



Engineering Company

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MixRites are very flexible water powered proportional injectors. Most of the time MixRites are used in a configuration where 100% of the water flows through the unit; however some customers want to use MixRites in **Bypass Loops** so chemical can be injected into higher flow rates. Examples of higher flow rates are large drip irrigation projects, linier irrigation systems and center pivot irrigation systems.

To inject the right amount of chemical into these **Bypass Loop** systems several questions need to be answered. How much water is flowing through the system? How much water is flowing through the MixRite? How much chemical needs to be injected?

Ounces of water flow per Click

All 2.5/500 series units and TF3	7.85
TF5	15
TF10	36
TF25	78.5

Math Formula for % of Chemical Injection in Bypass Loops

$$\frac{\text{GPM of flow through MixRite} \times \% \text{ (MixRite setting)}}{\text{Total Flow through system}} = \% \text{ of chemical mixed in total amount of water}$$

Total Flow through system

TF25 Examples

$$\frac{110 \text{ GPM} \times .05 \text{ (5\%)} = 5.5}{1200 \text{ GPM}} = .00458\%$$

1200 GPM

$$\frac{50 \text{ GPM} \times .05 \text{ (5\%)} = 2.5}{1200 \text{ GPM}} = .00208\%$$

1200 GPM

TF5 Examples

$$\frac{10 \text{ GPM} \times .001 \text{ (.01\%)} = .01}{450 \text{ GPM}} = .00002222\%$$

450 GPM

$$\frac{110 \text{ GPM} \times .001 \text{ (.01\%)} = .11}{1200 \text{ GPM}} = .00009\%$$

1200 GPM

$$\frac{50 \text{ GPM} \times .02 \text{ (2\%)} = 1}{600 \text{ GPM}} = .00166\%$$

600 GPM

$$\frac{20 \text{ GPM} \times .001 \text{ (.01\%)} = .02}{450 \text{ GPM}} = .00004444\%$$

450 GPM

Ratio and %: 1:20,000 ratio = .00005% 1:50,000 = .00002% 8:1,000 = .008% 1:256 = .0039%

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DESIGNERS AND MANUFACTURERS OF AUTOMATIC DISPENSING DEVICES

