pronic
In-die solutions

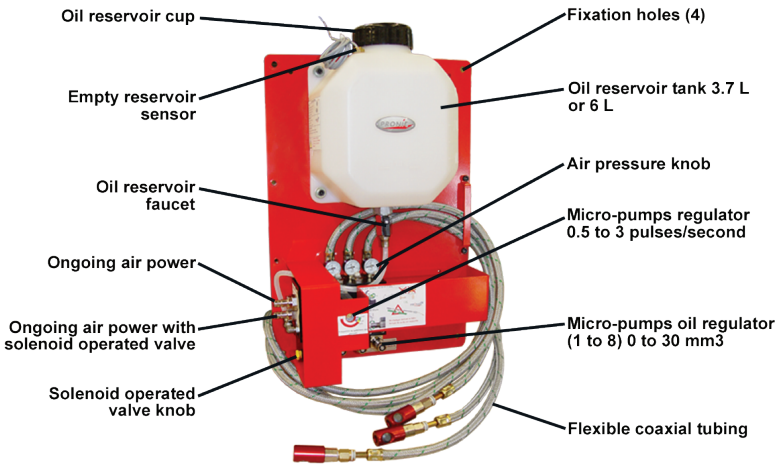
Micro-lubrication system v2

Reduce your oil consumption while improving your tap life

Because added tap life is directly dependent upon the supply of the lubrication, PRONIC has developed a complete system to handle the process.

Equipped with quick fitting connections, this system is very compact, accurate and environmental-friendly, while preventing wasted oil by ensuring that a very low level of oil is being disbursed onto the taps.

Principle



The micro-pumps push the oil into the micro-lubrication nozzles then an air flux sprays micro-droplet directly on the working zone of the tap. Depending on the hardness of the material to be tapped, the oil volume and number of pulses per cycle can be adjusted. The oil consumption is so low that it is not necessary to plan on recycling the lubricant.

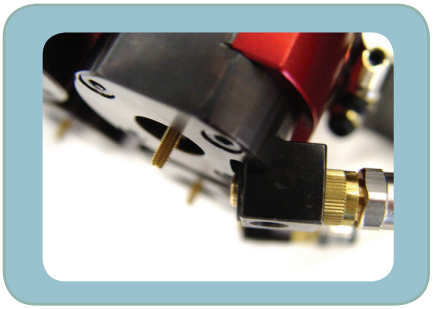
PRONIC lubrication system is flexible. You can create your own configuration, choose the number of pumps and the oil reservoir capacity (3.7L or 6L).

The system is available in 8 standard configurations, from 1 to 3 pumps with a 3.7L reservoir or 4 to 8 pumps with a 6L reservoir, and 2 lengths of coaxial armored tubing are available, 3 or 5 meters.

- Tapping performances increased (higher speed).
- Longer tap life.
- Mimimize wasted oil.
- Save on lubricant.
- Parts almost clean when stamped.
- No extra cost for recycling the lubricant.
- No pollution.
- Quick return on investment (few months).
- Flexible System.
- Convenient quick-disconnect fittings.

What's new with the micro-lubrication system v2?

The new lubrication system has been developped upon our customer's requirements.

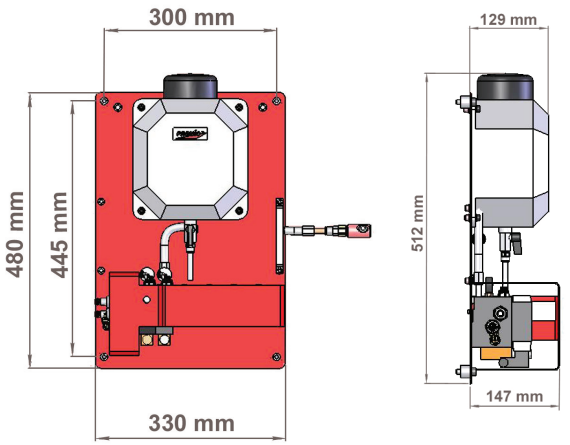


Thus, the new one has a numerous improvements:

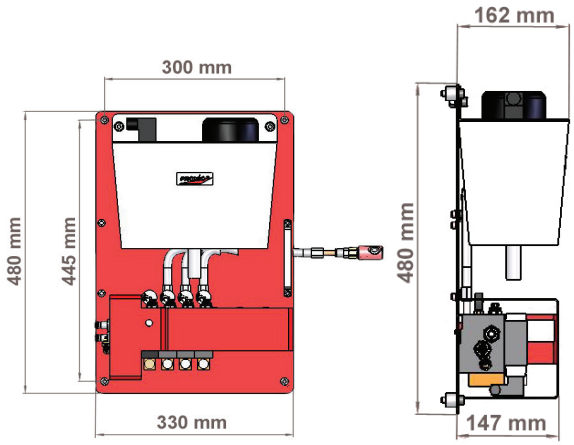
- New oil reservoir 6L instead of 3.7 L.
- The lubrication system is flexible. You can create your own configuration by ordering pump sets.
- Up to 8 pumps available instead of 6.
- Reliable by thicker internal tubes.
- New position of the frequency generator (avoiding oil pollution).
- Each pump is equipped with a monitored manometer for air control.
- Easy set-up.

Dimensions

1 to 3 pumps 3.7 L oil reservoir



4 to 8 pumps 6 L oil reservoir



Features

General

- Number of modules: 1 to 8
- Min. air inlet: 800 Nl/min
  . dry and filtered air (5µm)
  . Air inlet pressure: 5 to 8 bars
- Micropump delivery rate
  . Setting with thumb wheel (small): 7 to 30 mm^3 / stroke
- Max. pump working frequency: 3 strokes / s
- Operating temperature: +10°C to +50°C

General air solenoid valve

- Power supply
  . 24V DC - 1,6W (standard)
  . 115V AC - 50/60Hz - 2VA (1,5W) (option)
- Protection: IP65
- Mechanical life: 1,5 x 10^6 switching operations

Frequency generator

- Mechanical life: >1 x 10^7 switching operations.
- Frequency: 0,04 to 3 Hz.

Oil reservoir

3,7 Liters:

- Empty reservoir sensor: NO
- Voltage max:
  250 V 50/60Hz
- Cutting power: 10 VA
- Intensity max: 0.5 A
- Protection:
  IP 65 with connector

6 Liters:

- Empty reservoir sensor: NO
- Voltage max:
  250 V 50/60Hz
- Cutting power: 50 VA
- Intensity max: 0.7 A
- Protection:
  IP 65 with connector

Recommended Lubricants

This lubrication system can deliver mineral or synthetic oil, ecological oil, with an effective viscosity between 10 and 400 mm^2/s at operating temperature.

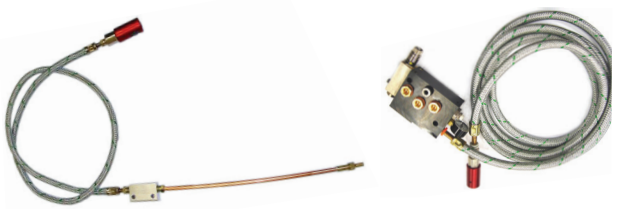
Vanishing lubricants have to contain 5 to 10 % of greasy susbance.

Specifications

- 1 to 8 pumps
- Individual adjustments for the micro pumps (lubricant and air)
- 2 oil reservoirs available: 3,7 L or 6 L
- Flexible coaxial tubing
- Quick fitting connectors for the PRONIC Tapping Units
- Empty reservoir sensor
- Synchronized with the press motion (solenoid operated-valve)
- Output up to 180 ppm (pulses per minute)

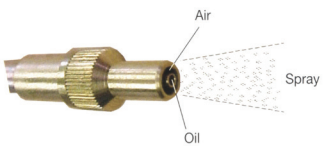
Options

- 6 L Oil Reservoir with empty contactor (for the Lubrication System 1 to 3 pumps)
- Additional equipped pumps
- External nozzle
- Solenoid valve power supply 115V
- 5 m flexible coaxial tubing (instead of 3 meters).



Dual fluid projection features helps to protect the environment

Provides lubrication droplets ranging from 200 to 600µm diameter without dispersal.



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