Dagangan : SINGLE SCREW COMPRESSOR Nama Perdagangan : VSM Single Screw Compressor Jenama : Vilter Model : VSS 901	**Kod Tarif (Perintah Duti Kastam 2012) :** 8414.30.40 00 (PDK 2017) **Tarikh Kelulusan :** 12 Mei 2017

Keterangan barangan :

Barangan yang dinamakan sebagai ***Single Screw Compressor*** ini merupakan sejenis complete compressor unit yang dilengkapi dengan komponen utama seperti drive motor, oil separator, compressor dan microprocessor control.

Spesifikasi barangan adalah seperti berikut :

Bil	Items	Specifications
1	Model	VSS 901
2	Displacement - CFM - $m^{3/ hr}$	880 1495
3	Base Rating Ammonia - Tons - BHP **- Capacity** - Absorbed	344 358 **1210 kW** 223 kW
4	Standard connection sizes - Suction - Discharge	5” 4”
5	Length	12‘-7” mm
6	Dimensions :- Single oil filter	3’.7” mm (W) 8’.0” mm (H)

Rupabentuk barangan adalah seperti gambar dibawah :

Kegunaan barangan adalah untuk *compress gas/ refrigerant from low pressure to high pressure gas.* Barangan digunakan pada *industrial refrigeration industries for process cooling applications.*

Fungsi komponen utama barangan adalah seperti berikut dan sepertimana yang ditunjukkan didalam jadual dibawah.:

	Components	Function
1	*Compressor*	*To compress the low pressure refrigerant vapor to high pressure*
2	*Drive Motor*	*To drive the compressor main rotor*
3	*Control Panel*	*To control the drive motor and solenoids and controlling the suction and discharge pressure of the compressor*
4	*Oil separator*	*In the oil separator the refrigerant is discharge through the discharge valve "A" into the oil separator. In the oil separator, the lubrication oil is separated from the refrigerant and drop to the sump of the oil separator. Only refrigerant is circulated to discharge check valve to the refrigerant system piping line. The oil in the oil sump is then sucked back to the compressor from port "C".*

Ketua Pengarah Kastam Malaysia memutuskan bahawa barangan ini sesuai diperjeniskan di bawah kod tariff **8414.30.40 00 (PDK 2017)** sebagai ***compressors of a kind used in refrigerating equipment with a refrigeration capacity exceeding 21.10 kW*** berdasarkan alasan- alasan berikut :

Barangan merupakan *compressor unit* yang terdiri daripada *motor, microprocessor control, compressor dan separator. Ia adalah composite apparatus dimana compressor merupakan fungsi utama (principal function)* sebagaimana keterangan didalam *Note 3 to Section XVI EN HS 2012* .

Section XVI, Note 3

Unless the context otherwise requires, composite machines consisting of two or more machines fitted together to form a whole and other machines designed for the purpose of performing two or more complementary or alternative functions are to be classified as If consisting only of that component or as being that machine which performs the principal function.

Barangan digunakan untuk *industrial refrigeration for process cooling applications.* Oleh itu, ia sesuai diperjeniskan dibawah heading 84.14 berdasarkan keterangan didalam EN HS 2012 mukasurat XVI-8414-1 dinyatakan seperti berikut :

84.14 - Air or vacuum pumps, air or other *gas* ***compressors and fans; ventilation or recycling hoods incorporating a fan, whether or not fitted with f1lters.***

8414.10 - Vacuum pumps

8414.20 - Hand-or foot-operated air pumps

8414.30 - Compressors of a kind used in refrigerating equipment

8414.40 - Air compressors mounted on a wheeled chassis for towing

This heading covers machines and appliances, hand-operated or power driven, for the compression of air or other gases, or for creating a vacuum, and also machines for circulating air or other gases.

(A) PUMPS AND COMPRESSORS

In general, air pumps, vacuum pumps and compressors function on the same principles as and are broadly of similar construction to the liquid pumps (piston, rotary, centrifugal or ejector pumps) described under the preceding heading.

In addition, however, there are certain special types, particularly for producing high vacua, such as diffusion pumps (the pump fluid being oil or mercury), molecular pumps and entrapment pumps (getter pumps, cryopumps). Diffusion pumps, however, are sometimes made of glass, in which case they are ***excluded (Chapter 70)***
Air and vacuum pumps serve many purposes: for facilitating boiling, distilling or evaporating at reduced pressure; for evacuating; electric lamps or tubes, vacuum flasks, etc. Air pumps serve for pumping air at pressure (e.g., for inflating pneumatic tyres).

Unlike liquid pumps, air or other gas compressors (other than low pressure or intermittent working compressors) are water-cooled or have fins or other means for air cooling (surface cooling) to dissipate the considerable heat of compression which is generated.

There are several types of compressors, for example, reciprocating piston, centrifugal, axial and rotary compressors. A special type of compressor is the exhaust-gas turbocharger used in internal-combustion piston engines to increase power output.

Compressors are widely used: for compressing gases into gas cylinders; in chemical processes; for refrigerators, etc. and for compressing air or other gases in reservoirs to be used to force feed machines or apparatus such as compressed air engines, pneumatic picks, winches, brakes, pneumatic conveyor tubes, submarine ballast tanks, etc.

Barangan juga mendapat liputan khusus dalam Perintah Duti Kastam 2017 iaitu :

84.14		***Air or vacuum pumps, air or other gas compressors and fans; ventilating or recycling hoods incorporating a fan, whether or not fitted with filters.***
	8414.10.00 00	*- Vacuum pumps*
	8414.20	*- Hand-or foot-operated air pumps:*
	8414.20.10 00	*- - Bicycle pumps*
	8414.20.90 00	*- - Other*
	8414.30	*- Compressors of a kind used in refrigerating equipment:*
	8414.30.40 00	***- - With a refrigeration capacity exceeding 21.10 kW, or with a displacement per revolution of 220 cc or more***
	8414.30.90 00	*- - Other*