The base from the rotary vanes groups, working to compression or vacuum, is based upon the progressive decrease of the fluid volume between the vanes, which slide by the centrifugal force above the rotor lodging, eccentrically located towards the cylinder.

**SCHEME FROM A ROTARY GROUP OF VANES**

- Air entrance
- Regulator
- Cylinder shirt
- Vanes
- Longitudinal grooves
- Rotor
- Maximum compressor
- Air way out
- Oil injection

**GRAPHITE AND FIBER VANES**

Vanes made by graphite impregnated in resin and fiber compound are specially recommended for its use in vacuum pumps, rotary compressors and fuel tank counters.

Graphite and fiber vanes can work under dry or wet working conditions and its working limit is above any other material.

**APPLICATIONS:**

- VACUUM PUMPS
- ROTARY COMPRESSORS
- FUEL TANK COUNTERS
- EQUIPMENT FOR FOOD PROCESS
- PRINTER MACHINES
- PACKING MACHINERY
- MILKING EQUIPMENTS
GRAPHITE VANES PROPERTIES

Ideal for working in vacuum pumps. The qualities developed by Carbosystem of graphite + resin have very high mechanical strength and a low coefficient of expansion, they don’t contaminate the liquids or gases and can be safely used in food processing equipment. Specially designed to work with the main pump brands, as Becker, Busch, Rietschle, Orion, etc…

SELF-LUBRICANT

One of the main properties from graphite is the self-lubrication, therefore is very good for pumps working in vacuum conditions or with liquids which have a poor lubrication. Even in applications without self-lubrication requirements, graphite vanes gives a soft polish in the cylinder wall, and this reduces the vanes wear index.

CHEMICALLY INERT AND NON-TOXIC

Graphite impregnated by resin, does not pollute the liquids or gases, and can be used with safety in equipment for food process or in other fields where the purity is required.

CHEMICAL AGENTS RESISTANT

Graphite vanes are chemically resistant against the great part of fields and specially in corrosive and agressive enviroments.

HIGH MECHANICAL RESISTANCE

One of the main requirements in the vanes material is the mechanical resistance. The graphite vanes, because of their properties, enclose preassures that goes from 3,2 Kg/cm² and speeds untill 12,7 m/sg.
Especially suitable for compressors with lubricant. Carbsystem’s developed qualities in reinforced composite fibre with thermosetting polyester resin have high dimensional stability and excellent mechanical and sealing properties.

Providing the utmost performance working with milking pumps and groups like Alfa Laval, Fullwood, Gascoigne-Melotte, Manus, Sac, Tecnozoo, Manovac, Impulsa, Westfalia, Cta Milk, Varie, Flaco, Miele…

- GOOD MECHANICAL PROPERTIES
- LOW WATER ABSORPTION
- NOT ABRASIVE FIBERS
- DOES NOT CONTAIN FIBERS GLASS
- LOW THERMAL EXPANSION
- HIGH IMPACT STRENGTH