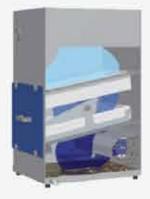


HANDTE OIL AND EMULSION MIST SEPARATORS EXCEL IN EVERY DIMENSION — AND ABOVE ALL IN THE AREAS OF PERFORMANCE, SAFETY AND USER-FRIENDLINESS:

The machine fluids used for cooling, lubrication and chip transport are indispensable in many fields of high manufacturing quality. Processing procedures place high demands on cooling lubricant, resulting in emissions in the form of aerosols, fumes and vapors. Handte's high-performance separators capture and collect these emissions guaranteeing compliance with regulatory requirements to the highest degree of worker safety and protection:









- Top separation rate in excess of 99%
 We consistently achieve high separation performance by optimizing air flow through multistage filter media designed to meet specific needs regardless of droplet spectrum.
- Safety...Our priority
 Guaranteed by our multistage design our filter elements not only act as a firewall but also as molecule separation for consistent air quality
- Unparalleled cost-effectiveness Our compact corrosion-proof filters can be washed and reused throughout the lifetime of the separator. Our standard separators are equipped with a self- cleaning system which provides safe operation, long-term durability, eliminates high filter cost, and high maintenance.
- Fully automatic sprayer: This patented spraying system counteracts emulsion clumping which ensures our separators can be operated almost maintenance-free.
- Robust separator construction: Our separators are designed to operate 24/7 almost maintenance free. Compact design and robust construction is completely oil tight and guarantees a long effective life
- The ultimate in user-friendliness
 Our units are extremely easy to Maintain. Large Access doors and quick-release latches enable easy tool-free removal of filter elements.

OEL & EM Series High Performance Mist Separators:

The Handte separators are World Class Efficient. 99% Emulsion separation rate on particles greater than I-20 Microns 99% Oil based mist separation on particle greater than .01-20 Microns

A top-mounted HEPA filter is recommended in the oil mist application Keep things moving: replacing trays is a snap – no tools necessary



- Reduced costs: robust unit construction with long-term durability and long filter element service lifefilter elements that can be washed and reused low energy use with high separation performance...
- Increased service life:

 pre-separation of coarse soil particles with baffle and expansion chamber contamination-resistant filter elements -self-regenerating filter elements fully automatic cleaning sprayer rapid filter replacement thanks to quick-release mechanisms.
- Economical safety solutions:
 easy to use designed for 3-shift operation worker protection
 ensured by high-performance exhaust effective separation
- Top performance: High efficiency is guaranteed by optimal synchronization of fiber bed volumes, fiber thickness, material combinations, porosity, wettability, the installation position of our separation units.







QUICKLY & PERFECTLY ADAPTED TO YOUR NEEDS:

- Positioning the separator is key to specific production situations. The Handte separators or oil and emulsion mist can be positioned as top or sidemount. Add-on or standalone separators can be configured to maximize space requirements. Handte OEL & EM series designed for large air volumes are manufactured as standalone units. Separators are easy to install, can be modified, and expanded with optional accessory equipment anytime.
- Flexible connection options
 The Handte high-performance separators come
 equipped with dirty gas connection ports at the rear,
 left or right sides. These unique features allow short
 pipeline routing and a high degree offlexibility during
 separator positioning.
- Exhaust performance to meet your needs
 Handte's flexible modular design allows you to use
 both standard and individually customized filter sizes.
- The Handte separators have the Hepa filter option which will meet even the highest standards of air quality. Most of the oil mist particles will be processed during operation but the Hepa filter will ensure the finalparticles will be contained.
- Adapts safely to tough requirements
 For air return back to the production floor our
 process with additional oil fume formation, can
 be expanded with a downstream filter stage. The
 downstream filterstage is standard equipment on
 Handte OEL & EM-Expert series central units.













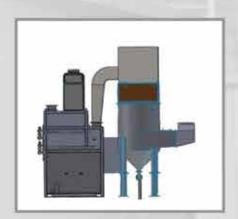




CAPTURE HOODS, PIPING, AND CLEAN AIR SOLUTIONS







Maximum Performance of Clean Industrial Air Quality

- System Engineering and design Solid Works 3D engineering
- Certified Air Specialist for onsite air quality testing
- Capture Hoods and Piping available in metric and standard options. Leak free pipe systems for wet or dry applications.
- Complete equipment installation, startup, and operator training. Proven success with guaranteed results. Backed by manufacturer Custom Air Flow Transitions

Test Result for Mist Separators						
Test Time	Intake Air	Exhaust Air	Air Speed			
28 seconds	0.295 mg/m ³	0.0041 mg/m ³	3900 fpm			
39 seconds	4.12 mg/m ³	0.0398 mg/m ³	3920 fpm			
20 seconds	0.398 mg/m ³	0.003 mg/m ³	3980 fpm			
30 seconds	0.005 mg/m ³	0.0045 mg/m ³	3840 fpm			
30 seconds	I.17 mg/m ³	0.161 mg/m ³	2400 fpm			
20 seconds	5.401 mg/m ³	2.801 mg/m ³	3560 fpm			

METHODOLOGY OF DUST TRAK ANALYZING

DUSTTRAK monitoring provides a reliable exposure assessment by measuring particle concentrations. This testing method has a continuous particle concentration laser photo meter which provides readout and documentation of potential levels of airborne contaminants such as dust, smoke, fumes, and mist. The DUSTTRAK measures the mist/dust levels in milligrams (mg) / cubic meter (m³). These test results are a snapshot of the actual conditions at any given time and will act as a guide to meet the air quality levels as recommended by OSHA and NIOSH.

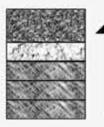
OEL & EM TECHNICAL DATA

Are you looking for an oil or an emulsion separator?

The standard Handte unit with optimized OEL and EM separator filter equipment offers the best performance and safety! For special needs or other applications, our associates will be happy to recommend the most efficient Handte separation equipment!



Filter Stages:



Handte EM Emulsion application



Oil application



Handte OEL



Handte EM Emulsion application

Handte OEL Oil Application

Filter material:

Bloom in Stainless Steel

Technical Data - Handte OEL & EM:								
Top-Mounted Unit Series (A):	CFM	Motor Power HP	Filter Surface tt2	Height in.	Weight Ibs.			
OEL & EM-OS (A) 1-0, 12	400	I	1.3	43.375	243			
OEL & EM-OS (A) 1-0, 18	600	2	1.9	43.375	287			
OEL & EM-OS (A) 1-0, 28	900	2.3	3	45.25	331			
OEL & EM-OS (A) 1-0, 37	1200	3	4	47.25	375			
Series	CFM	Motor Power HP	Filter Surface tt2	Height in.	Weight Ibs.			
OEL & EM-OS 1-0, 5	1500	*	5.4	59	1103			
OEL & EM-OS 1-0, 75	2350	*	8	78.75	1433			
OEL & EM-OS 1-1,0	3500	*	10.8	96.5	1896			
OEL & EM-OS 2-1,5	4700	*	16.1	99.25	2095			



