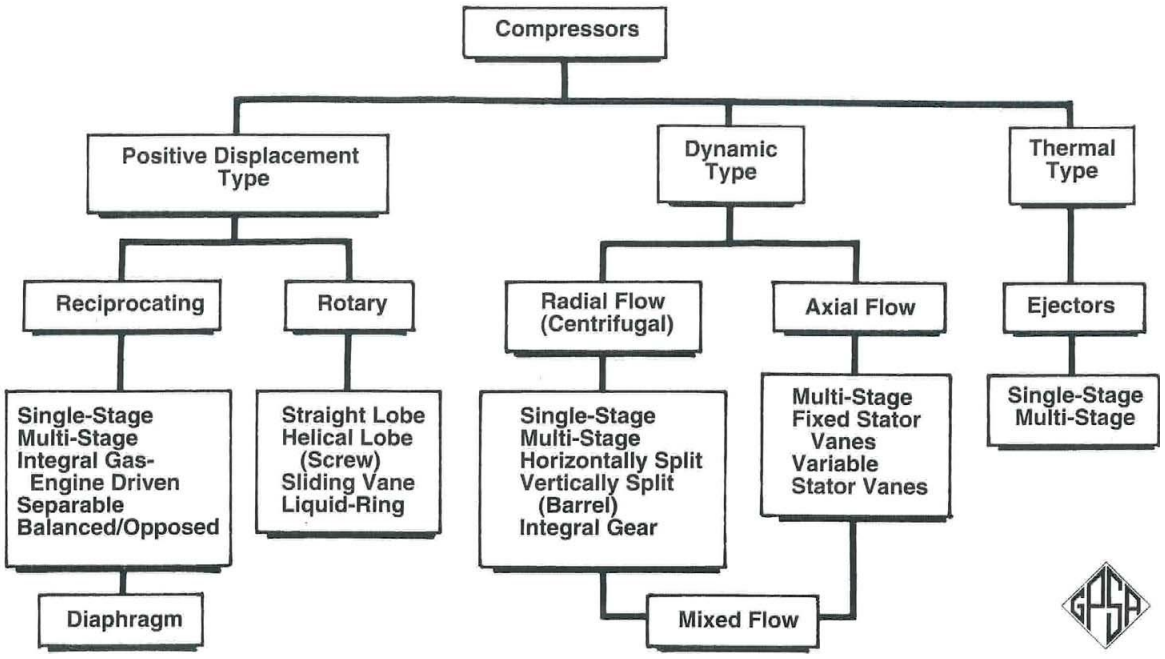
q.- Enclosure-type classes

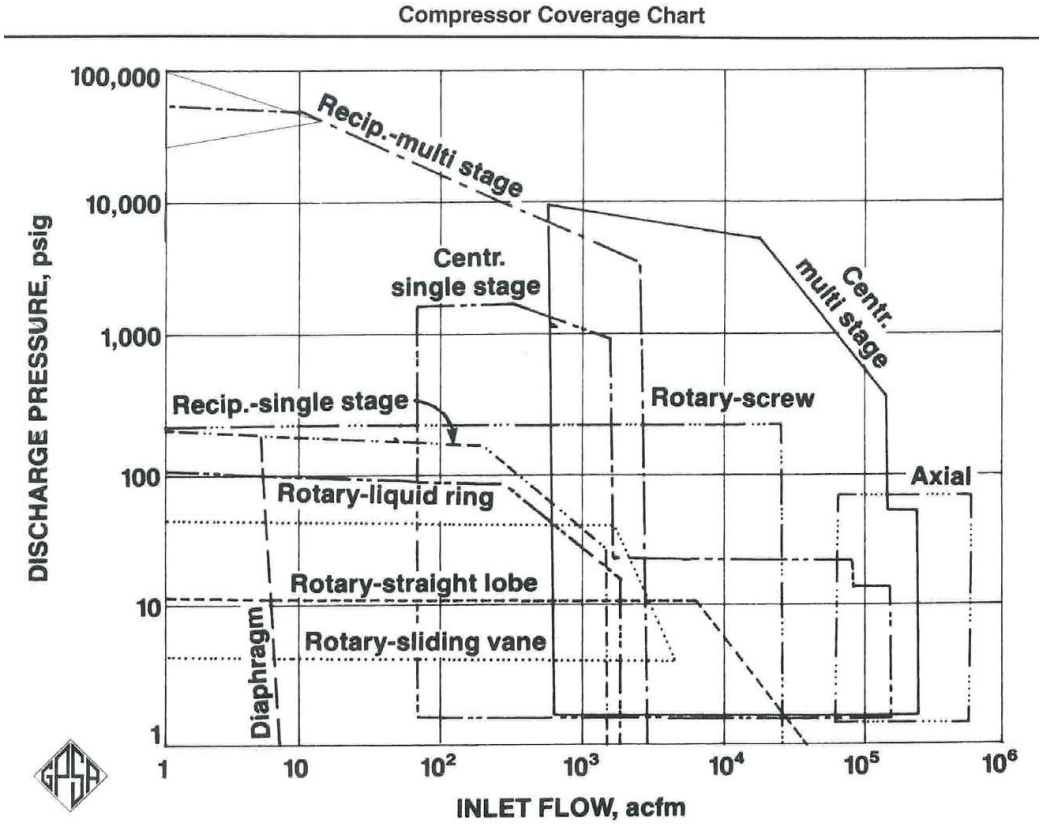
Class and subclass		Definition
Enclosed packaged compressor plant	Silenced packaged compressor plant	A packaged compressor plant with a noise-suppressing enclosure. NOTE 2 This type of compressor plants can have in turn a further subclass of partly enclosed compressor plant in which only the most intensive noise emitters: driver, gear, mechanical compressor are placed under the enclosure.
	Weather-protected compressor plant	A packaged compressor plant placed in an enclosure protecting the compressor equipment from atmospheric effects and adapted to operation outdoors in the open air.
	Container-type packaged compressor plant	A packaged compressor plant placed in a container adapted for operation outdoors in the open air and equipped with inside ambient-air monitoring system enabling maintenance and repair operations at any weather or seasonal conditions.
	Encapsulated compressor plant	A packaged compressor plant placed in a hermetic enclosure (capsule) which eliminates leakages of gas into the ambient atmosphere as well as penetration of the ambient air into the compressor equipment.

VII.- TYPES OF COMPRESSORS IN THE OIL, GAS AND PETROCHEMICAL INDUSTRY

Among the rotating equipment is the family of compressors that depending on the service required and the operating conditions that need to be met, can be classified into the following: Dynamic Compressors (Centrifugal and Axial) Positive Displacement Compressors (Reciprocating, Rotating, Diaphragm) Rotary compressors (screw type (dry or flooded in oil), liquid ring, sliding blades) Thermal Compressors (Ejectors)



The selection of the type of compressor to be applied is based on the flow of gas (or air) handled and the pressure differential or compression ratio, which is shown in the attached figure.



The advantages of a reciprocating compressor over a centrifugal compressor are:

1. Greater flexibility in capacity and pressure range,
2. Higher compressor efficiency and lower energy cost,
3. Ability to deliver higher pressures,
4. Ability to handle smaller volumes,
5. Less sensitive to changes in gas composition and density.

The advantages of a centrifugal compressor over a reciprocating or reciprocating compressor are:

1. Lower installation cost where pressure and volume conditions are favorable,
2. Lower maintenance cost,
3. Greater continuity of service and reliability,
4. Less operational attention,
5. Greater volume capacity per unit of physical area of installation.
6. Adaptability to high-speed actuators, with low maintenance cost.