Vapour Recovery Unit

The main advantages for recovering vapours are:

- Reduce emission of environmentally hazardous compounds;
- Increase safety and reduce health risks linked with the distribution net of gasoline or crude oil;
- Recovery of valuable energy resources;
- VRU capacity: from 150 to 3500 m³/h of vapours.

Main application of VRU:

- Storage terminals;
- Truck and rail car loading;
- Marine loading system;
- Vapour balance systems.









Vapour Recovery Unit

All emission regulations can be achieved:

TA-Luft: 150 mg/m³ EU Directive: 35 g/m³ US EPA: 5 mg/l loaded

Our VRU may even coupled with a second stage plant, reducing emissions to as low as 50 mg/m³.

Process consists of three main steps:

- Adsorption of the VOC on activated carbon bed;
- Regeneration of the carbon by means of vacuum;
- Re-absorption and recovery of VOC by absorbent liquid.



Vapour Recovery Unit

VRU Safety

Safety features of our VRUs include the following:

- Use of activated carbon capable to withstand high degrees of mechanical and thermal stresses;
- Higher pressure resistant vessels and piping;
- Control system monitoring all important operating parameters, with ESD;
- Flame arrestors, limit switches, level switches etc.

VRU Control system

- Our plants are equipped with an advanced Programmable Logic Controller (PLC), a bus communication between I/O station and PLC as well as a PC-based, user-friendly Human Machine Interface (HMI). Control system continuously keeps track of process parameters and the operation of the unit;
- The system enables operational adjustments, accurate diagnostics and remote supervision.



thank you



Termomeccanica Industrial Process

Termomeccanica Group



TM.I.P. S.r.I. - Termomeccanica Industrial Process

Via Fossamastra 22- 19126 La Spezia – Italy Tel. +39 0187 513.410 - Fax. +39 0187 515.352

www.tmip.termomeccanica.com