

## **Characteristics**

• Auto-Adaptive system, for autoregulation of the microoil mist to have always the best aerosol quality.

- Minimum Level as standard
- Quick and easy installation, few hours needed to install on existing machines.

## Advantages

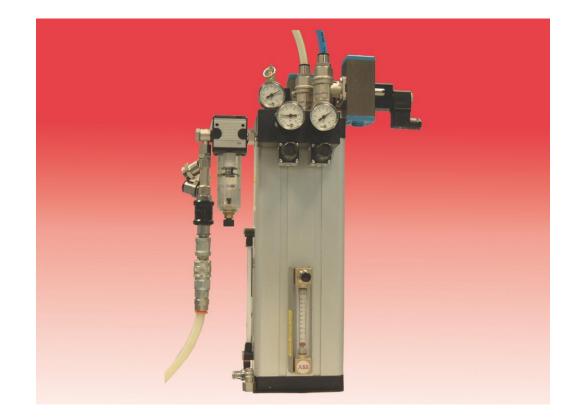
- Reduce your Cycle time
- Increase tool life: the aerosol mixture prevent machine tool overheating.
- Better surface finish: thanks to the most complete and fittest lubrication through the machine tool.
- Reduced initial investment: no high pressure or low pressure coolant tanks and pump.
  No coolant filtration

# Applications

- Near Dry-working on machine tool
- High –speed milling applications
- Applications on CNC machines.

# **MKD-Dual**

The new dimension for internal Minimal Quantity Lubrication in dry-working applications



MORE PRODUCTIVITY WITH MKD-DUAL

The **MKD-Dual minimal lubrication system** represents the solution for internal lubrication dry machining. MKD-Dual generates a thin film of aerosol that is brought directly to the tool cutting point using the existing tool-internal distribution channels. **Increase of productivity and machine tool lifetime** are the results that you can immediately touch by using MKD-Dual.

# COSTS REDUCTION ALSO FOR EXISTING MACHINES

MKD-Dual is easy to install also on machines that are already working; the installation need maximum one day of downtime.

The costs reduction is evident immediately after the installation. In fact there is no more need of high pressure tools and coolant filtration systems. It is also no more necessary to proceed to the fluid disposal with evident benefit also for the environment.

# Automatic Lubrication Systems



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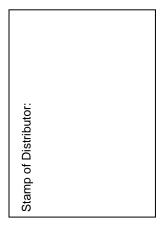
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# Auto-Adaptive System

The auto-regulation is one of the key characteristics of MKD-Dual you will not find on other aerosol generators for near dry machining. Dual Venturi based aerosol generator will automatically compensate when going from one size of tool to another avoiding the deterioration of the aerosol quality that is found when varying the linear velocity of air through the Venturi.

MKD-Dual therefore optimizes the process through an automatic adjustment of the micro-oil mist depending on the air flow – this means best aerosol quality throughout the different sizes of cutting tool and a considerable time saving on initial setup (no complex regulation).

MKD-Dual has been designed mainly for mid-high range applications– this sophisticated technology of generating an ultra thin aerosol with sub micron particle size allows the mixture to flow through the spindle during rotation at high speeds minimizing the effects of centrifugal force on the aerosol avoiding deterioration.

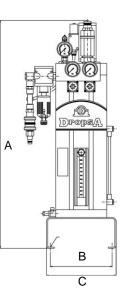
The MKD-Dual unit is provided with two outlets which can be supplied with electro-pneumatically controlled ball valves.

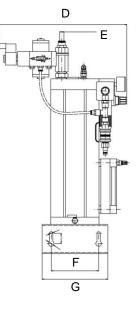
# Technical Information

## TECHNICAL CHARACTERISTICS

Air supply	Max 6 Bar (88.2 psi)
Air inlet pipe	Ø6 ÷ 10 mm (0.23 ÷ 0.4 in.)
Aerosol Outlet	Ø10 ÷ 16 mm (0.4 ÷ 0.6 in.)
Reservoir Capacity	1,8 Litres (0,40 galls)
Electro-pneumatic ball valve input voltage	24VDC 200mA

DI	MENSIONS	- 1	ИМ	(INCHES)
А	600 (23,62)		Е	Push in tube Ø 12 mm
В	160 (6,29)		F	130 (5,11)
С	180 (7,08)		G	180 (7,08)
D	360 (14,17)			





# Ordering Information

Part. No.	Description				
3135086	MKD- Dual with minimum level and with electro-valve				
3135088	MKD- Dual with minimum level, without electro-valve				
ACCESSORIES					
Part No.	Description				
3155187	Electro-valve				

CONSUMABLE				
Part No.	Description			
3226664	Olio MK 150 25 Kg.			
3226665	Olio MK 100 25 Kg.			
3225465	Olio MK Stainless 20 Kg.			