter Aluminum Fan with 10 Blades – Axial Type
Fan Airflow	25000 m <sup>3</sup> /hr – 30000 m <sup>3</sup> /hr
Fan Power	15 kW Soft Start, Rotating at 2950 RPM
Pump Power	2 kW Vertical Multistage Pump
Water Consumption	50 – 120 L/min
Nozzle Quantity	6 pcs. Stainless Steel Full Cone Nozzles Arranged in 1x Cluster
Effective Throw Range	30m – 40m (without wind)
Effective Spray Coverage	250 m <sup>2</sup> – 300 m <sup>2</sup> (without wind)
Droplet Size range	50 μm – 200 μm (mean 70)
<b>Pump and Water System</b>	
Piping Material incl. Pump	Stainless Steel 316
Water Supply Connection	1 1/4" Flange Conn. PN16
Working Pressure	5-15 bar
Filtration	Removable, stainless steel, 180 micron filter
System Drainage	Manual Drain Valve
Pressure Monitoring	Pressure Gauge Set to Detect Water Supply, Pump and Filter Pressures
<b>Chassis</b>	
Vertical Tilt Angle	0 – 45
Oscillation	Optional
Gross Weight	700 kg incl. wheelset
Dimension (L×W×H)	2.5m × 2.5m × 2.5m incl. wheelset
Mounting	Strong Chassis with 3 off-road Wheels with Height Adjustable Stabilizers
Machin Material	Carbon Steel with Electrostatic Color spray
<b>Electrical Controls</b>	
Power Supply	3×380V 50Hz
Power Connection	Inlet Plug Three Phase 32 A – 5 pin
Start-Up Current	64 A
Electrical Controls	Lockable, IP66 Control Panel with Pump and Fan on/off Switch, Emergency stop button
Operating temp	+5°C to +50°
Warranty	6 Month Warranty on All Parts and Workmanship

# SPADFLOW Dust Cannon

## Overview

SPADFLOW dust cannons produce a fine mist of water droplets, propelled forward by a high-flow jet fan. Depending on local wind conditions, the water can reach up to 40 meters. Research indicates that when water droplets are approximately the same size as dust particles, the likelihood of collision is significantly increased. Conversely, if the water droplets are too large, they create an airstream that pushes dust particles away, reducing the effectiveness of dust suppression.

## Application

Demolition  
Bulk Materials Handling  
Crushing and Screening  
Stockpiles  
Mine Blast Dust  
Conveyor Discharge Chutes

## Technical Specification

<b>General Specs</b>	
Jet Fan	27 inch Diameter Aluminum Fan with 10 Blades – Axial Type
Fan Airflow	20000 m <sup>3</sup> /hr – 25000 m <sup>3</sup> /hr
Fan Power	7.5 kW Soft Start, Rotating at 2950 RPM
Pump Power	2 kW Vertical Multistage Pump
Water Consumption	5 – 20 L/min
Nozzle Quantity	10 pcs. Stainless Steel Full Cone Nozzles Arranged in 1x Cluster
Effective Throw Range	More than 20 m (without wind)
Effective Spray Coverage	150 m <sup>2</sup> – 200 m <sup>2</sup> (without wind)
Droplet Size range	50 μm – 150 μm (mean 60)
<b>Pump and Water System</b>	
Piping Material incl. Pump	Stainless Steel 316
Water Supply Connection	3/4" Flange Conn. PN16
Working Pressure	7-15 bar
Filtration	Removable, stainless steel, 400 micron filter
System Drainage	Manual Drain Valve
Pressure Monitoring	Pressure Gauge Set to Detect Water Supply, Pump and Filter Pressures
<b>Chassis</b>	
Vertical Tilt Angle	0 – 45
Osilation	Optional
Gross Weight	500 kg incl. wheelset
Dimension (L×W×H)	2 m × 2m × 2m incl. wheelset
Mounting	Strong Chassis with 3 off-road Wheels with Height Adjustable Stabilizers
Machin Material	Carbon Steel with Electrostatic Color spray
<b>Electrical Controls</b>	
Power Supply	3×380V 50Hz
Power Connection	Inlet Plug Three Phase 15 A – 5 pin
Start-Up Current	42 A
Electrical Controls	Lockable, IP66 Control Panel with Pump and Fan on/off Switch, Emergency stop button
Operating temp	+5°C to +50°
Warranty	6 Month Warranty on All Parts and Workmanship

## شبیه‌سازی برد پاشش SPADFLOW Fog Cannon با نرم افزار COMSOL Multiphysics

در این تصویر از طریق شبیه سازی سیالاتی توانایی جت فن مه افکن اسپادفلو در پرتاب هوا مورد ارزیابی قرار گرفته است. این تجهیز قابلیت پرتاب هوا تا بیش از ۴۰ متر را دارا می‌باشد.

Slice: Velocity magnitude (m/s)

