

DOMESTIC AND RESIDENTIAL SEGMENT

Energy Efficient Pumps

SAPTHA INNOVATIONS PVT LTD



Link : arin.bz/SAPTHA

PRESSURE BOOSTING

APPLICATION :

- Water pressure boosting
- Household water supply
- Boosting from above ground water tanks


CM BOOSTER

APPLICATION :

- Large bungalow
- Domestic buildings
- Cottages and villas
- Mid-size hotels / hospitals
- Schools


CM TWIN BOOSTER

APPLICATION :

- Large houses
- Domestic buildings
- Cottages and villas
- Mid-size hotels / hospitals / schools


CME BOOSTER

APPLICATION :

- Large houses
- Domestic buildings
- Cottages and villas
- Midsize hotels / hospitals / schools
- Community hostels
- Polyhouse & green house farming


CMBE TWIN BOOSTER

APPLICATION :

- Pressure boosting water from roof tank and sump tank
- Gardening
- Water transfer • Car wash
- Taps & showers in the home


SCALA 1

APPLICATION :

- General pressure boosting & cleaning
- Green houses
- Irrigation
- Car wash
- Taps & showers in the home


SCALA 1 TWIN SYSTEM

APPLICATION :

- Pressure boosting from city mains and roof tank
- Break tank and ground tank.


SCALA 2

APPLICATION :

- Domestic boosting with inlet pressure (0.1 bar) for single shower, taps, gas heaters and washing machines.
- Inlet boosting to the solar tank, Ideal for single bathroom application without special shower gadgets


UPA

WATER TRANSFER AND CIRCULATION PUMP

APPLICATION :

- Water treatment
- Hot water circulation (liquid temp 200C- 1200C)


CM

APPLICATION :

- Water transfer from tank below and above the ground level
- Treated water transfer


JP

APPLICATION :

- Heating
- Air-conditioning
- Cooling
- Domestic hot water systems
- Domestic heat pump


MAGNA 3

APPLICATION :

- Extra bathrooms even away from drainage stack (e.g attics)
- Backwater protection of sanitary appliances when placed below the sewer level
- Added rest room and wellness facilities in guest houses and holiday cottages
- Office and building renovation


SOLOLIFT 2

WASTE WATER LIFTING STATIONS

APPLICATION :

- Collection and disposal of wastewater in single-family houses or light commercial applications.


MULTI MSS

WATER TRANSFER AND DRAINAGE PUMPS

APPLICATION :

- Shallow wells
- Rainwater collection in tanks
- Boosting of public water collected in break tanks


SB

APPLICATION :

- Water lifting from borewell
- Water transfer from ground tank
- Pressure Boosting


SP

APPLICATION :

- Sump to over head tank filling
- Farms • Fountains
- Industrial and rural water supply
- Gardening • Landscaping


SMART SUB

APPLICATION :

- Sewage
- Tough
- Wastewater pump


SEG GRINDER

APPLICATION :

- Fountains
- Dewatering


KPC

APPLICATION :

- Rainwater, drainage water and water from flooding pools water
- Effluents from showers, washing machines and sinks below sewer level
- Water and rainwater in horticulture


UNILIFT AP/KP

CONTROL PANELS

APPLICATION :

- Domestic and residential segments


GIDPC

APPLICATION :

- Domestic and residential segments


GIDPC 2

APPLICATION :

- Storm water, sewage, booster sets, rainwater reuse, irrigation


GIDPC 3

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COMMERCIAL SEGMENT

Energy Efficient Pumps

SAPTHA PUMPWORKS PVT LTD



Link : arin.bz/SAPTHA

APPLICATION :

- For clear water & select liquids (like oil, water, coolant...)
- Pressure boosting
- OHT filling • Chilled water • Boiler feed
- Filter feed • Water treatment

IN-LINE MULTI STAGE PUMPS



CR



CRI



CRN



CRE

PRODUCT TYPE : CR, CRI, CRN, CRE, CRIE, CRNE, CRNE-HS, CRT, CRTE

APPLICATION :

- Hydro booster pumps • High rise buildings
- Hotels • Hospitals • Schools • Residential buildings

HYDRO PNEUMATIC SYSTEM


 HYDRO
MULTI S

 HYDRO
MULTI B

 HYDRO
MPC

 HYDRO
MULTI E

PRODUCT TYPE : HYDRO MULTI S, HYDRO MULTI B, HYDRO MPC, HYDRO MULTI E

APPLICATION :

- For clear water • Pressure boosting
- OHT filling • Chilled water • Boiler feed
- Filter feed • Water treatment

END SUCTION PUMPS



NB



NBE



NK



NKE

PRODUCT TYPE : NB/NBE, NK/NKE

APPLICATION :

- Chilled water pumps • Heating
- Industrial cooling • Industrial processes
- HVAC • Air conditioning • Water distribution

TP INLINE PUMPS



TP



TPE

PRODUCT TYPE : TP, TPE

WATER TRANSFER & CIRCULATION

APPLICATION :

- For clear water & select liquids (like oil, water, coolant...)
- Heating
- Air conditioning • Pressure boosting
- Domestic water supply



CM



CME

PRODUCT TYPE : CM / CME

SINGLE PUMP/ HOME BOOSTER

APPLICATION :

- Commercial water pressure boosting
- Domestic water pressure boosting



CMB



CMBE

PRODUCT TYPE : CMB, CMBE

WATER TRANSFER / BOREWELLS PUMPS

APPLICATION :

- Borewell
- Pressure boosting



SP

PRODUCT TYPE : SP, MS

WASTE WATER & SEWAGE PUMPS

APPLICATION :

- Dewatering
- Waste water



AP



DPK



DPKV

PRODUCT TYPE : DPK, DWK, AP/KP

APPLICATION :

- Dewatering
- Waste water
- Sewage water



SEG GRINDER



SLV

PRODUCT TYPE : SEG, SLV, SEV, DPK (V)

SEWAGE PUMPS WITH COLLECTION TANK

APPLICATION :

- Commercial wastewater
- Domestic wastewater



MULTI MSS



MULTILIFT 2

PRODUCT TYPE : MULTI LIFT


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INDUSTRIAL SEGMENT

Energy Efficient Pumps


 Link : arin.bz/SAPTHA

APPLICATION :

- For clear water & select liquids (like oil, water, coolant...)
- Pressure boosting
- OHT filling • Chilled water • Boiler feed
- Filter feed • Water treatment

IN-LINE MULTI-STAGE PUMPS



CR CRI CRN CRE

PRODUCT TYPE : CR, CRI, CRN, CRE, CRIE, CRNE, CRNE-HS, CRT, CRTE

APPLICATION :

- For clear water • Water distribution
- Air conditioning • Filter feed
- Water treatment • Irrigation

END SUCTION PUMPS



NB NBE NK NKE

PRODUCT TYPE : NB/NBE, NK/NKE

WATER TRANSFER & CIRCULATION

APPLICATION :

- For clear water & select Liquids (like oil, water, coolant...)
- Industrial plants, washing & cleaning, water treatment
- Heating • Air conditioning
- Pressure boosting



CM CME

PRODUCT TYPE : CM/CME

TP INLINE PUMPS

APPLICATION :

- Chilled water pumps
- Heating
- Industrial cooling
- Industrial processes
- HVAC • Air conditioning
- Water distribution



TP TPE

PRODUCT TYPE : TP, TPE

APPLICATION :

Potable water distribution within the plant, Process water distribution for heating/cooling applications, water supply to cooling towers/ reactors, water supply to cleaning/ washing applications

HYDRO PNEUMATIC SYSTEM



HYDRO MULTI S HYDRO MULTI B HYDRO MPC HYDRO MULTI E

PRODUCT TYPE : HYDRO MULTI S, HYDRO MULTI B, HYDRO MPC, HYDRO MULTI E

APPLICATION :

- Heating • Air conditioning • Cooling
- Domestic hot water systems
- Domestic heat pump systems
- Solar heating systems



MAGNA 3

PRODUCT TYPE : MAGNA 3

APPLICATION :

- Hot water circulation
- Heating systems



UP(S)

PRODUCT TYPE : UP(S)

IMMERSIBLE COOLANT PUMPS

APPLICATION :

- Machine tool coolant



MTH MTR MTRE

PRODUCT TYPE : MTH, MTR, MTRE, MTA, MTS, SPK


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TOTAL SAVING IN POWER COST as on 31.10.2024 is Rs. 1.22 CRORE AND COUNTING WITH EACH PASSING DAY.

YEAR	CUSTOMER	APPLICATION	OLD PUMP POWER CONSUMPTION KW	RECOMMENDED PUMP POWER CONSUMPTION KW	POWER SAVED KW	POWER SAVED %	TOTAL SAVED PER DAY (KWH)	TOTAL SAVED (RS./ANNUM)	Co ₂ Emission Reduction e Tons/Yr
2017 To 2022	1	DOMESTIC OHT	49	15.23	33.7	68.77	404.4	13,02,168.00	29.3
	2	CHILLED WATER HVAC	117	44	73	62.39	876	28,20,720.00	63.4
	3	CHILLED WATER HVAC	27.8	14	13.8	49.64	165.6	5,33,232.00	12
	4	CONDENSOR WATER	52.58	34.42	18.16	34.53	217.92	7,01,702.40	15.7
	5	CHILLED WATER HVAC PH1	9.4	4.98	4.42	47.02	53.04	1,70,788.80	3.8
	6	PRESSES OPHE	65	32	33	50.76	396	12,75,120.00	28.7
	7	ETP PRESSURE FILTER FEED	8.54	4.42	4.12	48.24	49.44	1,59,196.80	3.6
	8	ETP GARDEN PUMPS	8.5	4.51	4	47.05	48	1,54,560.00	3.5
	9	CHILLED WATER HVAC PH2	7.9	2.5	5.4	68.35	64.8	2,08,656.00	4.7
	10	CHILLED WATER HVAC PH3	7.6	2.48	5.1	67.10	61.2	1,97,064.00	4.4
2023	11	DOMESTIC - RO	4.4	2.3	2.1	47.72	25.2	81,144.00	1.8
	12	PROCESS PUMPS	41.3	33	8.3	20.09	99.6	3,20,712.00	7.2
	13	SECONDARY PUMP	14.4	8.5	5.9	40.97	70.8	2,27,976.00	5.1
	14	BOOSTER PUMP	72	49	23	31.94	276	8,88,720.00	21.1
	15	BOOSTER PUMP	15.3	7.8	7.5	49.01	90	2,89,800.00	6.5
	16	BOOSTER PUMP	3.9	2	1.9	48.71	22.8	73,416.00	1.6
	17	IRRIGATION PUMP	60	40.4	19.6	32.66	235.2	7,57,344.00	17
	18	CONDENSOR PUMP	83.6	64.8	18.8	22.48	225.6	7,26,432.00	16.3
	19	DOMESTIC WATER	6	4	2	33.33	24	77,280.00	1.7
2024	20	DOMESTIC WATER	4.4	2.1	2.3	52.27	27.6	88,872.00	2
	21	CHILLED WATER HVAC	22	17.3	4.7	21.36	56.4	1,81,608.00	4.08
	22	HOT WATER CIRCULATION	11	6.7	4.3	39.09	51.6	1,66,152.00	3.73
	23	FLUSHING WATER	22	18.6	3.4	15.45	40.8	1,08,192.00	2.4
	24	DOMESTIC WATER	11	7.4	3.6	32.72	43.2	1,39,104.00	3.1
	25	FLUSHING WATER	11	6.9	4.1	37.27	49.2	1,58,424.00	4.2
	26	HOT WATER CIRCULATION	5.5	3.8	1.7	30.90	20.4	65,688.00	0.3
	27	ETP WATER	7.5	4.7	2.8	37.33	33.6	1,08,192.00	2.4
	28	PROCESS PUMPS	11	8.1	2.9	26.36	34.8	1,12,056.00	2.5
	29	CHILLED WATER	18.5	15.8	2.7	14.59	32.4	1,04,328.00	2.3
								1,21,98,648.00	274.41

Do you know:

- 85% of Lifetime cost of a pump is incurred by energy consumption of the pump during its lifetime
- 6 out of 10 pumps in operation are not optimised for their application and therefore waste energy

Major Reasons for Excess Power Consumption

1. Improper Selection
2. Over Design
3. Suction as well as the delivery valves are throttled
4. Old and Inefficient pump.
5. Operational for more than @ 10- 15 years with loss in 25% efficiency
6. Improper Layout/Piping
7. Improper maintenance
8. Usage of spurious spares

Why Energy Audit –

While industry consumes 50% of the total energy expended , 20% of this is consumed by pumps.30-50% of this energy guzzled by pumps can be saved. The life cycle cost in a pump reveal that the energy costs eats away 85% ,maintenance costs 10% and the initial investment of the product is a meagre 5% by which customer can find out how to reduce energy costs and plan for future improvements and kick start a company energy management strategy.

Benefits of Energy Audit –

It is an **opportunity** to find out how to reduce energy costs by approx 5 to 15 percent, often with payback periods of approx less than two years. Establish a baseline against which to compare future improvements and Help kick-start a company energy management strategy.

Benefits of Annual Maintenance Contract



- 2 free emergency visit support
- Guaranteed priority service from trained service engineers
- Ensuring the pump operates within the designed parameters (Recommended Efficiency curve)
- On call and video support service in case of exigency
- Regular and Proper diagnosis of problem and give appropriate solution
- Increase in uninterrupted availability of pumps and pumping system
- Feedback on status after every visit to take preventive action
- Availability of select critical spares
- Help reduce energy cost
- Helps reduce frequency of panic situation
- Spares Cost- can be budgeted
- Reduction in spares and pump inventory cost
- Reduction in life time cost of pumps
- Free health check of pumps of more than 7.5HP capacity & more than 10 years old
- Discount on energy audit charges to explore savings on energy cost
- Select multi-brand pump service support
- Spare pumps support only if available in case of exigency
- Pumps will be available on rental basis if required
- On a case to case basis pump exchange option can also be considered
- Support in optimised selection of pumps when there is a need for replacement



Hotels



Resorts



Hospitals

HEAT PUMPS

Choose the Best... Choose A. O. Smith!



Hostels
(Schools & Colleges)



Restaurant & Kitchen



Manufacturing Facilities

A.O.Smith Heat Pump Benefits



AES

The Intelligent Adaptive Energy Saving technology analyzes the water usage pattern to automatically heat up the water and optimize energy consumption



LED Display with Self Diagnosis

Real-time display of temperature control, times and error code for a trouble free service



Multiple Heating Mode

User can choose between Efficiency, Hybrid Turbo, Max and Instant Heating Mode



Blue Diamond Glass Coating

Corresponds to longer life to your tank by its corrosion resistance and reduced scaling accumulation technology



High Performance

Can achieve upto 65°C in Heat pump mode



Absolute Safe the Power of 7

Safety features to ensure the protection of the Heat Pump under all conditions

1.Compressor Overheating discharge protection

2.Abnormal operation protection

(Relay and electronic expansion valve)

3.High & low voltage protection

4.Refrigerant leakage protection

5.High water temperature protection

(Temperature sensor)

6.High-Temperature limit protection switch

(ECO Switch)

7.Temperature & pressure relief valve