

CHEMICAL PUMPS SINCE 1992



GENERAL  
CATALOGUE

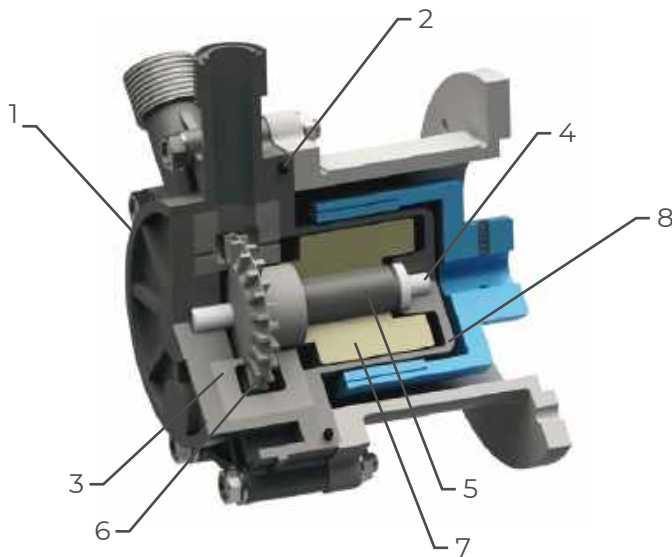
2025 | 2026



# MAG-DRIVE TURBINE PUMPS

## SEAL-LESS MAG DRIVE TURBINE PUMPS

In seal-less magnetic drive turbine pumps, the external magnet is directly connected to the motor shaft and it transmits the torque to the internal magnet. The magnetic field created produces a rotation without physical contact between the parts and the turbine spins and moves the fluid. The rear casing is placed between the two magnet joints and it hermetically closes the hydraulic part from the motor.



GemmeCotti supplies three different models of mag drive turbine pumps:

### HTT PP/PVDF

- Thermoplastic pumps made of PP or PVDF.
- Capacity up to 9 m<sup>3</sup>/h.
- Head up to 48 mlc.

### HTT-SP PP/PVDF

- Thermoplastic pumps made of PP or PVDF.
- Capacity up to 6 m<sup>3</sup>/h.
- Head up to 24 mlc.
- Machined from a block.
- Self-priming up to 5 m.

### HTA AISI 316

- Metallic pumps made of stainless steel AISI 316.
- Capacity up to 7 m<sup>3</sup>/h.
- Head up to 76 mlc.

MATERIALS IN CONTACT WITH THE LIQUID

PART NUMBER - DESCRIPTION	TURBINE PUMPS		
	HTT	HTT-SP	HTA
1 - PUMP HEAD	PP or PVDF	PP or PVDF	AISI 316
2 - O-RING	EPDM or VITON	EPDM or VITON	EPDM or VITON
3 - FRONT AND REAR DISC	PP or PVDF	PP or PVDF	PTFEC
4 - SHAFT + RING	CERAMIC Al <sub>2</sub> O <sub>3</sub> 99,7%	CERAMIC Al <sub>2</sub> O <sub>3</sub> 99,7%	HASTELLOY-C 276
5 - BEARING	PTFEC	PTFEC	PTFEC
6 - IMPELLER	PVDF	PVDF	AISI 316
7 - INTERNAL MAGNET	PP or PVDF + NdFeB	PP or PVDF + NdFeB	AISI 316 + SmCo
8 - REAR CASING	PP or PVDF	PP or PVDF	AISI 316



## THERMOPLASTIC MAG-DRIVE REGENERATIVE TURBINE PUMPS



### STANDARD

- Gas threaded In and Out connections.
- Static shaft in high purity ceramic.
- Chemical resistant PTFE/carbon sleeve bearings.
- High torque magnetic coupling.
- Direct starting motor.

### OPTIONAL

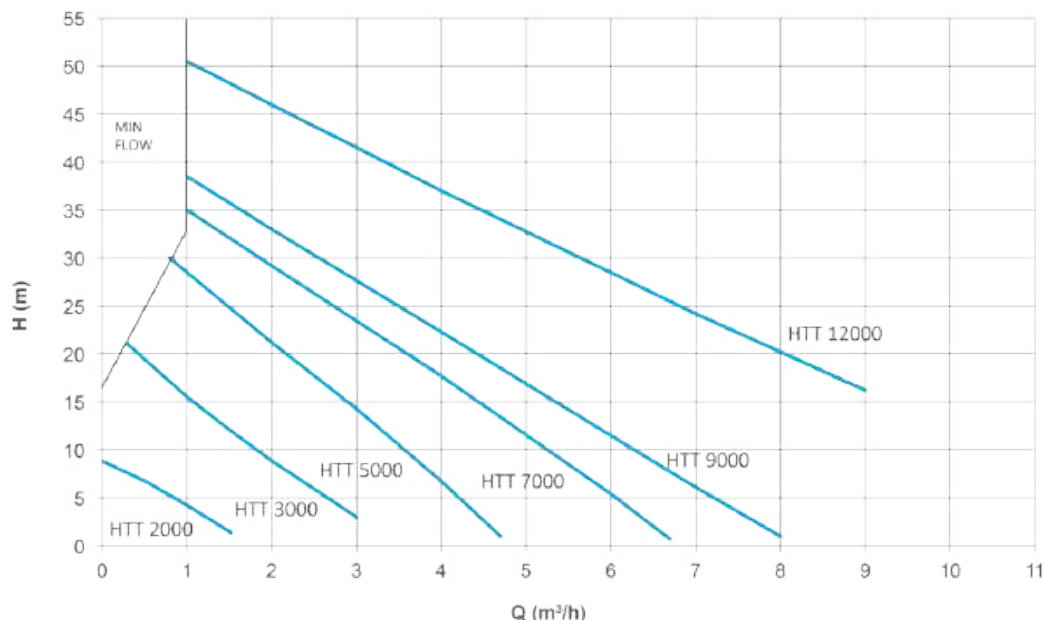
- DIN or ANSI 150 flanges available.
- Baseplate.
- Dry-running protection device.
- Available in ATEX version for zone 2II 3G (pump mod. EM-T PP/PVDF).

**Mag drive regenerative turbine pumps series HTT** are made of thermoplastic materials (**Polypropylene-PP** and **PVDF**) and are suitable for pumping high corrosive liquids. Thanks to the innovative mag drive system, pumps model HTT **reduce risks of leakage and emissions and the maintenance costs**. The transmission of the motion occurs through magnetic joints without any mechanical seal. This seal-less design guarantees the **maximum safety and efficiency**. The pumped liquid has to be clean and without solids in suspension.

### MAIN FEATURES

- **Materials available:** PP / PVDF.
- **Plastic injection moulded.**
- **Materials in contact with the liquid:** casing and rear casing: PP/PVDF; Impeller: PVDF; o-ring: EPDM (standard for PP pumps); VITON (standard for PVDF pumps); shaft: ceramic  $Al_2O_3$  99,7%; bearing: PTFEC.
- **Max flow:** 9 m<sup>3</sup>/h; **Max head** 48 m.
- **Max Temperature:** PP: max 70°C – PVDF: max 90°C.
- **Max viscosity:** 45 cPs.
- **Pressure rating:** NP 6 at 20°C.
- It handles up to 20% entrained gas.  
HTT pump resists cavitation.

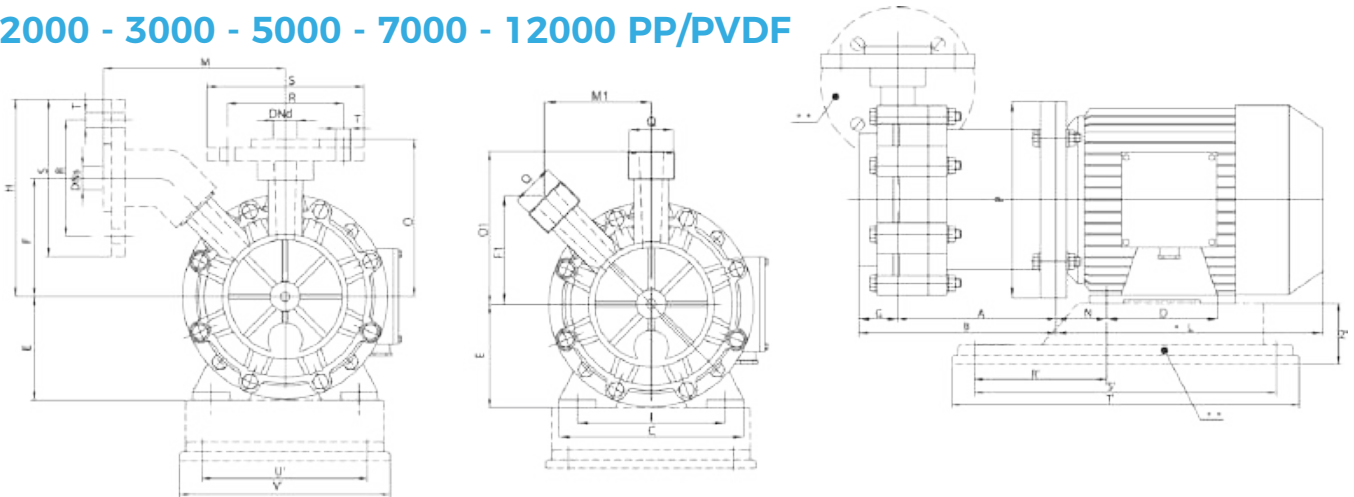
### PERFORMANCE CURVES 50Hz - 2900 RPM



## HTT TECHNICAL DATA

PUMP SIZE	MATERIAL	Q MAX		H MAX		SUCTION CONNECTION	DISCHARGE CONNECTION	PUMP WEIGHT (kg)		SUITABLE MOTOR POWER (kW) 2900 rpm	MOTOR FLANGE AND FRAME
		50Hz (m³/h)	60Hz (USGPM)	50Hz (m/c)	60Hz (ft)			PP	PVDF		
HTT 2000	PP- PVDF	1.7	8.8	10	50	1" MALE	1" MALE	2.8	3.8	0.37	71 - B3 / B5
HTT 3000	PP- PVDF	3	15	21	102	1" MALE	1" MALE	2.8	3.8	0.37 0.55	71 - B3 / B5 71 - B3 / B5
HTT 5000	PP- PVDF	5	26	30	140	1" 1/2 MALE	1" 1/2 MALE	8	10	0.75 1.1	80 - B3 / B5 80 - B3 / B5
HTT 7000	PP- PVDF	7	37	36	162	1" 1/2 MALE	1" 1/2 MALE	8	10	1.1 1.5 2.2	80 - B3 / B5 90 S - B3 / B5 90 L - B3 / B5
HTT 9000	PP- PVDF	8	41	36	177	1" 1/2 MALE	1" 1/2 MALE	8	10	2.2 3	90 - B3 / B5 100 - B3 / B5
HTT 12000	PP- PVDF	9	42	48	235	1" 1/2 MALE	1" 1/2 MALE	8	10	3 4	100 - B3 / B5 112 - B3 / B5

## HTT 2000 - 3000 - 5000 - 7000 - 12000 PP/PVDF



PUMP TYPE	MOTOR FLANGE B3-B5	kW	DIMENSIONS - mm -																	BASEPLATE DIMENSIONS - mm						
			A	B	C	D	E	F	F1	G	H	I	*L	M	M1	N	O	O1	P	Q	R'	S'	T	U'	V'	Z'
HTT 2000	71 2A	0.37	118	146	142	90	71	875	78	28	145	112	192	135	78	45	115	110	160	1" MALE	112	244	280	130	160	48
HTT 3000	71 2A 71 2B	0.37 0.55	118	146	142	90	71	86	78	28	145	112	192 215	135	78	45	115	110	160	1" MALE	112	244	280	130	160	48
HTT 5000	80 A 80 B	0.75 1.1	187	221	160	100	80	110	95	34	186	125	215 232	189	95	50	148	135	200	1" 1/2 MALE	120	302	350	157	205	60
HTT 7000	80 B 90 S 90 L	1.1 1.5 2.2	187	221	160 170 170	100 100 125	80 90 90	110	95	34	187	125 140 140	232 255 280	189	95	50 56 56	148	135	200	1" 1/2 MALE	120 120 132	302	350	157	205	60
HTT 9000	90 L2 100 L2	2.2 3	187 207	221 241	170 200	125 140	90 100	110	95	34	186	140 160	280 316	189	95	56 63	148	135	200 250	1" 1/2 MALE	132 140	302 352	350 400	157 202	205 250	60
HTT 12000	100 L 112 M	3 4	207	241	200 230	140	100 112	110	95	34	186	160 190	316 324	189	95	63 70	148	135	250	1" 1/2 MALE	140 156	352	400	202	250	60

## FLANGES DIMENSIONS - mm -

PUMP TYPE	R	S	T	DNs	DNd
HTT 2000 - 3000	85	115	14	25	25
HTT 5000 - 7000 - 9000 - 12000	110	153	18	40	40

\* Different according to the manufacturer. \*\* OPTIONAL UPON REQUEST: DIN or ANSI Flanges and Baseplates.  
NOTE: DIRECTION OF ROTATION IS COUNTER CLOCKWISE AS SEEN WHEN FACING THE MOTOR.  
PUMPS AVAILABLE THREADED OR FLANGED.



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