

5-MICRON FILTERING SYSTEMS

Clean – Convenient - Ecological
Fluid treatment management
in step with the most modern
machine tool technologies



For every Company that focuses on Productivity and Quality
in a Clean and Healthy work environment

PMPO



5-MICRON FILTERING SYSTEMS

APPLICATIONS

Grinding machines
Machining islands
Lathes
Lapping machines
Boring machines
Machines for working
Glass and Ceramic materials

CLEAN WORK ENVIRONMENTS FOR FIRMS WHERE PRODUCTIVITY AND QUALITY ARE PRIORITIES

ELIMINATION of bulky, stinking tanks with pollutants

ELIMINATION of lengthy and costly clean-up procedures

Considerable **SAVINGS** on NO LONGER prohibitive waste mud disposal costs

PURCHASE of large land areas

Annual **DURATION** of the emulsion, with consequent **savings** in oil and disposal costs for spent emulsions

Medium-term **CONVENIENCE** with a ROI (Return on Investment) of 1 - 3 years

TOTALLY AUTOMATED, PATENTED SYSTEM

- No use of paper, additives or other materials
- The filtering elements are self-regenerating and guaranteed effective for 3,000 - 5,000 hours
- The degree of filtering can be modified by simply changing the PLC parameters
- The system can be simultaneously employed for multiple machines (i.e. centralized system)
- The steel framework guarantees heavy duty service and work-life (stainless steel available on request)
- Remote control and management via modem

ECOLOGICAL ADVANTAGES

- Continuous oxygenation of the liquid provides bacterial control
- **No more problems with dermatitis and pathologies of bacterial or fungus origin for the operators**
- The muds cannot build up on the bottom of the tank and cause smelly stench in the lubricating-cooling liquid
- The lubricating-cooling liquid lasts an average of 12 months

QUALITY OF THE PRODUCTION

- The lubricating-cooling liquid treated in this way permits reducing attainable levels of part roughness
- The grinding wheel maintains sharp edges longer, limiting the frequency of diamond-dust treatment
- Cleaning process using a filtered liquid at high pressures permits also lengthening the life of the grinding wheels which cannot be subject to diamond-dust abrasive treatment
- In case of breakdowns, it is possible to work using decanted liquid, without having to stop production

MAINTENANCE

Extremely quick and easy

EXTRACTION CAPABILITIES FOR HOSTILE MATERIALS:

Nickel - Copper dust -
Chrome - Cast iron -
Lapping materials -
Calamine - Glass -
Ceramic material

ECOLOGICALLY CLEANED

Savings on waste mud disposal costs

It is not what you promise, but what you can deliver, and **PMPO guarantees:**
Micron-level filtering, flowrates and mud extraction

Range of systems for mud disposal:



Standard model



for hostile materials



for drying out muds (up to 90%, even for whole oil)



PRESTAZIONI

	WHOLE OIL				EMULSIONS			
	EGS 200 C	EGS 400 C	EGS 800 C	EGS 1000 C	EGS 200	EGS 400	EGS 800	EGS 1000
Degree of nominal filtering	5÷15µ	5÷15µ	5÷15µ	5÷15µ	5÷15µ	5÷15µ	5÷15µ	5÷15µ
Emission of clean lubricant-coolants	120 L/min	250 L/min	400 L/min	800 L/min	200 L/min	400 L/min	600 L/min	1000 L/min
Waste mud extraction capabilities	8 Kg/hr	10 Kg/hr	15 Kg/hr	20 Kg/hr	8 Kg/hr	10 Kg/hr	15 Kg/hr	20 Kg/hr
Re-generation time for the filtering elements	30 seconds	30 seconds	30 seconds	30 seconds	30 seconds	30 seconds	30 seconds	30 seconds
Daily tolerance for the quantity of extraneous oil (over a 10 hour workshift)	—	—	—	—	1 Kg	1 Kg	1 Kg	1 Kg

5 MICRON Filtering