METAL PROCESSING

Industry

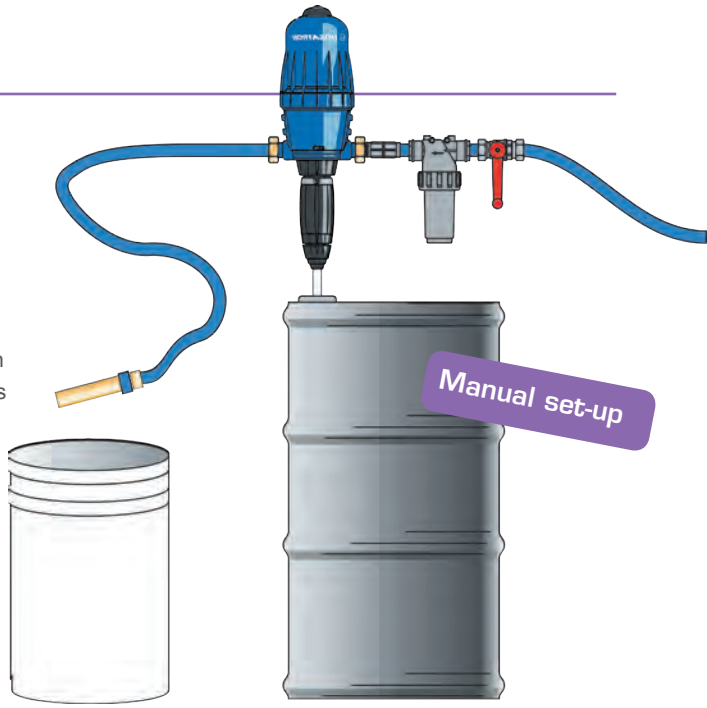
Dosing and proportional mixing of water-soluble oils

DOSATRON®

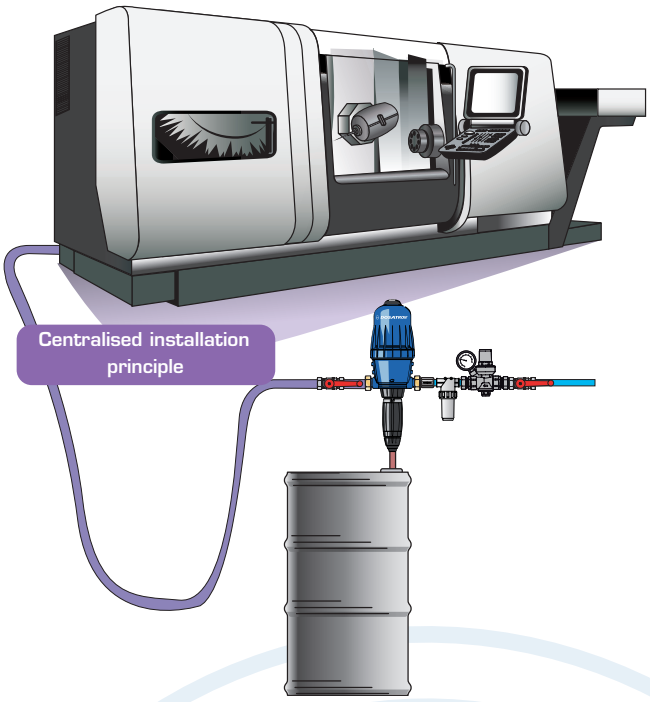
Because life is powered by water®

Dosatron Solution

Incorporated in the water circuit, the Dosatron pump uses the pressure and water flow as its sole power source. Driven in this way, the Dosatron can dose various types of additive directly into the water feed tanks of one or more conventional or NC machines. The precision and reliability of the Dosatron pump eliminates any risk of errors in the dosing and preparation of products such as emulsions and solutions. The pump is not sensitive to the inherent variations (pressure, flow-rate, temperature, intake height and viscosity) of a fluid.
Constant emphasis on quality at all stages in the manufacture of the pump, both with regard to the materials used and the test and inspection procedures applied, ensures an optimum response to the requirements of metalworking machine tool users.



- Cooling, lubrication and protection.
- Improved tool life.
- Saving energy consumption.
- Better machining performance.
- Increase the service life of the coolant.
- Easy to install, operate and maintain (no electrical risks).



DOSATRON ADVANTAGES

Hydraulic, volumetric and non-electric.

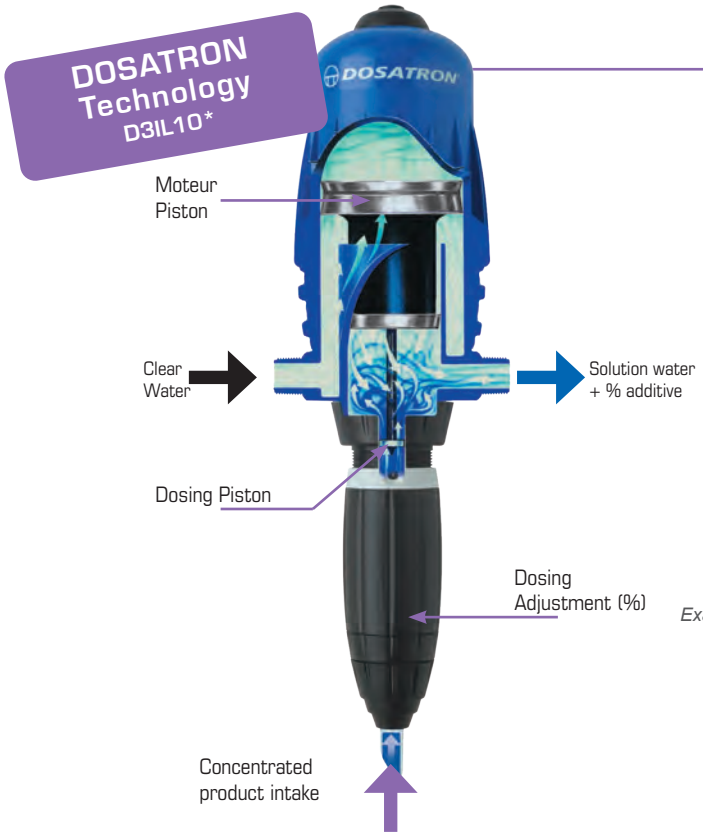
Accurate and proportional dosing to water flow-rate.

Excellent dosing repeatability and final solution homogeneity.

Emulsion delivered directly downstream by water power.

Easy dosing adjustment at any time.

Self-priming up to 4M.



Pump selection

The appropriate Dosatron pump is selected firstly according to filling rate and secondly to dosing rate.

• Calculation of flow-rate requirement

Flow-rate is determined according to the required tank volume and filling time.

Example: 25-litre tank to be filled in one minute = flow-rate 1,500 l/h.

In this case you can select your pump in the 3 m^3/h range.

If you wish to supply a number of tanks/machines simultaneously, or fill the tanks faster (if your available water flow-rate makes this possible), you should select a model in the 4.5 or 8 m^3/h range.

• Choice of the dosing rate

Particularity: proportional volumetric dosing

The Dosatron pump operates on the proportional volumetric dosing principle: the quantity of product injected is proportional to the quantity of water passing through the Dosatron pump.

Example: A 10% setting gives a solution of 10 parts concentrated product to 100 parts water

In absolute % terms, this gives 9.09% (10/110).

This feature of the Dosatron system must be taken into account when selecting your model.

**This Dosatron model is ideal for filling and adjusting, and answers a recurrent demand from professional users.*

Recommendations for installation

- Installation and utilisation in a drinking water circuit demands compliance with national standards and regulations in force.
- The system must incorporate a stop valve or non-return valve upstream from the injection system, to avoid any risk of pollution of the water source.
- Include a 300 micron filter (50 mesh) up-stream from the dosing pump, according to supply water quality.
- The level in the dosing product container must never be higher than the pump (risk of siphoning).

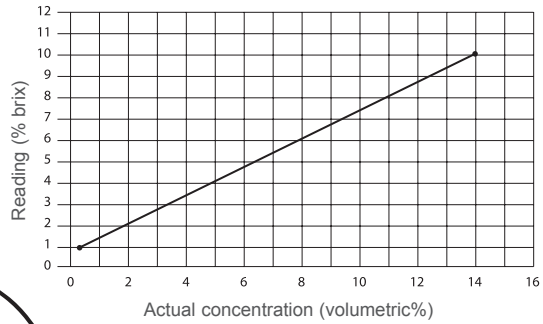
Do you check your emulsion with a refractometer?

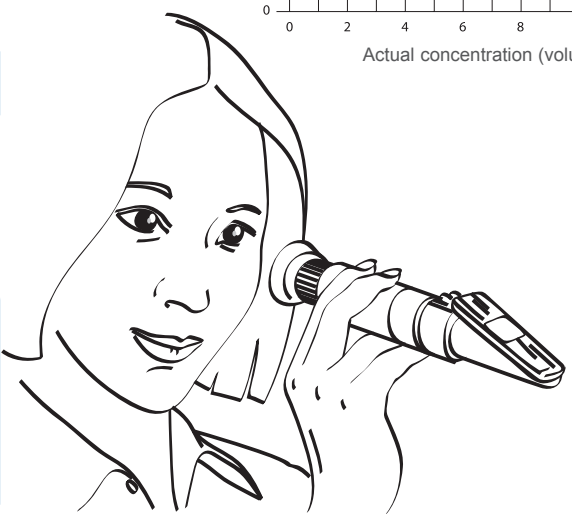
The initial % Brix readings given by your refractometer are not volumetric % values.

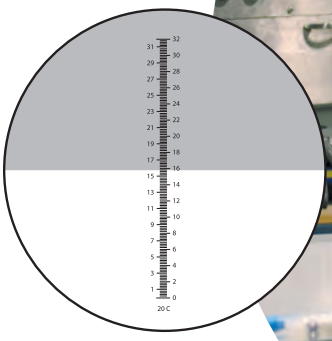
Consequently, you must:

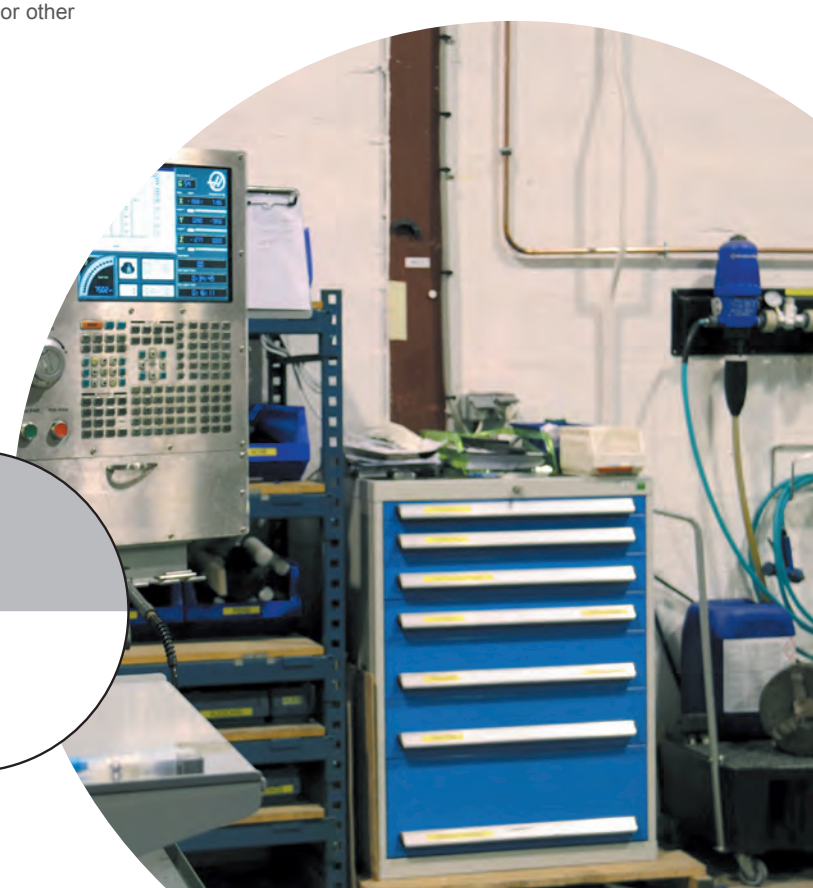
- either calibrate your refractometer,
- or check the equivalence curve generally given by your oil or other Viscous concentrate supplier in its technical data sheet.

Example: equivalence curve at 20°C









METAL PROCESSING - Soluble oils

D3RE25IE

An optimised design
A polypropylene pump casing
Highly ergonomic dosage adjustment
The availability of macro dosages
One injection at the exit

serie : AF VF IE

option : B.P PVDF V

Injection range **5 - 25 % [1:20 - 1:4]**
Water flow range **10 l/h - 2 m³/h**
Operating water pressure **0.5 - 4 bar**
Concentrated additive injection **0.5 - 500 l/h**
Stroke volume ~ **0.53 l**
Connections **NPT-BSP 20x27 - 3/4"M**
Hose **PVC 16x22 - Lg 1.75 m**

D3IL10

An optimised design
A polypropylene pump casing
Highly ergonomic dosage adjustment
The availability of macro dosages
One injection at the exit

Injection range **1 - 10 % [1:100 - 1:10]**
Water flow range **10 l/h - 3 m³/h**
Operating water pressure **0.5 - 6 bar**
Concentrated additive injection **0.1 - 300 l/h**
Stroke volume ~ **0.53 l**
Connections **NPT-BSP 20x27 - 3/4"M**
Hose **PVC 16x22 - Lg 2.75 m**

serie : VF

option : B.P V

Options : A wide range of dosing pumps and an equally wide choice of options (high flow-rates, micro-dosing, high chemical resistance materials, etc.) enable us to meet your needs.

- VF — Seals for acids, oils, odour-control concentrates...
- AF — Seals for alkaline concentrates
- K — Seals for highly concentrated acids (> 15 %) – systematically PVDF.
- B.P — (Integrated by-pass) system for manual activation of the additive suction (on) and stop (off)
- PVDF — Housing for highly concentrated acids and other aggressive concentrates.
- V — Kit for viscous concentrate recommended for more than 200 or 400 cPs (depending on model).
- IE — External Injection

D3RE2

Injection range
0.2 - 2% [1:500 - 1:50]
Water flow range
10 l/h - 3 m³/h
Operating water pressure
0.3 - 6 bar
Concentrated additive injection
0.02 - 60 l/h

D3RE5

Injection range
0.5 - 5% [1:200 - 1:20]
Water flow range
10 l/h - 3 m³/h
Operating water pressure
0.3 - 6 bar
Concentrated additive injection
0.05 - 150 l/h

OTHER APPLICATIONS

- Die casting
- Vibro-abrasion
- Water jet cutting (polymer dosing)
- Part degreasing and cleaning
- Surface treatment
- Vulcanisation...

Protective kit assembled on wall plate (without Dosatron)

KIT AKI7

Protective kit, not assembled, without wall plate

ADAPTATOR

PDI861M Adaptor for metallic can/drum:
PDI861P adaptator for plastic can/drum:

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