

# SUBMERSIBLE PUMPSET

*for long life & better efficiency*



INDKOYO brand submersible pumps are available in the range of V4, V5 & V6. INDKOYO's design is prepared by Indo Malaysian Joint Venture Group. Newly Launched V6 (Metal) Submersible pump is the result of the constant research, development and experience. The pump is having many unique features such as 15 Mtr. Head per stage, extremely long life, attractive outlook, higher efficiency and above all its ECONOMICAL operation.

INDKOYO is manufactured from high quality of raw material e.g. its Bowls made from SS 304 grade non magnetic, non corrosive, providing permanent smooth surface to the flow of water. The Bowl-impeller set is designed hydraulically to match with each other for the specified flow, head and load so as to achieve the maximum efficiency with minimum mechanical and hydraulic losses.

The maximum accuracy and precision of components make the INDKOYO pump quit **DISTINCTIVE**. The complete INDKOYO pump set is passed through stringent inspection and testing before it reaches to our valued customer.

The technical know-how combined with hard efforts make the INDKOYO superior in reality. With a view to bring **REVOLUTION** in the field of manufacturing submersible pumps our technical team has made hard efforts to give our customers much better results then ever. This technology is acclaimed by the customers and that has motivated to even better in future.

## Salient Features & Technical Data :

**More Output in Less Power & H.P.**



S.R. No.	Description	V-6 Submersible Pumpset	V-5 Submersible Pumpset	V-4 Submersible Pumpset
1)	Range of H.P.	3 HP to 25 HP (Three phase only)	3 HP to 7.5 HP (Three phase only)	0.5 HP to 3 HP (Single & Three phase both)
2)	Range of Head	15 mtr. to 450 mtr. (50' to 1500')	30 mtr. to 235 mtr. (100' to 770')	20 mtr. to 245 mtr. (65' to 800')
3)	Range of discharge at Duty point	120 lpm to 1000 lpm	70 lpm to 160 lpm	25 lpm to 160 lpm
4)	Maximum discharge at low head	240 lpm to 1800 lpm	140 lpm to 280 lpm	60 lpm to 260 lpm
5)	Maximum head per stage	15 mtr (50')	7.5 mtr (25')	6 mtr (20')
6)	Operating Voltage for better result	250 V to 450 V (volt phase to phase)	300 V to 450 V (volt phase to phase)	140 V to 260 V (volt phase to phase)
7)	Material Specification of Bowlset	304 Grade S.S. non magnetic & G.M. Impeller with S.S. Neck ring.	Engineering Plastic NORYL-GFN2-701 Grade	Engineering Plastic NORYL-GFN2-701 Grade
8)	Weight & Length of pump	Very short in length & light in weight compare to conventional M.S./C.I. pump	very light due to NORYL - Bowlset & light S.S. pipe of pump and motor	very light due to NORYL - Bowlset & light S.S. pipe and motor
9)	Durability of pump set.	Very long life due to S.S. 304 Bowl and fully S.S. body motor.	long life due to S.S. body of pump & motor.	long life due to S.S. body of pump & motor.
10)	Output/ power consumption	more output by 20 to 30% than conventional M.S./C.I. body pumpset so as it saves the electricity	more output by 20 to 30% than conventional pump	more output by 20 to 30% than conventional pump.
11)	Outlook	SUN SHINING & very attractive (colour less pump)	Very good outlook due to S.S. body of pump and motor.	Very good outlook due to S.S. body of pump and motor.

## Technical Specification

### Motor :

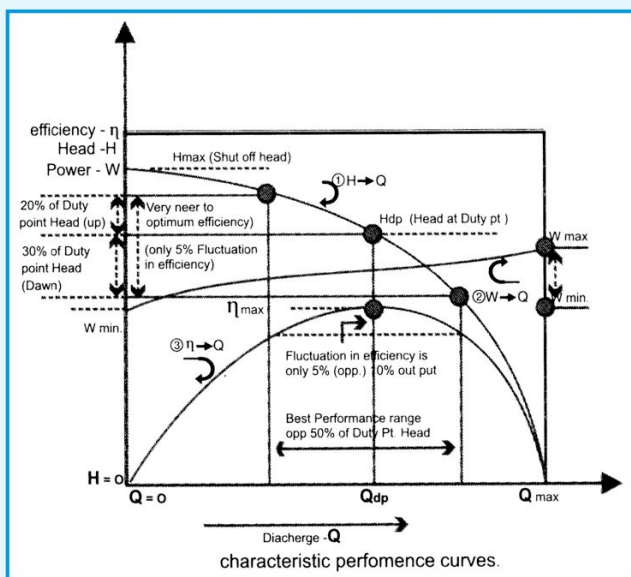
- Body is of S.S. 304 Grade heavy duty pipe from top to bottom
- Stator - Rotor are of imported high silicon stamping which minimize the iron losses.
- Copper strip (Rod) of Rotor is of pure E.C. Grade Copper as per IS Std.
- Winding wire is of tapping type having high resisting insulating capacity upto 5000 V.
- Tofflan plate and S.S. bearing as well as fiber plate & Bronze bearing are used
- Bushes are as per IS Std.

### PUMP V-6 :

- Bowls, NRV, Suction, shaft, couple, clamping strips, stud/nuts etc. are made from S.S. 304 Grade nonmagnetic noncorrosive material. This pump can be run in sandy or muddy water without any wear & tear.

### PUMP V-5 & V-4 :

- Bowls made from NORYL GFN2-701 are inserted in S.S. 304 Grade pipe.
- V-4 Submersible Pumpset are also available in BRASS Models (ie. NRV, Suction, Housing, base, etc. are made from brass)



## Indokoyo characteristic performance curves.

- Graph is of Head V/S discharge (H-->Q) Discharge fluctuate almost inversly proportionate to HEAD, So as minor change occurs in efficiency in best performance range. (i.e. Discharge increases tremendously, if Head reduces)
- Graph is of input power V/S. discharge (W-->Q). Slope is very flat i.e. minor increase in poer consumption with increases of discharge.
- Graph is overall efficiency V/S discharge ( $\eta$ -->Q).

There is only opp. 5% fluctuation in overall efficiency in the event of 20% increase and 30% decrease in head from Duty. Pt.

H = Total head of water in meter  
Q = Discharge in Lpm.  
 $\eta$  = Overall efficiency in %  
W = Input Power in KW.

Conclusion : When the water level comes up, flow increases much more (even in high head pump) so no need to change pump