

## Air Blowers Nozzles



This class of air nozzles is expressly designed for the various Air Blowing applications using compressed air or technical gas fluids for cooling and manufacturing operations and are available in many different versions about performances, thread sizes, materials, air flow-rates, regulations compliant as EC n.1935/2004, EU 10/2011, FDA reg.21 CFR, OSHA, DIN EN ISO 9612.

The Spraytecs Air Nozzles BW series for compressed air are specialized in **CNC machine tools cooling, to substitute** (or to add a great improving to liquid cooling system)) with a concentrate compressed air cooling system, **the existent liquid cooling system** during high temperatures reached during themachining operations, as milling, cutting, drilling, surfaces grinding, tools sharpening, routing and tires grinding.



The main target is the increasing of tool life due to the lower working temperatures, but as direct consequence there is also a great save of money in the CNC machine tool exercise costs on yearly basis.

Compressed air pressures in the range 2 bar/8 bar (30 psi/120 psi) give great cooling results with the right installation nozzle set solutions, in the larger number of machine tools.

There are several advantages to consider the substitution of the existing liquid cooling with a compressed air cooling in your CNC machines:

- **all machined parts are absolutely clean and dry when come out your machine**
- **no need, no costs for operations to clean and dry the just manufactured parts and therefore they are immediately available to be packaged and shipped**
- **no dust or oil traces in the machine internal vanes**
- **no liquids to be managed when needed, with lost time and expenses related**
- **no spaces, recipients, machines needed to stock/manage new and exhaust coolants**
- **no dangerous vapors, fumes or coolant contacts with operators, improving work conditions**
- **more value for your cleaned scraps amount when you will sale it**
- **no risks and production delays/damages for cooling system default, because there are no parts with possible wearing**
- **no toxicity in coolant fluid, no water needed, air is an environment friendly solution**
- **no corrosion and no wet in machined materials**
- **high energy to move the chips out of the way of the machine tool cutter**

Materials and production are all strictly of West Europe origin, with certificates available.

## Air Impact Nozzles



These general purpose cooling nozzles are suitable where a concentrate air beam must hit with energy a small area. Typical application is the cooling of very hot materials surfaces, vanes and holes, as metal alloys, aluminium, magnesium alloys, etc.

Moreover are available suitable accessories as nipples and flexible-pipes of different lengths to fit at the best your cooling direction needs.

## Air Impact Micro Nozzles



These cooling micro nozzles are suitable where a concentrated air beam must hit with energy a small area, but there is a very small space to fit the nozzles, as in the spindle head cooling vanes. Typical application is the cooling of very hot materials surfaces, vanes and holes, as metal alloys, aluminium, magnesium alloys, etc in mechanical manufacturing and robotics.

Moreover are available suitable **accessories** as **micro-nipples** and **micro-pipes** of different angles and lengths to fit at the best your cooling needs.

## Air Impact Nano Nozzles



These air cooling nano nozzles are suitable where a concentrated air beam must hit with energy a small area, but there is a very small space to fit the nozzles, as in the spindle head cooling vanes and the air jet must have a particular direction.

Typical application is the cooling of very hot materials surfaces, vanes and holes, as metal alloys, aluminium, magnesium alloys, etc in mechanical manufacturing and robotics.



Moreover are available suitable **accessories** as **micro-nipples** and **micro-pipes** of different angles and lengths to fit at the best your cooling needs.

## Air Wide Flat Jet Nozzles



These general purpose cooling nozzles are suitable where a wide, tangential flat air jet must hit a wide linear area. Typical application is the cooling/cleaning or the heating/drying of wet surfaces, bottles, recipients, dishes, etc.

Moreover are available suitable **accessories** as **nipples** and **flexible-pipes** of different lengths to fit at the best your cooling direction needs.

## Air Thermal Drop Nozzles



**The TH series** nozzles are expressly designed to obtain a significant thermal drop when the ambient temperature compressed air is canalized in the nozzle inlet and the temperature drop is obtained in the out coming compressed air (temperature decrease values between 15°C to 30°C depending from many factors, as inlet pressure and TH nozzle model).

Spraytecs TH series Air Thermal Drop nozzles can use also other gases and are suitable in all applications where an intensive focused cooling is needed, as CNC machining operations, milling, cutting, drilling, surfaces grinding, tools sharpening, routing, tires grinding, or other industry processes.

In all CNC machines and lathes currently working, it is possible to substitute the actual coolant water-chemical based in the machine cooling system, with a clean and health-friendly solution as compressed air. **Ask to your local Spraytecs Authorized Distributor for any technical advice about the cooling system substitution.**

Moreover they can be installed in an existing compressed air cooling system for the machine, where the low temperature level of the air cooling must be improved. In such case please request us our technical support to reach the best result in your application.

TH nozzles are available in different models about thread sizes, materials, air flow-rates.