# STABLE COOLING TANKS for milk HNP 100 - 1000



All our products are made of **environmentally friendly materials**, work with **ecological coolants**, have **low energy consumption** and are **efficient** 



Modern PLEVNIK cooling tanks are indispensable for the production of high quality and bacteriologically safe milk. Milk cooling tanks PLEVNIK are placed in class I. and II. according to the ISO 5708, DIN 5708 and EN 13732 standards (design, capacity, cooling...)



#### Tank:

- entirely made of high quality stainless steel W.Nr.1.4301 (AISI 304)
- integrated spot welded evaporating body
- the inclined bottom allows a complete emptying of the tank
- insulated with an ecologically safe polyurethane (PUR) foam without CFC
- · cover with springs for an easy opening
- height adjustable leveling legs
- mixer with 28rpm
- DN50 outflow
- outflow valve (optional)





#### **Electrical part:**

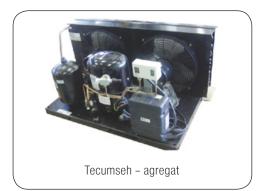
Control panel with an electronic programmer which allows the following functions:

- · controls the operation of the cooling unit
- controls the operation of the mixer (periodical start of the mixer in the process of temperature maintenance to preserve the homogeneity of the milk)
- monitors the milk temperature and shows it on the display
- setting of the desired milk temperature and its automatic maintenance
- electrical supply; one phase 230V 50Hz or three phase 400V 3N 50Hz



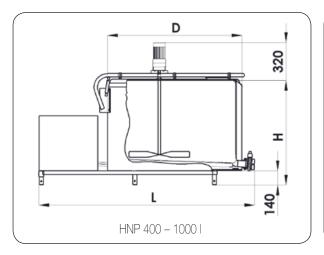
#### **Cooling unit:**

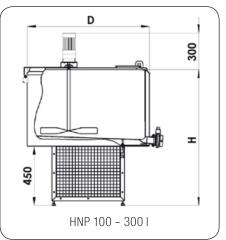
- · compactly built cooling unit (option separated cooling unit)
- · works on the principle of direct cooling
- ecological coolant (R404 A)
- built-in pressure and thermal protection
- SCROLL compressor (optional over 2 kW)
- using the thermal energy of the cooling process for the warming of sanitary water - heat recuperation

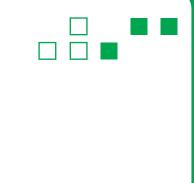


Cooling units of different powers let us chose the best combination of cooling tank and cooling unit









2M - two milkings ; 4M - four milkings			Technical data							
TIP	Electrical supply		Connection	Cooling	Cooling	Dimensions (mm)			Weight	Door
	1x230V 50 Hz	3x400V 50Hz	power (kW)	power (W)	Cooling	ФD outside	Н	L	(kg)	(cm)
HNP 100 - 2M	*		0.5	900	25	610	1020		80	70
HNP 150 - 2M	*		0.6	1260	35	760	950		95	80
HNP 200 - 2M	*		0.65	1640	50	760	1100		105	80
HNP 260 - 2M	*		0.75	1860	55 I	760	1250		135	80
HNP 300 - 2M	*		1.00	1990	65 - 70 I	960	1100		155	100 (80)
HNP 400 - 2M	*	*	1.15	2360	70 - 85 I	1100	740	1900	175	90
HNP 400 - 4M	*	*	0.75	1860	55 I	1100	740	1900	165	90
HNP 500 - 2M	(*)	*	1.5	3950	90   - 115	1100	860	1900	190	90
HNP 500 - 4M	*	(*)	0.75	1860	55 I	1100	860	1900	180	90
HNP 650 - 2M	(*)	*	1.9	4230	110   - 135	1280	840	2050	210	90
HNP 650 - 4M	*	(*)	1.1	1990	65 - 75 I	1280	840	2050	195	90
HNP 800 - 2M	(*)	*	2	5990	150   - 180	1280	1050	2180	220	110
HNP 800 - 4M	(*)	*	1.15	3950	90   - 115	1280	1050	2180	205	110
HNP 1000 - 2M	(*)	*	2.5	5990	180   - 200	1550 (1280)	880 (1180)	2300 (2180)	260	90 (130)
HNP 1000 - 4M	(*)	*	1.5	3950	90   - 115	1550 (1280)	880 (1180)	2300 (2180)	245	90 (130)

Cooling - the quantity of milk that can be cooled form 35°C to 4°C in one hour at the room temperature of 32°C and condensation temperature of 40°C without MGV (recuperation of wasted energy)

Doors - minimal entrance doors width

(\*) - optional



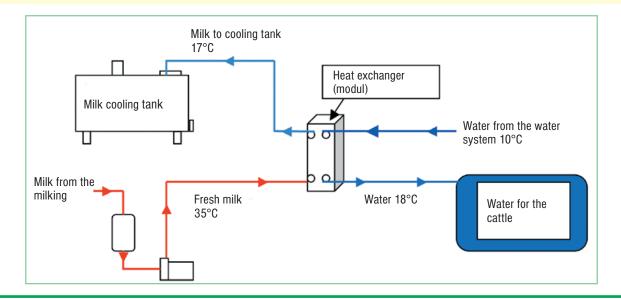
# ECONOMIC ENERGY TREATMENT during the cooling of milk



### A) Pre-cooling of milk

Advantages:

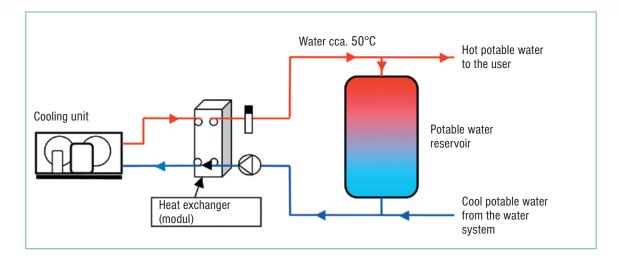
- With the water from the water system we can pre-cool the milk for cca. 20°C. Doing so we reduce electrical energy consumption for cooling of the milk.
- During this process the water warms up and we can use it to **water the cattle**. Warmed water affects beneficently the health of the kettle especially in the cold part of the year. Lowering the temperature difference between the kettles body temperature and the water temperature **lowers the risk of diseases**.



## B) Conversion of the waste energy of cooling for heating sanitary water; heat pump - recuperation

The system for heating potable water using the "wasted" energy of the cooling unit or the heat from fresh milk. Advantages:

- We relieve the cooling unit better condensation in the warmer part of the year shortens the time of milk cooling
- Warming the potable water without additional electrical energy consumption. The warmed water (cca. 45°C 50°C) can be used for washing the milking equipment and cow udder, watering the cattle... the surplus water can be used for other home uses. At full load 1I of cooled milk can warm 0.7I 0.8I of potable water up to cca. 50°C.





PLEVNIK production and marketing d.o.o. Podsmreka 56, 1356 Dobrova, Slovenia Tel.: 00386 / (0)1 200 60 80

Fax.: 00386 / (0)1 257 44 22

E-mail: info@plevnik.si , http://www.plevnik.si

Representative