



GENERAL 2018/19

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 can supply three different models of mag drive turbine pumps:

HTT

- Thermoplastic pumps made in PP or PVDF.
- Capacity up to 9 m3/h.
- Head up to 50 mlc.

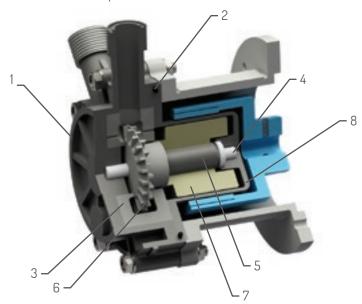
HTT-SP

- Thermoplastic pumps made in PP or PVDF.
- Capacity up to 7 m3/h.
- Head up to 25 mlc.

- Machined from a block.
- Self-priming up to 3 m.

HTA

- Metallic pumps made in stainless steel AISI316.
- Capacity up to 7 m3/h.
- Head up to: 80 mlc.



| MATERIALS IN CONTACT WITH THE LIQUID | | | | | | | | | | | |
|--------------------------------------|--|--|-----------------|--|--|--|--|--|--|--|--|
| PART NUMBER - DESCRIPTION | TURBINE PUMPS | | | | | | | | | | |
| PART NUMBER - DESCRIPTION | нтт | HTT-SP | НТА | | | | | | | | |
| 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 ₂ 0 ₃ 99,7% | CERAMIC Al ₂ 0 ₃ 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. SELF-PRIMING



STANDARD:

- · High torque magnetic coupling.
- Chemical resistant PTFE/carbon sleeve bearings.
- Static shaft in high purity ceramic.
- Direct starting motors.

OPTIONAL:

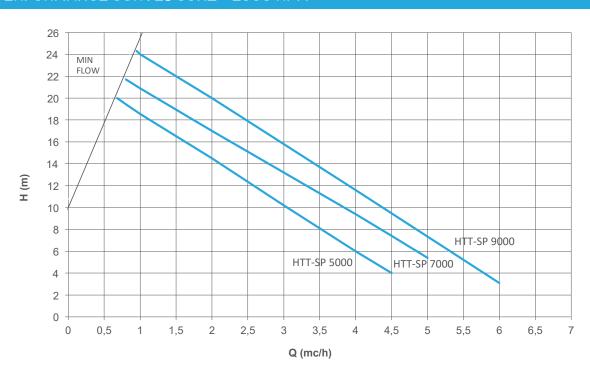
- ANSI 150 flanges available.
- Baseplate.

HTT-SP pumps can prime up to 5 m with water at ambient temperature. The casing is made from a PP solid machined block and the impeller in PVDF for maximum chemical resistance. The casing is machined from a solid block. The impeller in PVDF is self-balanced to eliminate thrust bearing wear and it is separate to minimize the maintenance costs. This kind of pump offers maximum resistance withstanding also external corrosion. It handles up to 20% entrained gas and resists cavitation.

MAIN FEATURES:

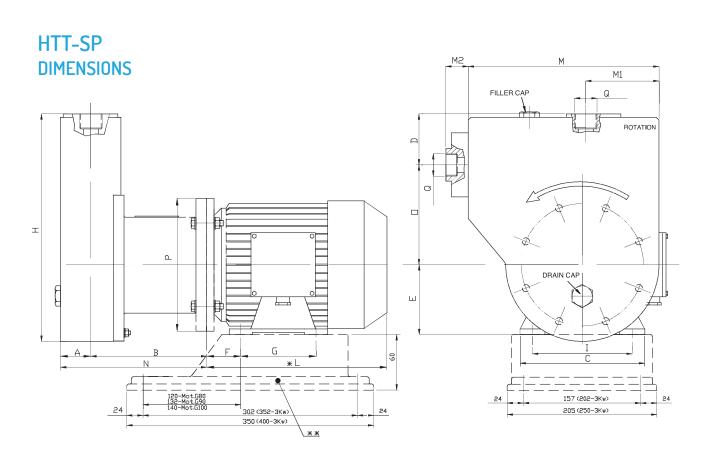
- Max flow: 6 m3/h; max head 28 mlc.
- Max temperature: PP: 70°C PVDF: 90°C.
- High torque magnetic coupling.
- Chemical resistant PTFE/carbon sleeve bearings.
- Static shaft in high purity ceramic.
- Direct starting motor.

PERFORMANCE CURVES 50HZ - 2900 RPM



HTT-SP TECHNICAL DATA

| PUMP | MATERIAL | Q MAX | | H MAX | | SUCTION | DISCHARGE | SUITABLE MOTOR | MOTOR FLANGE | | |
|-------------|---|-------------|--------------|--------------|-----------|--------------------|------------|-----------------------|--------------|--|--|
| SIZE | MATERIAL | 50HZ (M3/H) | 60HZ (USGPM) | 50HZ (MLC) | 60HZ (FT) | CONNECTION | CONNECTION | P0WER (KW) - 2900 rpm | AND FRAME | | |
| HTT-SP 5000 | PP- PVDF | 4.5 | 23 | 18 | 90 | 00 4" FEMALE 1" FE | | 0,75 | 80 - B3/B5 | | |
| H11-3P 3000 | PP- PVUF | 4.5 | 23 | 10 | 90 | 1" FEMALE | 1" FEMALE | 1,1 | 80 - B3/B5 | | |
| | TT-SP 7000 PP- PVDF 5 27 20 98 1" FEMALE 1" F | | 1,1 | 80 - B3/B5 | | | | | | | |
| HTT-SP 7000 | | 5 | 27 | 20 | 98 | 1" FEMALE | 1" FEMALE | 1,5 | 90 S - B3/B5 | | |
| | | | 2,2 | 90 L - B3/B5 | | | | | | | |
| HTT-SP 9000 | PP- PVDF | 6 | 32 | 24 | 110 | 1" FEMALE | 1" FEMALE | 2,2 | 90 - B3/B5 | | |
| TII-3P 9000 | PP- PVUF | Ь | 32 | 24 | IIU | I FEMALE | 1" FEMALE | 3 | 100 - B3/B5 | | |



| PUMP TYPE | MOTOR FLANGE | KW | DIMENSIONS - mm - | | | | | | | | | | | | | | | | |
|--------------|-----------------|------|----------------------|-----|------------|---------------|-----|--------|-----|-----|-----|-----|----------|----------|------------|------------------------|------|-----------|-----------|
| | B3 - B5 | | А | В | С | D | Ε | F | G | Н | 1 | *L | М | M1 | M2 | N | 0 | Р | Q |
| HTT-SP 5000 | 80 | 0.75 | PP = 45 PVDF = 41 | 175 | 160 | 70 | 80 | 50 100 | 100 | 325 | 125 | 215 | 270 97.5 | 33 | PP = 220 | 147 | 200 | 1" FEMALE | |
| | | 1.1 | | | | | | | 100 | | 123 | 232 | 2/0 | 2/0 9/.5 | 33 | PVDF = 216 | 147 | 200 | I FEMALE |
| HTT-SP 7000 | 80 | 1.1 | PP = 45 PVDF = 41 | 175 | 160 170 | 70 | 80 | 50 | 100 | 325 | 125 | 232 | | | | PP = 220 PVDF = 216 | 147 | 200 | 1" FEMALE |
| | 90 | 1.5 | | | | | | | 125 | | 140 | 255 | 270 97 | 97.5 | 33 | | | | |
| | | 2.2 | | | | | 90 | 56 | | | | 280 | | | | | | | |
| HTT-SP 9000 | 90 | 2.2 | PP = 45 | 175 | 170 | 170 200 70 | 90 | 56 | 125 | 325 | 140 | 280 | 270 97.5 | 075 | 00 | PP = 220 | 4/17 | 200 | 1" FEMALE |
| | 100 | 3 | PVDF = 41 | 175 | 200 | | 100 | 63 | 140 | | 160 | 340 | | 33 | PVDF = 216 | 147 | 250 | 1" FEMALE | |

 $[\]ensuremath{^{\star}}$ Different according to the manufacturer.

^{**} OPTIONAL UPON REQUEST: Baseplate - Flanges.



GEMMECOTTI SRL

Via A. Volta 85/A 20816 Ceriano Laghetto MB ITALY **EUROPEAN UNION**

> Ph: +39 02.96460406 Fax: +39 02.96469114

info@gemmecotti.com www.gemmecotti.com







