

# MixRite Industrial applications

### **About TEFEN**

Tefen is a leading manufacturer of environmental friendly, non-electric volumetric equipment and flow products since 1973.

Tefen's MixRite line of water driven proportional dosing pumps, are used to ensure precise additive injection directly into the water or fluid line under various flow rates, feed ratios and different ranges of pressure. These injectors are extremely durable, manufactured from engineered composite materials to withstand the rigors of the elements, as well as chemicals and acids for injection.

Tefen offers the MixRite pumps for a variety of applications such as medication for livestock, cleaning or disinfecting fluid lines, sanitizing water systems, car wash, cost effective fertilizing, and pest control for crops and plants. Tefen's injectors are adaptable simple to use and cost effective, while creating a long-lasting solution for your needs.

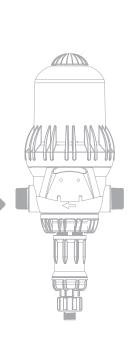
The Tefen MixRite water powered dosing pump is a simple, user friendly and ingenious system that has demonstrated its value in over 90 countries.

Tefen is certified by ISO 9001 2008













# **MixRite** | Dosing Pumps



MixRite proportioning dosing pumps can be applied successfully for various industrial applications.

The MixRite pumps can offer accurate dosing, side by side with simplicity, solely working by water pressure, without the need of using electric energy.

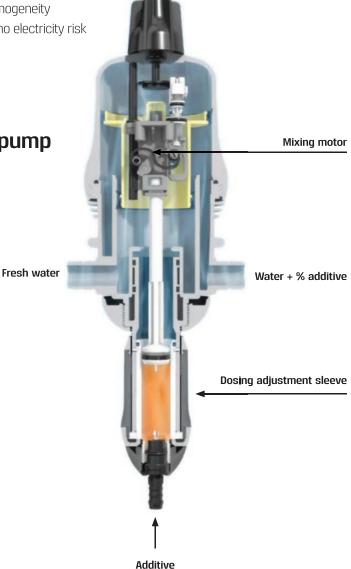
### Advantages of using MixRite

- Hydraulic, Volumetric and non electric
- Dosing proportional to flowrate
- Precision: Surface quality optimized with no waste
- Excellent dosing repeatability and homogeneity Easy to install, operate and maintain, no electricity risk

### Adjusting the MixRite pump

The injection rate is set up manually by rotating the sleeve to the desired proportion. The amount of injected concentrate is proportional to the amount of water flowing into the MixRite pump.





# **MixRite** Industrial applications

### **Industrial applications**

### **Water Treatment**

#### Chlorination for rural areas or emergencies:

- It is estimated that 2.6 billion people do not have satisfactory access to drinking water
- The production of drinking water in rural areas or emergencies requires reliable equipment that is suitable for extreme conditions such as lack of electricity or local constraints
- Typical concentration and dosing:
  - Sodium Hypochlorite: 0.3 5 PPM
  - Chlorine Dioxide: 0.3 5 PPM
  - Hydrogen Peroxide: 1 PPM and above
- All concentration and dosing levels refer to the water content.

#### PH Control

• For PH Control there is a wide range of acids that are being used, such as: Sulphoric acid, Chloric Acid, Phosphoric acid, Nitric Acid

### Institutional Hygiene and Sanitization

#### Institutional Hygiene

Proportioning MixRite dosing pumps are widely used by institutional Hygiene application, as follows:

- With all types of chlorinated detergents with foaming agents
- With Parasitic Acids (PAA)
- With all Hydrogen peroxide concentrations

#### Sanitation

Industries under this application:

- Food processing and sanitation
- Beer line cleaning
- Operating theaters surface cleaning and disinfection
- Cleaning and Sanitary additives to be dosed and injected including glutaraldehyde and organic acids such as:
  - peracetic acid, formic acid, etc.
  - quadranary ammoniums, etc.









### **Industrial applications**

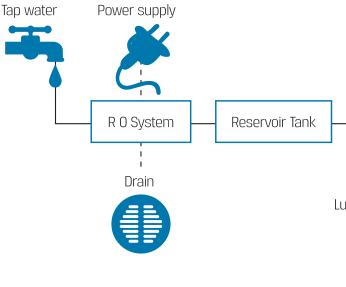
### **Metal Processing**

- Perfect for dispensing fluids. Customers uses are, for example, as follows: Cutting & Stamping, Forming, Die casting, Parts wash, Floor scrubber fill stations
- Efficient dosing and mixing during filling or adjusting operations with mineral or synthetic soluble oils or the addition of biocides and anticorrosive and emulsifying agents



Coolant mixture to the machine











# MixRite Industrial applications

### **Industrial applications**

### Car Wash

In applications such as car wash MixRite pumps are ideal

- Presoak chemicals
- Engine and tire cleaners
- Bug and tar removers
- Waxes
- Drying agents
- Foaming brush cleaners
- MixRite pumps are installed inline in the car wash control room, and can dose all liquid additive proportionally according to need
- The pump will start to work automatically, once water begins to flow in the line
- No need for any premix chemicals
- Correct concentration of fresh chemicals is promised, without any waste or leftover









### **MixRite** Dosing pumps



### MixRite 2.5 Series **Low Flow Rate**

0.1-0.9%, 0.3-2%, 0.4-4%

Water pressure

Flow Rate

Weight

Coupling

0.2 - 8 bar (2.9 - 120 psi)

7 - 2500 l/h (1.85 - 660) gal/h

1.8 kg (4 pound)

3/4"



### MixRite 3.5 Series

0.03-0.2%, 0.1-0.9%, 0.3-2%, 0.5-5%, 1-10% Water pressure

Flow Rate

Weight

Coupling

0.2 - 8 bar (2.9 - 120 psi)

10 - 3500 l/h (2.65 - 930) gal/h

1.8 kg (4 pound)

3/4"



#### MixRite TF-5

0.1-1%, 0.2-2%, 0.5-5%

Water pressure

Flow Rate

Weight

Coupling

1 - 8 bar (14.7 - 120 PSI)

0.02 - 5 m3/h (0.8 - 22 GPM)

5 kg (11 pound)

1" or 32 mm

\* Legs available upon special request



### MixRite TF-10

0.1-1%, 0.2-2%, 1-5%

Water pressure

1 - 8 bar (14.7 - 120 PSI)

Flow Rate

0.05 - 10 m3/h (2 - 45 GPM)

Weight

7.38 kg (16.27 pound)

Coupling

1.5" or 50 mm

\* Legs available upon special request

# **Table Range**

Spec \type	Model	Flow rate Range	Pressure Range	Dosage rate %	Dosage rate	Connectors Dia. Thread	Min-max injection Rate per Hour
MIXRITE 1	0.1% - 1%	20-1000 l/h 0.088 to 4.4 gpm	0.2-8 bar 2.9-120 psi	0.1%-1%	1:1000 - 1:100	3/4" BSPT	0.02 - 10 l/h 0.005 - 2.64 gph
	0.2% - 2%	20-1000 l/h 0.088 to 4.4 gpm	0.2-8 bar 2.9-120 psi	0.2%-2%	1:500 - 1:50	3/4" BSPT	0.04 - 20 l/h 0.016 - 5.3 gph
	0.4% - 4%	30-1000 l/h 0.088 to 4.4 gpm	0.2-8 bar 2.9-120 psi	0.4%-4%	1:250 - 1:25	3/4" BSPT	0.12 - 40 l/h 0.032 - 10.57 gph
TE 2.5	0.1% - 0.9%	7-2500 l/h 0.03 to 11 gpm	0.2-8 bar 2.9-120 psi	0.1%-0.9%	1:1000 - 1:111	3/4" BSPT	0.007 - 22.5 l/h 0.002 - 5.95 gph
	0.3% - 2%	7-2500 l/h 0.03 to 11 gpm	0.2-8 bar 2.9-120 psi	0.3%-2%	1:333 - 1:50	3/4" BSPT	0.021 - 50 l/h 0.006 - 13.22 gph
	0.4% - 4%	7-2500 l/h 0.03 to 11 gpm	0.2-8 bar 2.9-120 psi	0.4%-4%	1:250 - 1:25	3/4" BSPT	0.028 - 100 l/h 0.007 - 26.5 gph
	3% - 10%	50-2500 l/h 0.22 to 11 gpm	0.2-8 bar 2.9-120 psi	3%-10%	1:33.3 - 1:10	3/4" BSPT	1.5 - 250 l/h 0.4 - 66.14 gph
MIXRITE	0.3% - 2% by-pass	20-2500 l/h 0.088 to 11 gpm	0.2-8 bar 2.9-120 psi	0.3%-2%	1:333 - 1:50	3/4" BSPT	0.06 - 50 l/h 0.016 - 13.22 gph
_	0.4% - 4% by-pass	20-2500 l/h 0.088 to 11 gpm	0.2-8 bar 2.9-120 psi	0.4%-4%	1:250 - 1:25	3/4" BSPT	0.08 - 100 l/h 0.021 - 26.5 gph
	0.3% - 2% Internal by-pass	20-2500 l/h 0.088 to 11 gpm	0.2-8 bar 2.9-120 psi	0.3%-2%	1:333 - 1:50	3/4" BSPT	0.06 - 50 l/h 0.016 - 13.22 gph
	0.4% - 4% Internal by-pass	20-2500 l/h 0.088 to 11 gpm	0.2-8 bar 2.9-120 psi	0.4%-4%	1:250 - 1:25	3/4" BSPT	0.08 - 100 l/h 0.021 - 26.5 gph
MIXRITE 3.5	0.03% - 0.2%	10-3500 l/h 0.044 to 15.5 gpm	0.2-8 bar 2.9-120 psi	0.03%-0.2%	1:3333 - 1:500	3/4" BSPT	0.003 - 7 l/h 1.85 gph
	0.1% - 0.9%	10-3500 l/h 0.044 to 15.5 gpm	0.2-8 bar 2.9-120 psi	0.1%-0.9%	1:1000 - 1:111	3/4" BSPT	0.01 -31.5 l/h 0.003 -8.32 gph
	0.3% - 2%	10-3500 l/h 0.044 to 15.5 gpm	0.2-8 bar 2.9-120 psi	0.3%-2%	1:333 - 1:50	3/4" BSPT	0.03 - 70 l/h 0.008 -18.5 gph
	0.5% - 5%	10-3500 l/h 0.044 to 15.5 gpm	0.2-8 bar 2.9-120 psi	0.5%-5%	1:200 - 1:20	3/4" BSPT	0.05 - 175 l/h 0.013 -46.23 gph
	1% - 10%	50-3500 l/h 0.22 to 15.5 gpm	0.2-8 bar 2.9-120 psi	1%-10%	1:100 - 1:10	3/4" BSPT	0.5 - 350 l/h 0.132 -92.5 gph
TF 5	0.1 - 1%	0.02-5 m³/h 0.088- 22 gpm	1-8 bar 14.7-120 psi	0.1%- 1%	1:1000 - 1:100	1"	0.02 - 50 l/h 0.005 -13.2 gph
	0.2 - 2%	0.02-5 m³/h 0.088- 22 gpm	1-8 bar 14.7-120 psi	0.2% - 2%	1:500 - 1:50	1"	0.04 - 100 l/h 0.011 -26.42 gph
	0.5 - 5%	0.02-5 m³/h 0.088- 22 gpm	1-8 bar 14.7-120 psi	0.5% - 5%	1:200 - 1:20	1"	0.1 - 250 l/h 0.026 -66.06 gph
TF 10	0.1 - 1%	0.05 - 100 l/h 0.013 -26.5 gph	1-8 bar 14.7-120 psi	0.1%- 1%	1:1000 - 1:100	1½"	0.05 - 100 l/h 0.013 -26.5 gph
	0.2 - 2%	0.1 - 200 l/h 0.026 -53 gph	1-8 bar 14.7-120 psi	0.2% - 2%	1:500 - 1:50	1½"	0.1 - 200 l/h 0.026 -53 gph
	1 - 5%	0.5 - 500 l/h 0.132 -132.3 gph	1-8 bar 14.7-120 psi	1% - 5%	1:100 - 1:20	1½"	0.5 - 500 l/h 0.132 -132.3 gph