

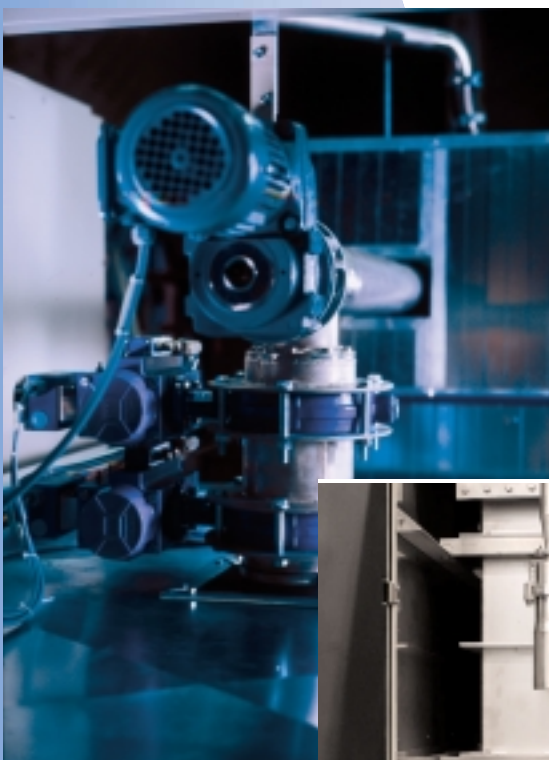
MRT CONTINUOUS FLOW DISTILLER



The Continuous Flow Distiller from MRT System is the result of continued development and adaptation to requirements from the waste management companies and the lamp industry. The distiller version being a solution especially designed for high capacity requirements, manages treatment of up to 5 times larger quantities of fluorescent powder and other low organic materials compared to a standard distiller.

Each machine will be custom built according to customer requirements with respect to feeding mechanisms and collection devices, including adaptation to the customer's existing machinery.





Functional description

The mercury contaminated waste e.g fluorescent powder is preferably fed to a silo from where it is automatically portioned into the distiller where the distillation process is in continuous progress. The customer may choose to equip the distiller with one or several inlets for feeding various types of materials intermittently. Applicable materials are e.g fluorescent powder and /or other materials with low organic contents such as exhaust tubes from lamp manufacturing. In case of higher degree of organic contents, an after combustion chamber could be connected.

Heating Phase

The continuous flow process utilizes the tried and trusted technology from the traditional MRT distillers. However, the traditional dome is replaced by a drum shaped oven made of heat and corrosion resistant steel, where mercury contaminated materials are continuously transported and heated up to 700° C (normally approximately 500 ° C). The distiller is capable of distilling materials with constant in-put and output for 24h/day. Thanks to the possibility of non-stop operation, the continuous flow distiller will be able to handle approximately 600l materials per 24/h.

Cooling Phase

◀ During heating process the mercury vapours are released from the waste material and continuously transferred to the cooling system in which where the mercury condenses into free floating liquid mercury. The reclaimed mercury has an average purity level of 99,99%, depending on mercury concentration before processing.

Before being dispensed in e.g a super-sack or barrel, the non-hazardous by-products such as fluorescent powder will be cooled to facilitate handling.

High Efficiency – Low Cost

The continuous flow process is a cost-effective solution as the machine can be worked for 24 hours with little efforts. Also the fact that merely the loaded materials are heated, and no excess heat energy is created, the power utility has a high degree of efficiency. Except for configurations with manual input of materials, the continuous flow process is fully automatic. The only manpower efforts required are for surveillance, selecting the appropriate program and managing the change of collection containers.

TECHNICAL DATA

CAPACITY	Approx. 600l powder or exhaust tubes/24h
HG EMISSION TO THE ATMOSPHERE	Max 0.025 mg/m ³
HG CONCENTRATION IN WASTE	Max 0.05 mg/l
HG PURITY	Up to 99,99%
DEGREE OF RECOVERY	Up to 99,99% (depending on processed material)
CONSUMPTION	Power: Approx. 25kW System/voltage to be settled at order Compressed air: 6 Bar, max 0.1 m ³ /min; dew point 3°C Ventilation Approx. 300 m ³ /h; outlet duct Ø125 mm (5")
DIMENSIONS:	Appr. space required for the installation: ~50 sqm.

We reserve the right to change technical data without further notice.

Your local representative in Romania is Arcon Overseas Limited

Arcon

ADDRESS: Bd. Corneliu Coposu No. 3, Bl. 101, Sc. 1, Etaj. 5, Ap. 9,
Sector 3, Bucharest, 030301

PHONE: +40 21 322 8451 / +40 21 322 8403 FAX: +40 21 320 8436

E-MAIL: sales@arcon.ro WEBSITE: www.arcon-environmental.ro

MRT
SYSTEM

For further information please contact:

MRT System AB, Lumavägen, SE-371 47 Karlskrona, SWEDEN

Phone no: +46 455 30 28 70. Facsimile: +46 455 30 28 79

e-mail: info@mrtsystem.com

www.mrtsystem.com www.mrtsystem.biz