

# **INDO-FORCE PUMP**

## **SELF-PRIMING NON-CLOG DEWATERING PUMP**



**DEWATERING COUPLED PUMP**



**DEWATERING MONOBLOCK PUMP**



**DEWATERING BARE SHAFT PUMP**



**GEAR PUMP**

# SELF PRIMING NON CLOG DEWATERING PUMPS



**INDO-FORCE PUMP**

## Features

- Self priming pump-priming required during installation only
- Self priming upto 8.0 meters at means sea level for ifd series & upto 6.0 meters.
- Construction : Bare Pump/Monoset/Monocoupled
- Shaft sealing gland packing mechanical seal
- Totally enclosed fan cooled motor suitable for wide volatage
- Non-clog type impeller suitable to handle liquid with solid particle & mixtures
- Easy maintainance with interchangeable parts

## Applications

### Industrial

- Effluent Treatment Plants
- Transfer of Petroleum products, Chemicals, Treated / Raw water
- Ash water in Thermal Power Plants
- Waste liquid in Tiles & Marble factories

### Domestic

- Civil construction sites
- Swimming pool filtration
- Dewatering of basement water & trenches

### Marine

- Pumping water from docks, ports, vessels

### Agriculture

- Dewatering

## Standard Specifications

- Power Range : 0.37 to 7.5 KW (1.0 to 10 HP)
- Supply : 225 Volts, 1 phase, 50 Hz AC supply  
: 415Volts, 3 phase, 50 Hz AC supply
- Suc. X Del. Size :  $\varnothing$  25 x 25 mm to  $\varnothing$ 100 x 100 mm
- Speed : 1500 / 3000 RPM
- Total Head : Up to 36 meters
- Capacity : Up to 2000 LPM
- Solid Handling Capacity : Up to 20 mm
- Operating Temperature : Up to 65 C
- Motor- Degree of Protection : IP 54
- Motor Class of Insulation : 'B' class

## Material of Construction for Dewatering Pumps IFD Series

S. No.	PART	MATERIAL
1	Impeller (Semi open type)	Graded Cast Iron
2	Delivery Casing	Graded Cast Iron
3	Wear Plate	Graded Cast Iron
4	Shaft	Carbon Steel
5	Shaft Sleeve	SS 410

## Material of Construction for Self Priming Monoset Pumps IFD Series

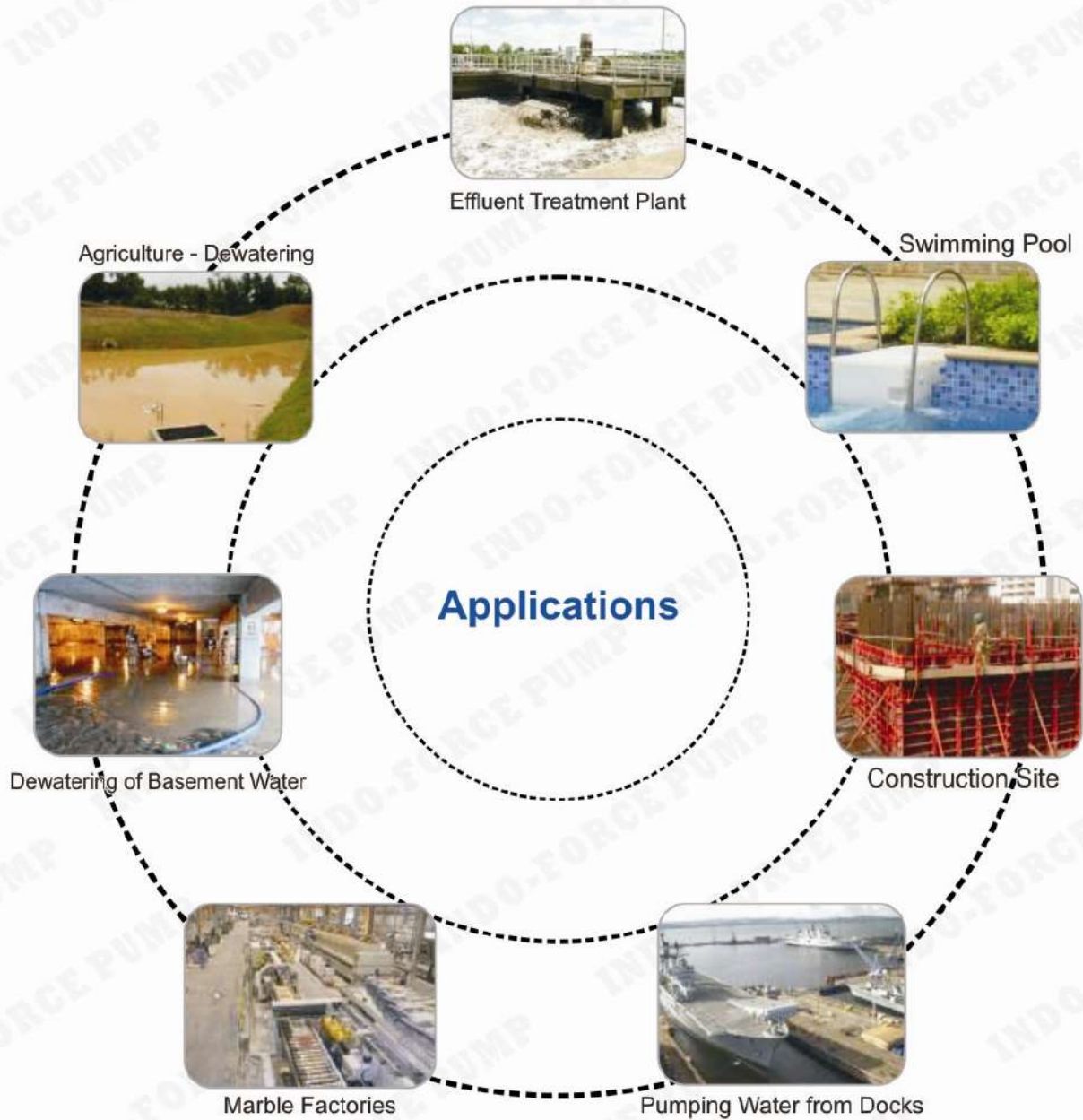
S. No.	PART	MATERIAL
1	Impeller (Non-Clog type)	Bronze
2	Casing	Graded Cast Iron
3	Wear plate	Stainless Steel
4	Delivery Bend	Graded Cast Iron
5	Shaft	Carbon Steel
6	Shaft Sealing	Mechanical seal fitted
7	Integrated Non Return Valve	Nitrile Rubber with M.S. plate
8	Bracket	Graded Cast Iron
9	Base Frame	M.S. Fabricated



# SELF PRIMING NON CLOG DEWATERING PUMPS

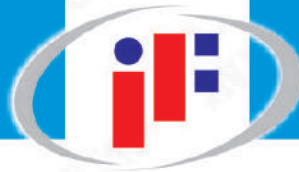


**INDO-FORCE PUMP**



**Mfg. By : Real Industries**

**Ahmedabad (Guj.)**



# INDO-FORCE PUMP



# SUBMERSIBLE DEWATERING PUMPS



**INDO-FORCE PUMP**

## Features

- The Pumps are portable and self priming.
- Fitted with Electric Motors in Monoblock Design.
- Sealed with double mechanical seal.
- Ideal for pumping contaminated liquids with fine solids, sands or such other liquids.
- Non clogging designs.
- Heavy duty bearing. Built in - in overload protection.
- Supplied with 5 mtr. ( $\pm 1$  Mtr.) cable as standard.

## Applications

- Drainage of sewage from the building basements, hotel, industry, waste water from factories.
- Drainage of sewage from industrial process factories.
- Emptying for septic tanks, cesspits and sewage pump stations.
- Pumping surface and drainage water from garages and sprinkler systems.
- Swimming Pool Filtration.

## Standard Specifications : Motor

- Power Range : 1.0 HP to 5.0 HP
- Supply : 225 Volts, 1 phase, 50 Hz AC supply  
: 415Volts, 3 phase, 50 Hz AC supply
- Speed : 2800 RPM
- Insulation : "B" Class
- Motor Degree of Protection : Ip-54
- Operating Conditions : - Liquid Temperature up to 40<sup>o</sup>  
- Ambient temperature up to 50<sup>o</sup>  
- Max. Starts per Hour 30 at Regular Intervals  
- Continuous Duty.  
- Max Depth 18.5 M

## Types of Impeller

- ➔ Semi -open impeller Cutting foreign particles and preventing clog by solid media
- ➔ This impeller can generate rapid rotating vortex to handle fluid mixed with long fiber, the majority of abrasive solids do not touch impeller to minimize impeller wear.



## Float Switch

- ➔ Excellent quality float switch provides with epoxy resin sealed connector.

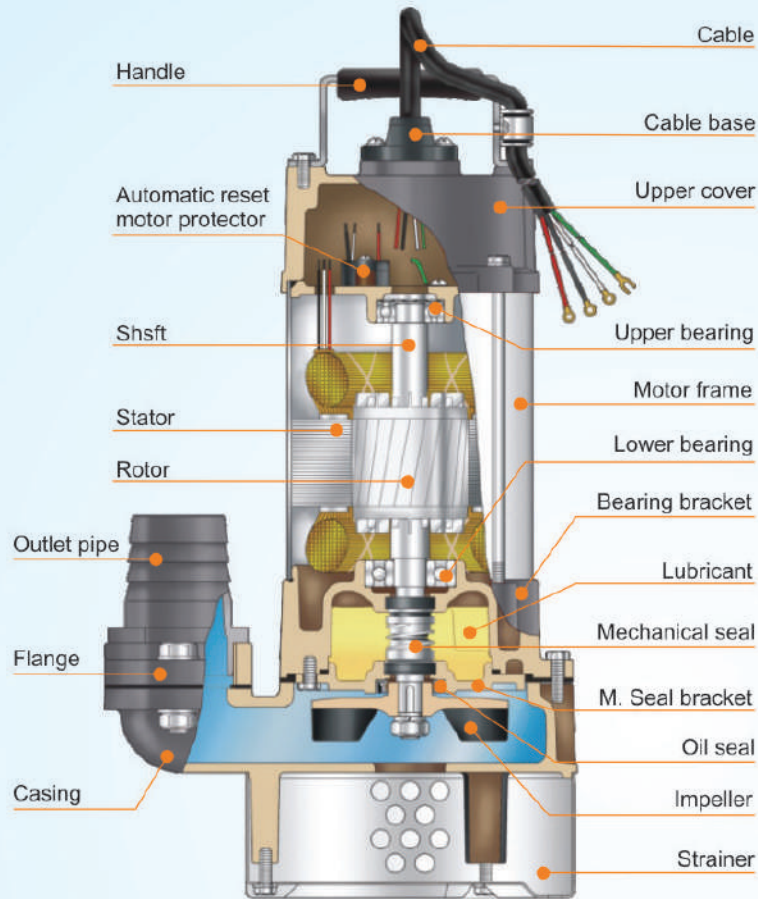


Material of Construction

S. No.	PART	MATERIAL
1	Impeller (Semi open type)	Grey Iron / Stainless Steel
2	Mech. Seal	Double Mech. Seal
		Motor Side - Carbon v/s Ceramic
		Pump Side - Silicon Carbide v/s Silicon Carbide
3	Delivery Casting	Grey Iron
4	Shaft	Carbon Steel
5	Upper Cover	Grey Iron
6	Bearing	Ball Type Bearing



**INDO-FORCE PUMP**



**PERFORMANCE DATA AT n = 2900 RPM**

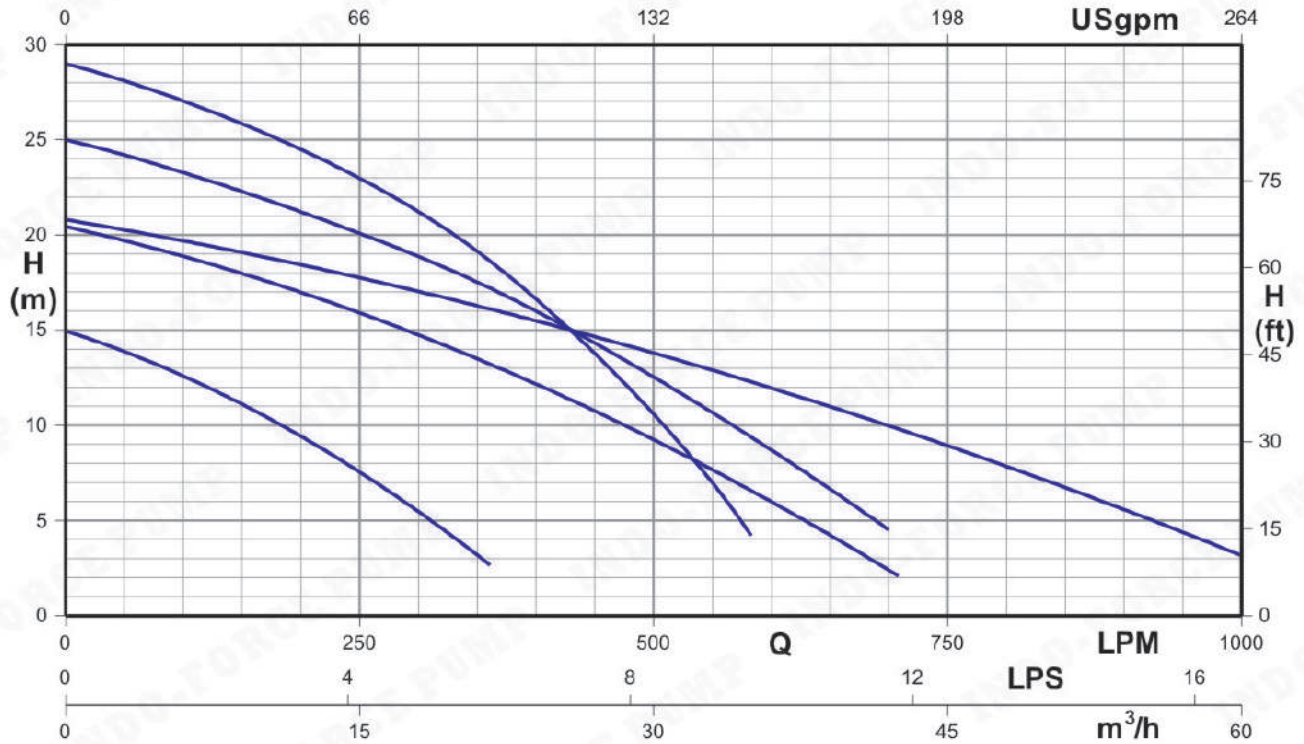
Model IFSD	Del. Size mm	Size of Solid mm	Head in Meters V/s. Discharge in LPM											Motor HP/kW	Weight Kgs. (Approx)	Dimension W x H in mm	
			4.0	7.5	10.0	12.5	15.0	17.5	20.0	22.5	25.0	30.0	40.0				
1.0	50	8	300	220	150	70									1/0.75	16	210x470
2.0	65	8	550	400	375	300	135								2/1.5	32	260x600
3.0	80	8	875	700	600	500	300								3/2.2	48	260x600
5.0	80	12	1300	1100	1000	850	650	450	225						5/3.7	50	450x680

**Capacity Data Subject to 10% Variation**



**INDO-FORCE PUMP**

**PERFORMANCE CHART AT n = 2900 RPM FOR DWATERING PUMPS**



**Our Other Product**



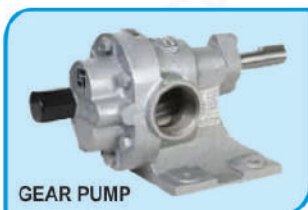
DEWATERING MONOBLOCK PUMP



DEWATERING COUPLED PUMP



DEWATERING BARE SHAFT PUMP



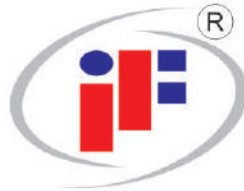
GEAR PUMP



GEAR PUMP

**MFG. BY : REAL INDUSTRIES**  
**AHMEDABAD (Guj.)**





**INDO-FORCE  
PUMP**

Series : IFG

## Perfect Solution

for Transfer of Oil, Viscous &  
Semi Viscous Liquid



ROTARY GEAR PUMPS

**REAL INDUSTRIES**  
AHMEDABAD

“ Quality...Service....Satisfaction...”

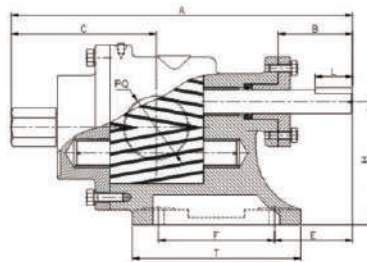
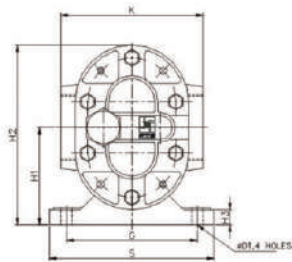
# ADVANCED TECHNOLOGY FOR PUMPING VISCOUS LIQUID



Real Industries offers most efficient and economic range of Positive Displacement Rotary Gear Pumps under the brand name "INDOFORCE" having special features like simple & compact design, low noise, high efficiency, easy to maintain, reliable and low cost. "INDOFORCE" Rotary Gear Pumps are ideal for Chemical, Petrochemical, Food, Oil, Steel Refining, Paints, Dairy Sugar & Pharmaceutical Industries etc. The Pump are useful for handling viscous liquids i.e. all kinds of oils, viscous chemicals & food applications etc.

## MODEL & PERFORMANCE CHART

PUMP MODEL	SUCTION & DELIVERY	CAPACITY AT 1440RPM			RECOMMENDED MOTOR BHP AT DIFFERENTIAL PRESSURE (KG/CM2) WITH 1500 SSU VISCOSITY											WT OF (APPROX.) BARE PUMP IN KG.
		LPM	US GPM	M3/hr	Kg/m2	1	2	3	4	5	6	7	8	9	10	
IFG - 0.5	1/2" 1/2"	25	5.3	1.2	KW HP	0.30	0.35 0.5	0.42	0.45	0.50 0.75	0.55	0.60	0.65	0.70 1.0	0.75	2.2
IFG - 1.0	1" 1"	50	13.2	3.0	KW HP	0.4	0.50 1.0	0.60	0.70	0.89 15	1.04	1.17	1.30	1.46 2.0	1.59	
IFG - 1.5	1 1/2" 1 1/2"	110	29.0	6.6	KW HP	1.0	1.45 2.0	1.95	2.10	2.40 3.0	2.65	2.95	3.25	3.60 5.0	3.75	9.5
IFG - 2.0	2" 2"	225	59.4	13.5	KW HP	2.0	2.0 3.0	3.2	3.75	4.3 5.0	4.55	5.6	4.3	6.9 7.5	7.11	
IFG - 2.5	2 1/2" 2 1/2"	350	92.5	21.0	KW HP	4.15	5.0 5.0	6.1	7.3	8.2 10.0	9.1	10.3	11.2	12.1 12.5	12.25	28.5
IFG - 3.0	3" 3"	500	132.0	30.0	KW HP	4.5	6.6 10	8.4	9.9	11.1 15	12.1	13.0	13.9	14.9 20	15.9	



### MATERIAL OF CONSTRUCTION STANDARD PARTS

Body : IS.210 FG 220 C.I. Grade  
 Back Cover : IS.210 FG 220 C.I. Grade  
 Gears : EN - 8 EN - 24 H. Nitrided  
 Shaft : EN - 19 H.G.  
 Bushes : Non Ferrous  
 Seal : Neoprene Oil seal / "Z" Pack Teflon  
 Pressure relief valve will be provided in all models.

## DIMENSIONAL DRAWING DETAILS

MODEL	A	B	C	E	F	G	S	T	H	H1	H2	H3	L	M	N	DQ	DQ	K	PQ
IFG - 0.5	172	46	78	51	40	70	90	70	63	50	90	6	22	4	13.5	12	8	70	1/2" B.SP.
IFG - 1.0	236	64	105	64.5	50	93	125	95	90	73	128	8	27.5	5	19.5	17	10	86	1" B.SP.
IFG - 1.5	240	75	120	80	70	115	150	130	110	88	155	12	35	6	24.5	22	12	108	1 1/2" B.SP.
IFG - 2.0	360	98	140	92	100	140	180	160	132	105	192	15	40	8	28	25	15	142	2" B.SP.
IFG - 2.5	420	110	175	110	120	155	200	185	145	114	215	18	45	8	31	28	15	160	2 1/2" B.SP.
IFG - 3.0	457	100	195	105	155	175	220	225	165	130.5	241	20	50	10	35	30	15	190	3" B.SP.

\* All dimensions are in millimeters. Unless otherwise stated, specifications are subject to change without prior notice as improvements are made from time to time.

CONVERSION FORMULA :      1 Imperial gallon = 4.5 Litres      1 U.S. Gallon = 3.785 Litres      1 p.s.i = 2.31 Feet  
    1 Kg./Cm2                                = 14.2 psi                                1 Metre                                = 3.281 Feet                                1 H.P. = 0.75 KW

## REAL INDUSTRIES

Ahmedabad, Gujarat

E-mail : [realindustries2012@yahoo.com](mailto:realindustries2012@yahoo.com), Web : [indoforcepump.jimdo.com](http://indoforcepump.jimdo.com)