## CHOCOLATE APPLICATIONS

V CHOCO positive displacement pumps for the chocolate industry





# V CHOCO the solution for **Chocolate handling**

The constant collaboration with prominent chocolate manufacturing companies and with machinery for its handling gave Varisco specific know-how in the chocolate industry.

Due to its mechanical and structural features and its flexibility in managing extremely variable viscosities, the Varisco internal gear positive displacement pump proved to be especially suited for the handling of chocolate in all shapes and blends.

The study of specific tolerances and of bearings to prevent crystallization of sugar, in addition to the speeds used in dimensioning, make this type of pump especially suitable for the chocolate industry.

In the light of its experience, Varisco standardized a series of pumps, called CHOCO, including those in the segment which work based on their hourly capacity:

- V25-2 CHOCO up to 300 kg/h
- V60-2 CHOCO up to 3000 kg/h
- V30-2 CHOCO up to 500 kg/h
- V50-3 CHOCO up to 1000 kg/h
- V80-2 CHOCO up to 5.000-8.000 kg/h
- V100-2 CHOCO up to 10.000-20.000 kg/h



### **Features and benefits**

#### V CHOCO pumps are suitable for

Pumping non-acidic food liquids, with pH which is higher than 4.5

#### Smooth pumping without fluid crushing

(Crushing leads to unwanted modification of the product's structure). As the gears rotate, liquid is drawn into the spaces created between the gears and the crescent: when the gears mesh, the liquid is forced out of the pump without excessive pressing/stressing to the fluid.

#### **Special clearances**

Prevent sugar to crystallize between rotor, idler and casing.

#### **Application-specific bushes**

Idler pin bush is designed with lubrication grooves and special clearance to idler pin (to avoid idler pin to seize up to its bush due to sugar tendency to crystallize with temperature): support bush with special clearance to shaft.

#### Casing with groove

This helps to keep fluid moving behind the rotor, to prevent chocolate from solidifying in that area and stalling the pump.

#### Soft packing shaft seal

This is the most reliable solution.

#### **Constant temperature**

Casing and packing housing heating jackets guarantee a constant and well distributed temperature - normally around  $50 - 70^{\circ}$ C.

Only for V 25-2 and 30-2 models, jacketed packing housing is not available.



COCOA PASTE BLENDED WITH COCOA BUTTER. LECITHIN AND SUGAR



DARK, MILK, WHITE, GIANDUJA CHOCOLATE



HAZELNUT PASTE







VARISCO V CHOCO pumps are compliant with regulation (EC) No. 1935/2004 FCMs (Food Contact Materials).



COCOA LIQUOR

#### Available in New Zealand from:

Prime Fluid Management Head Office: 10 Chesterfield St Greymouth, West Coast 0800 482 747 primefluid.co.nz



