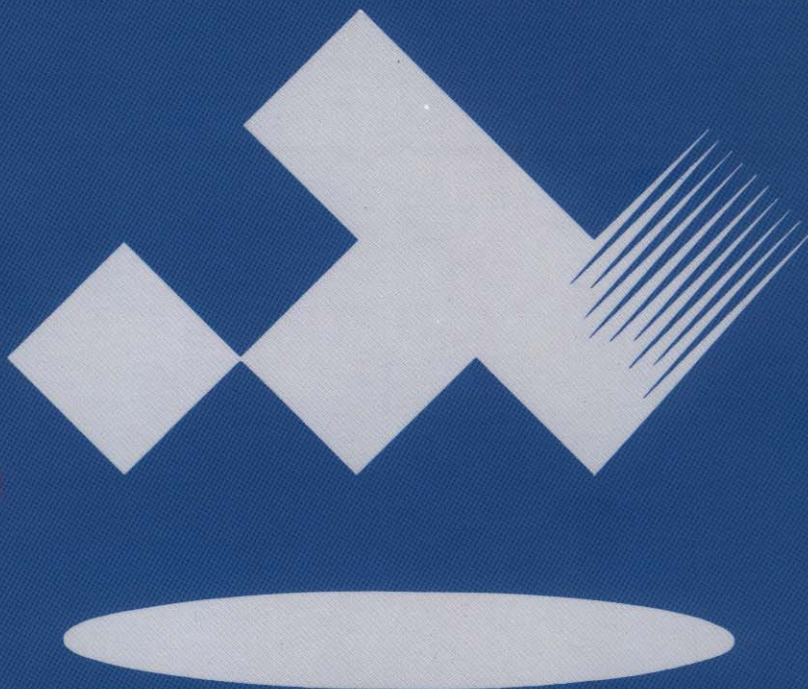
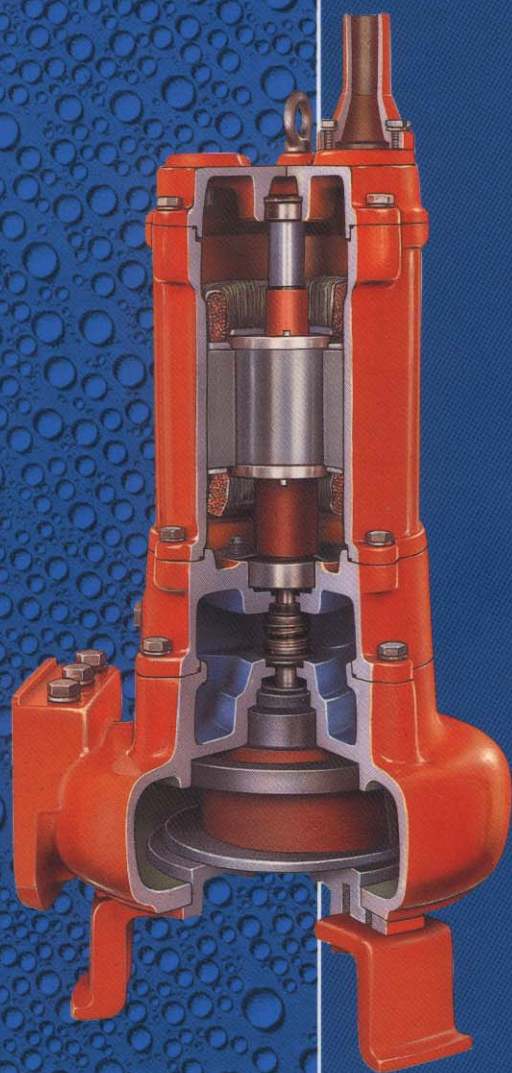


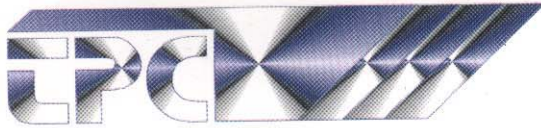


KS B 6321 (No.9178)
KOREAN STANDARD

TPC SUBMERSIBLE PUMPS



DAEWOONG
CORPORATION CO., LTD.



TPC Submersible Pump

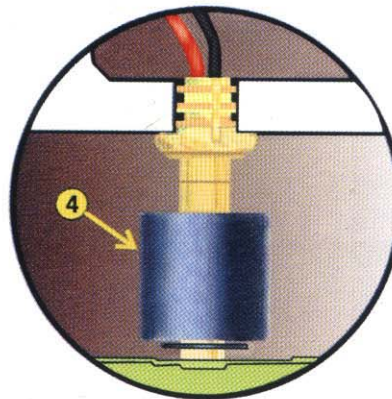
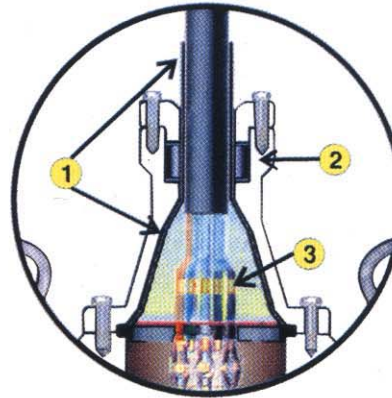
CABLE ENTRANCE

The TPC cable entrance incorporates the following features :

- ① Combination, thermal expansion, antikin-
king cable boot prevents cracking of the
epoxy potting due to the differential of
expansion rates between epoxy and cast
iron. The cable boot extends beyond the
cable entrance, thereby preventing the
power cable from kinking at the cable
entrance.
- ② Triple compression rubber washer,
flanked by two stainless steel washers,
prevents water from penetrating, both
inside and outside the cable boot.
- ③ Positive water block prevents water
from wicking down the cable into the motor,
even if the cable jacket is damaged.

SEAL SENSOR

- ④ This float type level sensor is furnished
as an optional item on units 7.5 Hp. (5.5kW)
and above. This type of sensor is
extremely reliable and will detect any
penetration of a foreign liquid into the
seal chamber.

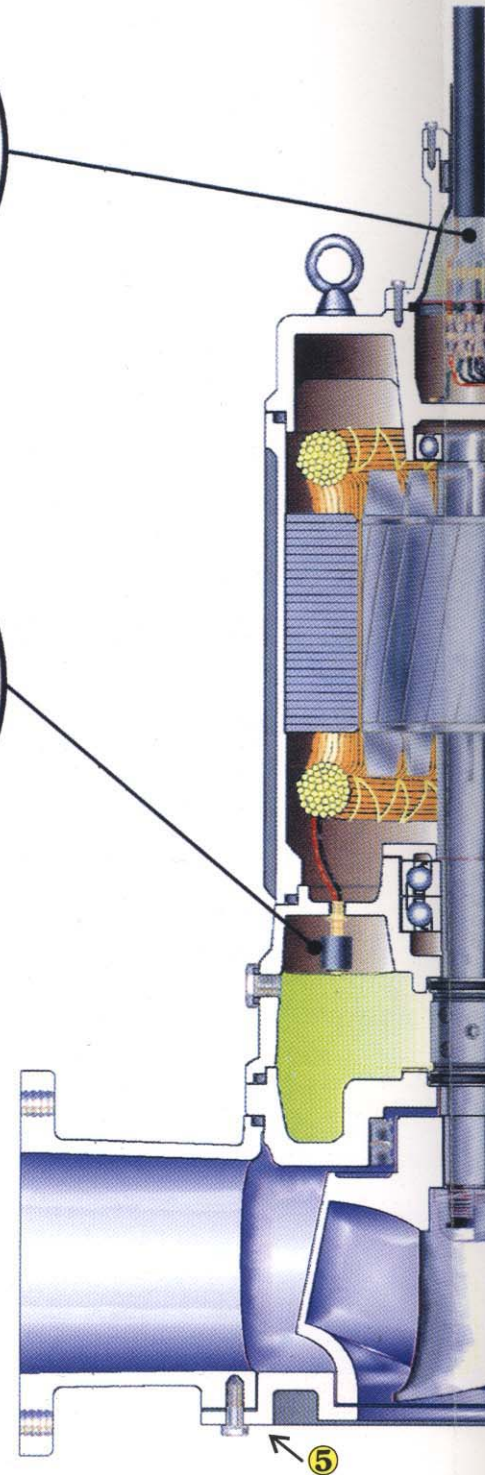


GENERAL FEATURES

The high costs of labor and "down time" require that submersible pumps be built to last. In order to meet this requirement, TPC submersible pumps incorporate, the highest quality materials and engineered features. Some of these features are outlined above in details.

To meet different applications TPC submersible pumps are offered in a wide variety of impeller designs, materials of construction and optional features. Impeller designs offered include semi-open solids handling, enclosed solids handling, enclosed mixed flow solids handling, semi-vortex solids handling and full vortex solids handling. Standard materials of construction are cast iron wetted part with stainless steel shaft and fasteners.

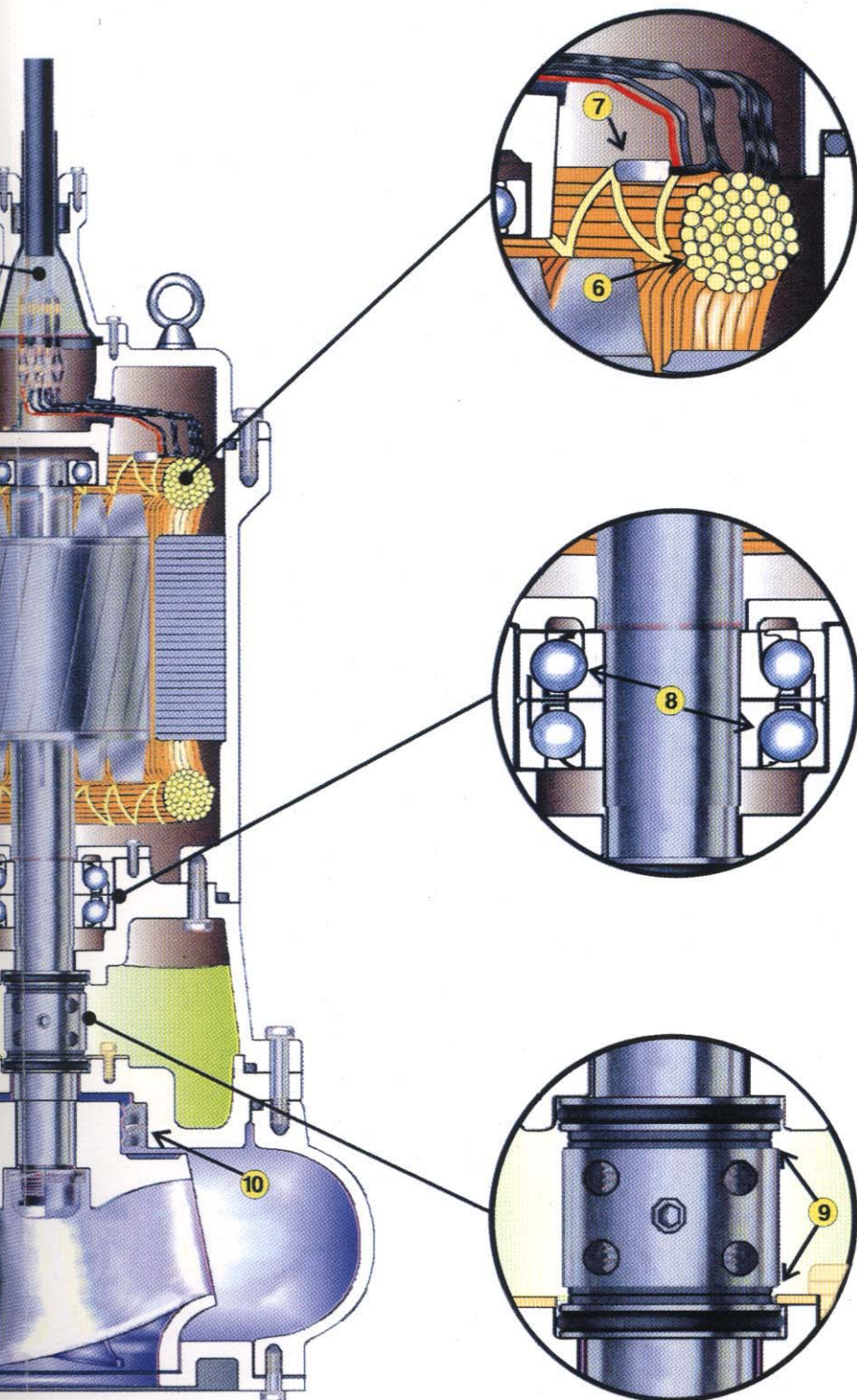
Optional materials of construction for wetted parts include all stainless steel, bronze fitted, all bronze and high chrome iron fitted. Optional features offered include QLD (Quick Lifting Device) (most models) and extended cable lengths (all models).



FIELD REPLACEABLE / ADJUSTABLE

- ⑤ Those models that are equipped with field adjustable and/or replaceable components.

p built to last in tough applications



ADJUSTABLE WEAR PLATE

equipped with wear plates, are designed to be replaceable.

CONTINUOUS DUTY MOTOR

TPC submersible motors are of the highly efficient, air filled design. Features include :

- ⑥ epoxy encapsulated, copper windings, class "F" insulation
- ⑦ built-in thermal protection for each winding.

HEAVY DUTY BALL BEARINGS

- ⑧ In order to provide extended operational life, all TPC submersible pumps are furnished with double shielded, permanently lubricated, high temperature C3 ball bearings rated for a B10 life of 50,000 hours (at best efficiency point).

SEVERE DUTY MECHANICAL SEAL

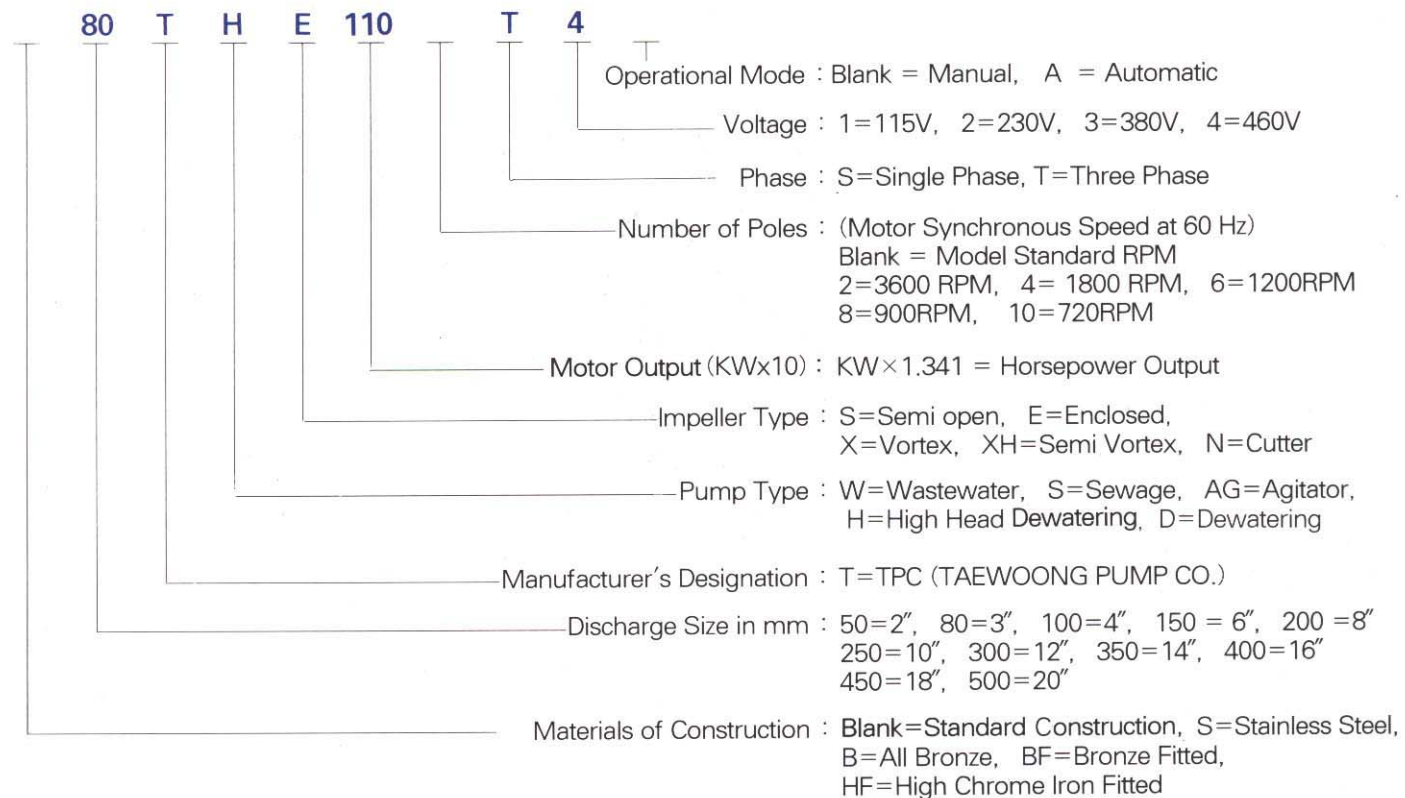
- ⑨ Double inside mechanical seals with silicon carbide faces (both top and bottom) are furnished as standard. For optimum operational life, the entire mechanical seal runs in an oil filled chamber located completely out of the pumpage and is further protected by one or more
- ⑩ exclusionary lip seals. This design feature provides the most durable mechanical seal available in submersible pumps today.

The double inside design allows for field replacement of the impeller, without disturbing the mechanical seal or the oil in the seal chamber.



TPC SUBMERSIBLE PUMPS

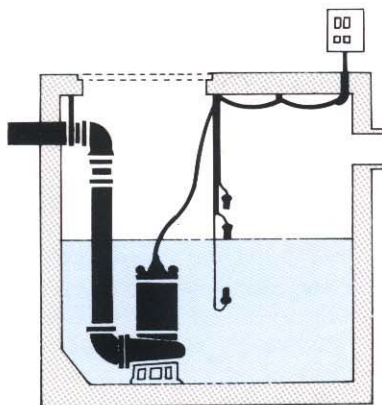
TPC PUMP MODEL NUMBER DESIGNATIONS



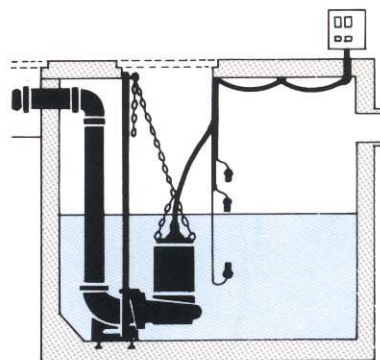
TPC LTD.

TPC PUMP INSTALLATION CONFIGURATIONS

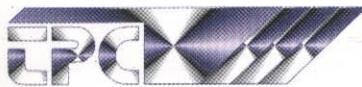
FREE STANDING



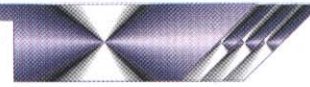
Q.L.D SYSTEM(Quick Lifting Device)



*Requires optional pump suction stand



TPC SUBMERSIBLE PUMPS



MODEL : TWS—WASTEWATER & EFFLUENT PUMPS (SEMI-OPEN IMPELLER)

■ APPLICATIONS

Residential, commercial and industrial wastewater and site drainage.

Decorative waterfalls and fountains.

Effluent transfer

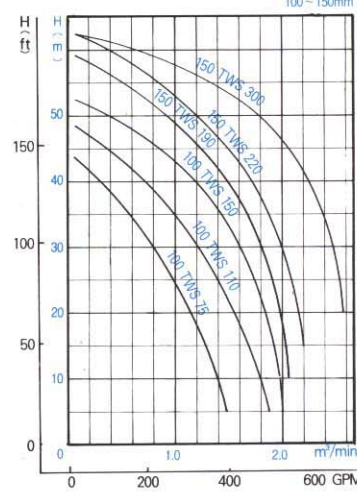
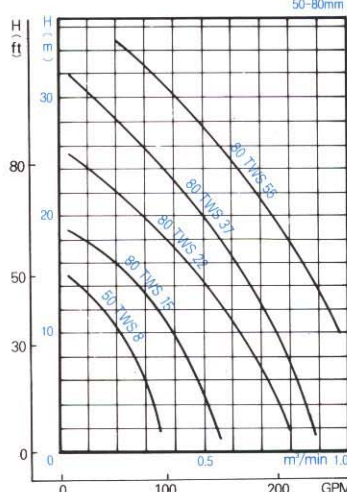
Raw water supply from lake or river.

■ FEATURES

1. Semi-open impeller with replaceable/adjustable wearplate guarantees efficient pumping.
2. Double inside mechanical seals with silicon carbide faces.
3. Highly efficient, continuous duty, air filled, copper wound, epoxy encapsulated motor with class F insulation.
4. Built-in thermal protection prevents motor failure due to overloading.



PERFORMANCE RANGE, 60Hz
(Synchronous Speed 3600RPM)



5. Double shielded, permanently lubricated, high temperature ball bearings.
6. Watertight cable entrance.
7. Optional - Q.L.D (Quick Lifting Device)

TPC LTD.

MODEL : TSXH—SEWAGE & EFFLUENT PUMPS (SEMI-VORTEX IMPELLER)

■ APPLICATIONS

Residential, commercial and industrial sewage and effluent.

Wastewater and site drainage from truck docks.

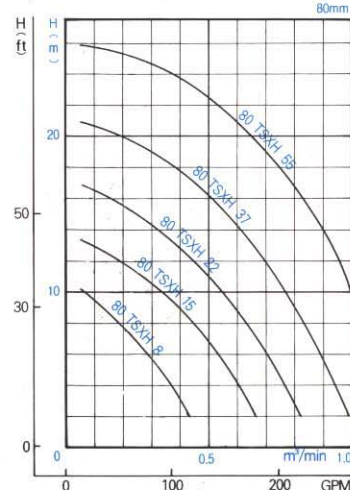
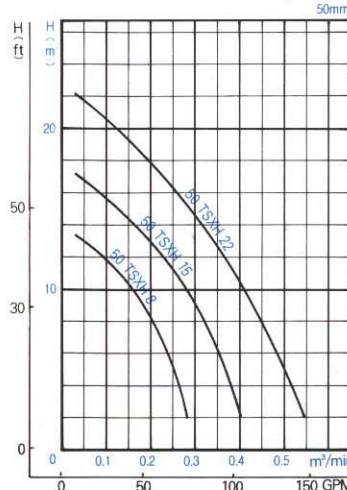
Industrial drainage when pumpage contains solid or stringy materials.

■ FEATURES

1. Semi-vortex impeller dramatically reduces the chances of clogging.
2. Double inside mechanical seals with silicon carbide faces.
3. Highly efficient, continuous duty, air filled, copper wound, epoxy encapsulated motor with class F insulation.
4. Built-in thermal protection prevents motor failure due to overloading.



PERFORMANCE RANGE, 60Hz
(Synchronous Speed 3600RPM)



5. Double shielded, permanently lubricated, high temperature ball bearings.
6. Watertight cable entrance.
7. Optional - Q.L.D (Quick Lifting Device)



TPC SUBMERSIBLE PUMPS

MODEL : TSX – SEWAGE & WASTEWATER PUMPS (VORTEX IMPELLER)

■ APPLICATIONS

Residential, commercial and industrial sewage.

Wastewater and site drainage from truck docks.

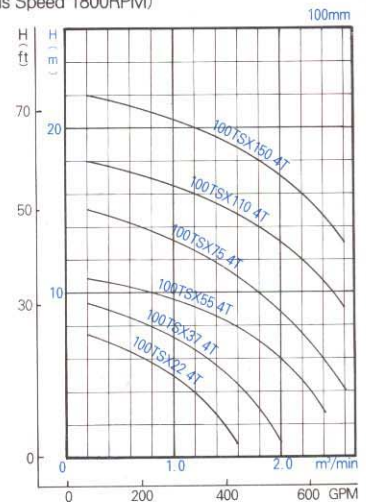
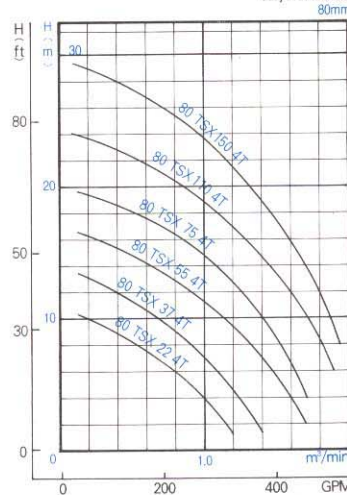
Industrial drainage when pumpage contains solids or stringy materials.

■ FEATURES

1. Fully recessed vortex impeller reduces the chances of clogging.
2. Double inside mechanical seals with silicon carbide faces.
3. Highly efficient, continuous duty, air filled, copper wound, epoxy encapsulated motor with class F insulation.
4. Built-in thermal protection prevents motor failure due to overloading.



PERFORMANCE RANGE, 60Hz
(Synchronous Speed 1800RPM)



5. Double shielded, permanently lubricated, high temperature ball bearings.
6. Watertight cable entrance.
7. Optional – Q.L.D.(Quick Lifting Device)

TPC LTD.

MODEL : TSN – WASTEWATER & SEWAGE PUMPS (SEMI-OPEN IMPELLER WITH CUTTER)

■ APPLICATIONS

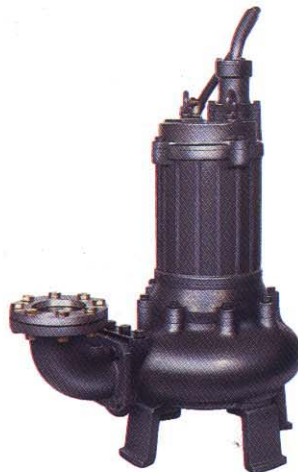
Residential, commercial and industrial sewage.

Wastewater and site drainage from truck docks.

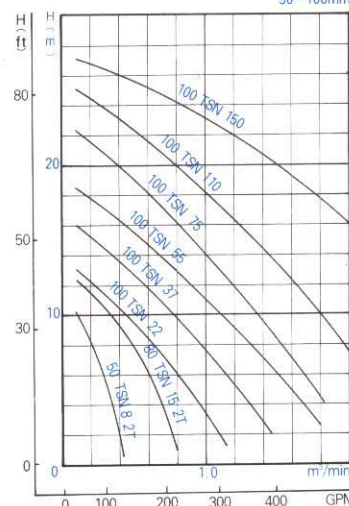
Industrial drainage when pumpage contains solids or stringy materials.

■ FEATURES

1. Semi-open impeller with cutter reduces solids, rags and stringy materials to a size that allows pumping.
2. Double inside mechanical seals with silicon carbide faces.
3. Highly efficient, continuous duty, air filled, copper wound, epoxy encapsulated motor with class F insulation.
4. Built-in thermal protection prevents motor failure due to overloading.



PERFORMANCE RANGE, 60Hz
(Synchronous Speed 1800~3600RPM)



5. Double shielded, permanently lubricated high temperature ball bearings.
6. Watertight cable entrance.
7. Optional – Q.L.D.(Quick Lifting Device.)

TPC SUBMERSIBLE PUMPS

MODEL : TSS – SEWAGE & WASTEWATER PUMPS (SEMI-OPEN IMPELLER)

■ APPLICATIONS

Residential, commercial, municipal, industrial sewage, wastewater and effluent transfer.

Decorative waterfalls and fountains.

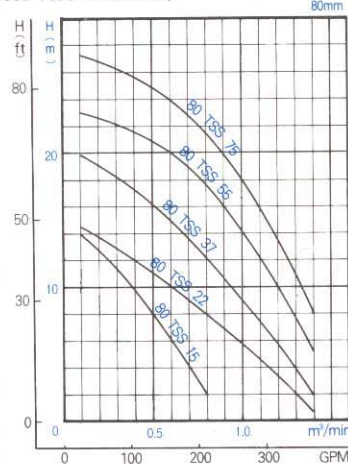
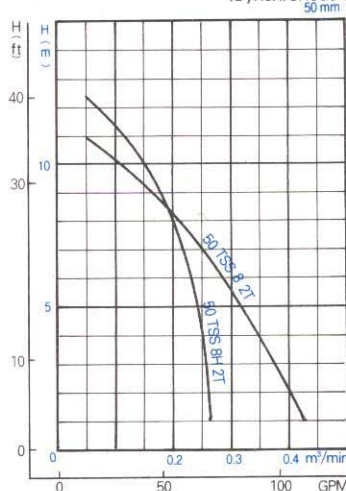
Raw water supply from river or lake.

■ FEATURES

1. Semi-open, solids handling impeller with replaceable/adjustable wearplate.
2. Double inside mechanical seals with silicon carbide faces.
3. Highly efficient, continuous duty, air filled, copper wound, epoxy encapsulated motor with class F insulation.
4. Built-in thermal protection prevents motor failure due to overloading.



PERFORMANCE RANGE, 60Hz
(Synchronous Speed 1800~3600RPM)



5. Double shielded, permanently lubricated, high temperature ball bearings.
6. Watertight cable entrance.
7. Optional – Q.L.D. (Quick Lifting Device)

TPC LTD.

MODEL : TSE – WASTEWATER & SEWAGE PUMPS (ENCLOSED IMPELLER)

■ APPLICATIONS

Residential, commercial, municipal, industrial sewage, wastewater and effluent transfer.

Decorative waterfalls and fountains.

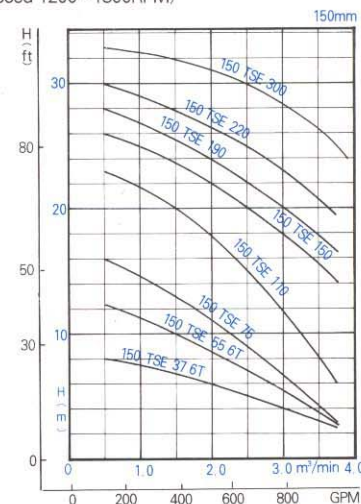
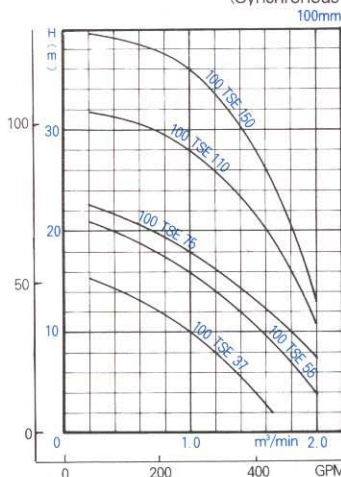
Raw water supply from river or lake.

■ FEATURES

1. Enclosed, solids handling impeller with adjustable/replaceable wearplate.
2. Double inside mechanical seals with silicon carbide faces.
3. Highly efficient continuous duty, air filled, copper wound, epoxy encapsulated motor with class F insulation
4. Built-in thermal protection prevents motor failure due to overloading.



PERFORMANCE RANGE, 60Hz
(Synchronous Speed 1200~1800RPM)



5. Double shielded, permanently lubricated, high temperature ball bearings.
6. Watertight cable entrance.
7. Optional – Q.L.D. (Quick Lifting Device)



TPC SUBMERSIBLE PUMPS

MODEL : TSE – WASTEWATER & SEWAGE PUMPS (ENCLOSED IMPELLER)

■ APPLICATIONS

Residential, commercial, municipal, industrial sewage, wastewater and effluent transfer.

Decorative waterfalls and fountains

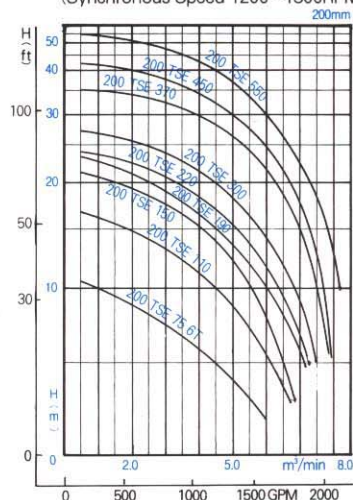
Raw water supply from river or lake.

■ FEATURES

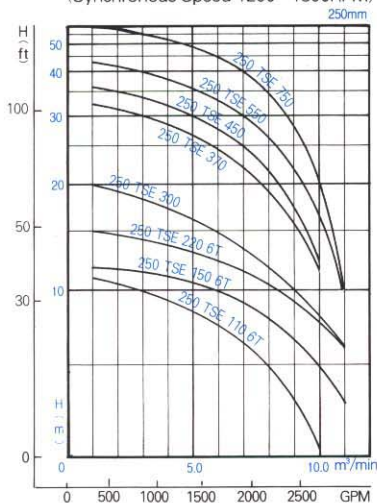
1. Enclosed, solids handling impeller with adjustable/replaceable wearplate.
2. Double inside mechanical seals with silicon carbide faces.
3. Highly efficient, continuous duty, air filled, copper wound, epoxy encapsulated motor with class F insulation
4. Built-in thermal protection prevents motor failure due to overloading.
5. Double shielded, permanently lubricated, high temperature ball bearings.
6. Watertight cable entrance.
7. Optional – Q.L.D (Quick Lifting Device)



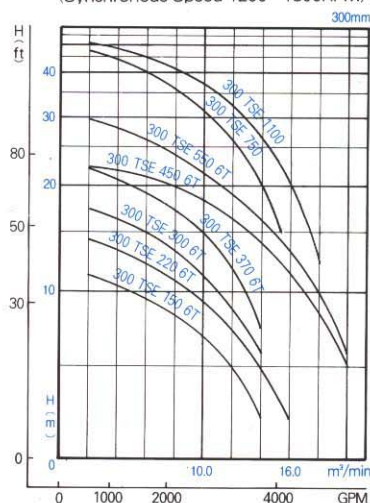
PERFORMANCE RANGE, 60Hz
(Synchronous Speed 1200~1800RPM)



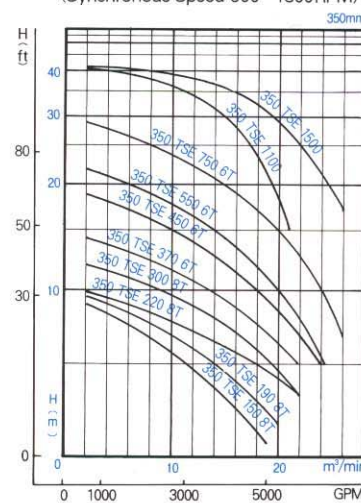
PERFORMANCE RANGE, 60Hz
(Synchronous Speed 1200~1800RPM)



PERFORMANCE RANGE, 60Hz
(Synchronous Speed 1200~1800RPM)



PERFORMANCE RANGE, 60Hz
(Synchronous Speed 900~1800RPM)





TPC SUBMERSIBLE PUMPS

MODEL : TDS – DEWATERING PUMPS (SEMI-OPEN IMPELLER)

■ APPLICATIONS

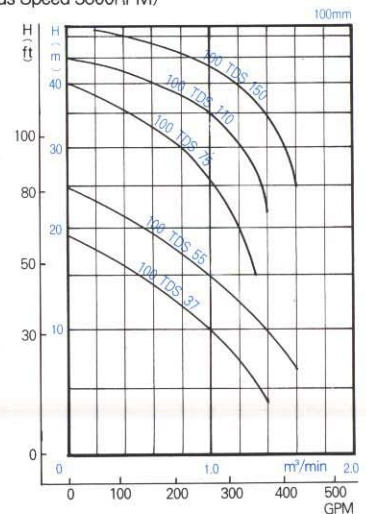
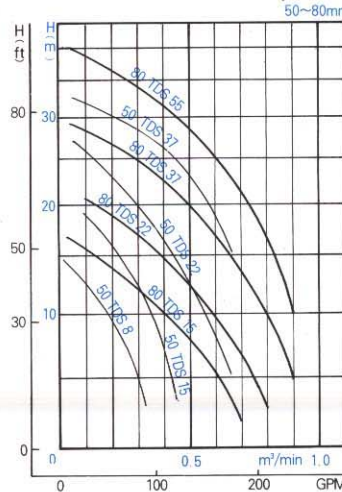
Construction site drainage.
Raw water supply from river or lake.
Portable or emergency drainage.

■ FEATURES

1. Semi-open impeller, high head design with replaceable and adjustable wearplate.
2. Double inside mechanical seals with silicon carbide faces.
3. Seal pressure relief ports (high head models).
4. Highly efficient, continuous duty, air filled, copper wound, epoxy encapsulated motor with class F insulation.
5. Built-in thermal protection prevents motor failure due to overloading



PERFORMANCE RANGE, 60Hz
(Synchronous Speed 3600RPM)



6. Double shielded, permanently lubricated, high temperature ball bearings.
7. Watertight cable entrance.

TPC LTD.

MODEL : TDS4 – DEWATERING PUMPS (SEMI-OPEN IMPELLER)

■ APPLICATIONS

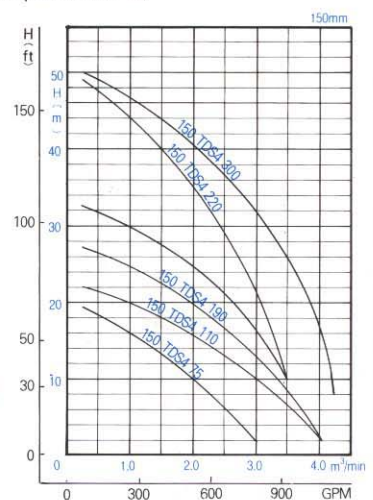
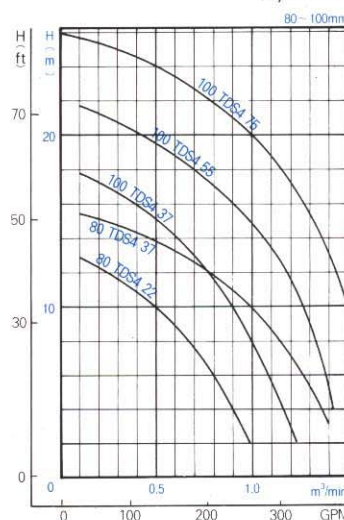
Construction site drainage.
Raw water supply from river or lake.
Portable or emergency drainage.

■ FEATURES

1. Semi-open impellers, high capacity design with replaceable/adjustable wearplate.
2. Double inside mechanical seals with silicon carbide faces.
3. Seal pressure relief ports (high head models).
4. Highly efficient, continuous duty, air filled, copper wound, epoxy encapsulated motor with class F insulation.
5. Built-in thermal protection prevents motor failure due to overloading



PERFORMANCE RANGE, 60Hz
(Synchronous Speed 1800RPM)



6. Double shielded, permanently lubricated, high temperature ball bearings.
7. Watertight cable entrance.



TPC SUBMERSIBLE PUMPS

MODEL : THE – DEWATERING PUMPS (ENCLOSED IMPELLER)

■ APPLICATIONS

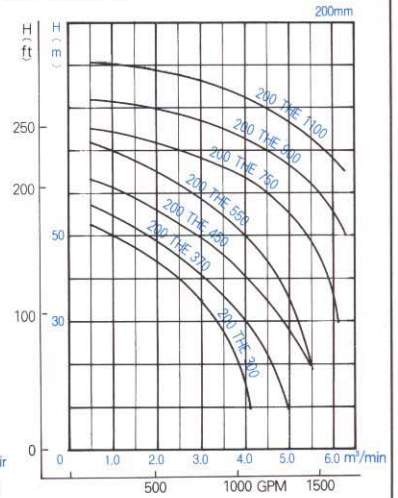
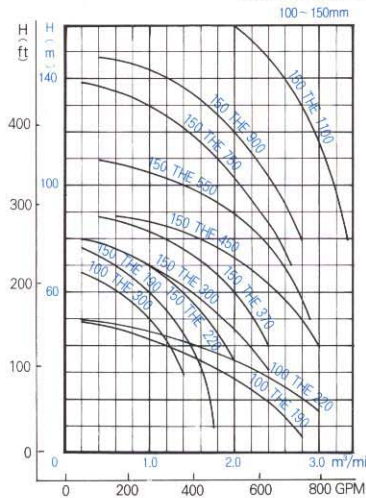
Construction site drainage.
Drainage in Mining.
Raw water supply from river or lake.
Portable or emergency drainage.

■ FEATURES

1. Enclosed impeller, high head and/or high capacity design with replaceable/adjustable wearplate.
2. Double inside mechanical seals with silicon carbide faces.
3. Seal pressure relief port (high head models).
4. Highly efficient, continuous duty, air filled, copper wound, epoxy encapsulated motor with class F insulation.
5. Built-in thermal protection prevents motor failure due to overloading



PERFORMANCE RANGE, 60Hz
(Synchronous Speed 3600 RPM)



6. Double shielded, permanently lubricated, high temperature ball bearings.
7. Watertight cable entrance.

TPC LTD.

MODEL : TWAG – SAND AND SLURRY PUMPS (SEMI-OPEN IMPELLER WITH AGITATOR)

■ APPLICATIONS

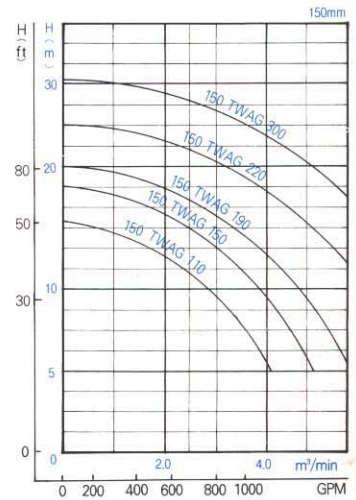
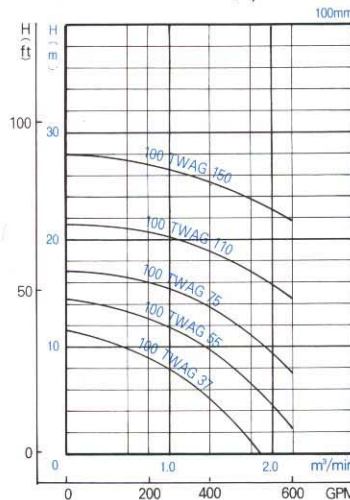
General slurry and sand pumping.
Sediment or sand removal from sumps or basins.
Grit pumping with chamber
Ore pumping and agitating.
Slag pumping.

■ FEATURES

1. Semi-open solids handling impeller with agitator and replaceable/adjustable wearplate.
2. Double inside mechanical seals with silicon carbide faces.
3. Highly efficient, continuous duty, air filled, copper wound, epoxy encapsulated motor with class F insulation.
4. Built-in thermal protection prevents motor failure due to overloading.



PERFORMANCE RANGE, 60Hz
(Synchronous Speed 1200~1800 RPM)



5. Double shielded, permanently lubricated, high temperature ball bearings.
6. Watertight cable entrance.

MODEL : TR – SUBMERSIBLE AERATOR (SEMI-OPEN IMPELLER)

■ APPLICATIONS

Preaeration and primary aeration for commercial, industrial and municipal wastewater treatment.

Pond aeration for fish farming and aquaculture.

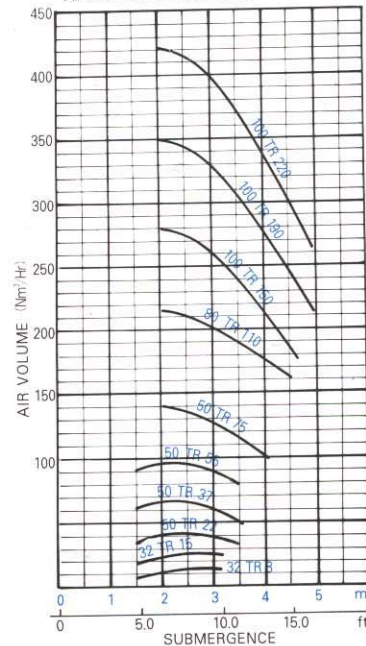
■ FEATURES

1. Semi-open double induction impeller with adjustable/replaceable wearplate.
2. Double inside mechanical seals with silicon carbide faces.
3. Highly efficient, continuous duty, air filled, copper wound, epoxy encapsulated, motor with class F insulation.
4. Built-in thermal protection prevents motor failure due to overloading.
5. Double shielded, permanently lubricated, high temperature ball bearings.
6. Watertight cable entrance.



PERFORMANCE RANGE, 60Hz
(Synchronous Speed 1800~3600RPM)

Air Volume / Water Depth Curve



TPC LTD.

MODEL : QUICK LIFTING DEVICE(Q.L.D)

■ APPLICATIONS

Supplied as an optional item, the Model "Q.L.D" slide rail system provides a quick and simple means for setting or removing submersible pumps, without the need for personnel to enter the wet well.

(Q.L.D = Quick Lifting Device)

■ FEATURES

1. Two rail design provides a positive guide to slide rail base..
2. Machined cast iron faces insure a positive sealing without the need for gaskets or secondary sealing devices..

