Gas Cleaning and Liquid Separation Technologies
for the Chemical, Petrochemical & Pharmaceutical Industries
Dürr Megtec carbon adsorption and distillation systems are widely used in the petrochemical and pharmaceutical industries.

Carbon adsorption, both regenerative and non-regenerative, are used to capture vapor-phase emissions of VOC (volatile organic compound) solvents from solvent-using processes, stopping them from being emitted to the atmosphere, thus meeting environmental laws and regulations.

In a regenerative carbon adsorption system, the solvents are adsorbed on activated carbon. When the carbon is saturated, it is regenerated with steam, which is then condensed, which makes it possible to remove the solvent. Non-water miscible solvents can frequently be reused without further processing. Water miscible solvents can often be distilled and purified to make them suitable for reuse.

A Dürr Megtec solvent recovery system creates two benefits to its customers, compliance with environmental laws and regulations, and reduced costs through the reuse of the solvents.

Dürr Megtec also provides stand-alone distillation systems to purify waste water to make it suitable for disposal, eliminating high disposal costs, or to separate solvents and purify them.
Thermal oxidizers and wet electrostatic precipitators (WESP) from Dürr Megtec have been used extensively in chemical, petrochemical, and pharmaceutical industry applications.

Dürr Megtec thermal oxidizers are used to abate vapor-phase VOC emissions to meet the most stringent global environmental emission limits and regulations.

Thermal oxidizers (multiple bed, flame-based regenerative, single-bed flameless regenerative, and direct thermal systems) have been used to abate VOC compounds released from batch emissions from vessel reactors, tablet coating, primary and secondary pharmaceutical manufacturing, chemical, and petrochemical processes.

Our supply and installation capabilities include turnkey operations such as:
- Vent collection systems
- Vent conditioning with LEL dilution control
- Pre- and post-oxidation scrubbing (packed tower and venturi scrubbers) for acid gas removal
- Flame arrestors
- Explosion relief
- Particulate removal
- CEMs (continuous emission monitoring systems), with the associated project HazOp
- SIL reviews
- Project documentation packages

Our wide range of solutions spans virtually any industry requiring pollution control. Dürr Megtec is a single-source supplier of reliable solutions for projects of all sizes and complexities, as well as for new or upgrade configurations.