

Replacement Solutions for your Split-Case and End Suction Pumps

- Exact replacement of iconic ranges of existing pumps
- The following shall remain identical to the existing installation for fast and economical replacement:
  - Foot-print
  - Interface dimensions
  - Driver
  - Foundation
  - Piping

PUMPSENSE FLUID ENGINEERING PVT. LTD 5/F, Hastings Court, Tower A, 96, Garden Reach Road, Kolkata - 700023



## Are you looking for an exact replacement of your existing pump?

You have been a loyal and satisfied user of split-case pumps manufactured by some of the iconic names in the pump industry – Worthington, Weir, Mather & Platt, etc. Your pumps have given you years of trouble-free service. Time has now come to replace some of them. You are looking for a "drop-in" replacement so that the new pump fits into the existing base without requiring any civil, structural, or piping modifications. Ideally, you want the same pump again but your efforts to locate the same model of pump have not been successful.

You need not despair. Pumpsense will try and provide a perfect solution to your problem. We will build a pump for you with identical footprint and interface dimensions while the hydraulics will be optimally designed to take care of your new system's requirement with highest achievable energy efficiency.

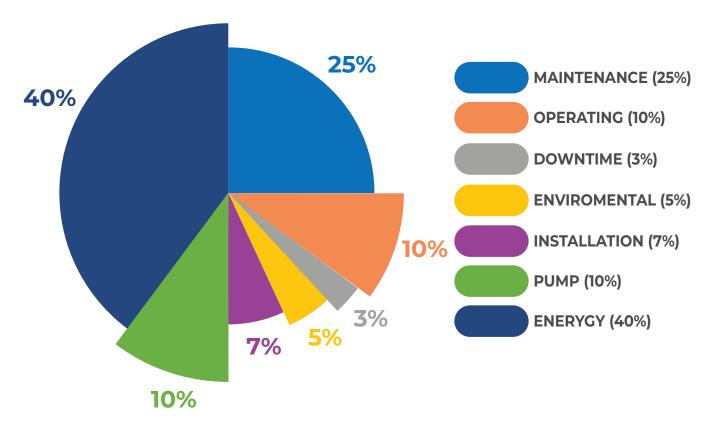
Drop-in replacements that can be offered include, but not limited to the following iconic ranges : Mather & Platt – Lonovane and Medivane Worthington – LN & LR Weir – Uniglide & Duoglide





### Drop-in With Retrofit & Upgrade Improves Efficiency & Reliability

#### TYPICAL LIFE CYCLE COSTS (LCC) ANALYSIS OF A PUMPING SYSTEM



N.B. Percentages denote fraction of total project cost incurred under each category

### CAPITALIZED COST OF ONE UNIT DIFFERENCE IN EFFICIENCY IS EQUAL TO THE COST OF THE PUMP



### Retrofitting in Replacement Pumps

- New pump will be designed based on the accumulated experience of the existing installation
  - Altered duty due to change in the system can be accommodated.
  - Material specifications can be changed.
  - Sealing system can be modernized.
- New hydraulic design shall be done by Pumpsense. In most cases, the efficiency of the replaced pump will be higher - this can be proved by "before" and "after" power measurement at the site.
- These Factors shall lead to a reduction in life-cycle-cost and improvement in reliability low pay back period.

### **Benefits Of Retrofitting**

- Optimizes energy consumption.
- Reduces chances of hydraulic & mechanical problems (such as noise & vibration).
- Widens the life of pump components (bearings, seal units, etc.). Thus, enhancing the pump's life span.
- Diminishes the chance of sudden pump failure.
- Improves pump's ability to serve user's need in an optimum manner.



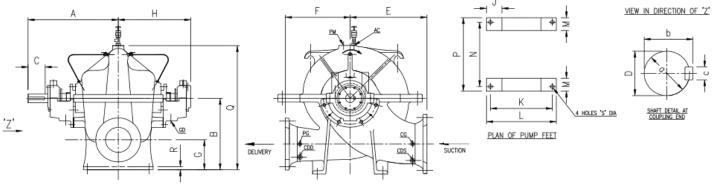
Faro Arm (Co-ordinate measuring machine)



High accuracy dimensional measurement using Faro Arm to check conformance with existing installation



### Dimensions of Single Stage Horizontal Split Case Pumps -WHS (Weir Uniglide Series Replacement)



	WEIR EQUIVALENT	DELIVERY FLANGE					SUCTION FLANGE					
PUMPSENSE				Holes					Holes			Net Weight
MODEL NAME	MODEL NAME	O.D	Width	No.	Dia.	P.C.D	O.D	Width	No.	Dia.	P.C.D	
6WHS12	SDA 150/200	285	26	8	22	240	340	30	12	22	295	202
6WHS14	SDB 150/200	285	26	8	22	240	340	30	12	22	295	249
6WHS12L	SDBA 150/200	285	26	8	22	240	340	30	12	22	295	240
6WHS15	SDBB 150/200	285	26	8	22	240	340	30	12	22	295	250
6WHS21	SDC 150/200	285	26	8	22	240	340	30	12	22	295	318
6WHS17	SDCB 150/200	285	26	8	22	240	340	30	12	22	295	337
6WHS15L	SDCC 150/200	285	26	8	22	240	340	30	12	22	295	340
6WHS12S	SDCH 150/200	285	26	8	22	240	340	30	12	22	295	377
8WHS14	SDA 200/200	340	30	12	22	295	340	30	12	22	295	390
8WHS16	SDB 200/200	340	30	12	22	295	340	30	12	22	295	309
8WHS21	SDC 200/200	340	30	12	22	295	340	30	12	22	295	499
8WHS18	SDB 200/250	340	30	12	22	295	406	32	12	26	355	474
8WHS21L	SDD 200/250	340	30	12	22	295	406	32	12	26	355	711
10WHS12	SDA 250/250	406	32	12	26	355	406	32	12	26	355	601
10WHS15L	SDB 250/250	406	32	12	26	355	406	32	12	26	355	436
10WHS14	SDBA 250/250	406	32	12	26	355	406	32	12	26	355	450
10WHS22	SDC 250/250	406	32	12	26	355	406	32	12	26	355	965
10WHS15	SDA 250/300	406	32	12	26	355	480	32	12	26	410	697
10WHS17	SDB 250/300	406	32	12	26	355	480	32	12	26	410	1000
10WHS26	SDD 250/300	444	48	12	26	355	510	51	12	26	410	809
10WHS22L	SDC 250/350	406	32	12	26	355	527	36	16	26	470	1250
10WHS27	SDD 250/350	444	47	12	30	370	555	48	16	33	490	1100

Shaft DIA	Coupling	Bore & k	Shaft Keyway		
D	а	b	С	е	f
25.009	24.996	28.5	8.018	21.00	8.000
24.996	24.983	28.3	7.982	20.80	7.964
30.009	29.996	33.5	8.018	26.00	8.000
29.996	29.983	33.3	7.982	25.80	7.964
35.018	35.003	38.5	10.018	30.00	10.000
35.002	34.987	38.3	9.982	29.80	9.964
45.018	45.003	49.00	14.021	39.50	14.000
45.002	44.987	48.80	13.979	39.30	13.957
50.018	50.003	54.0	14.021	44.50	14.000
50.002	49.987	53.8	13.979	44.30	13.957
55.030	55.013	59.5	16.021	49.00	16.00
55.011	54.994	59.3	15.979	48.80	15.957
62.030	62.013	66.6	18.021	55.00	18.000
62.002	61.994	64.4	17.979	54.80	17.957
65.030	65.013	69.6	18.021	58.80	18.000
65.011	64.994	69.4	17.979	57.80	17.957

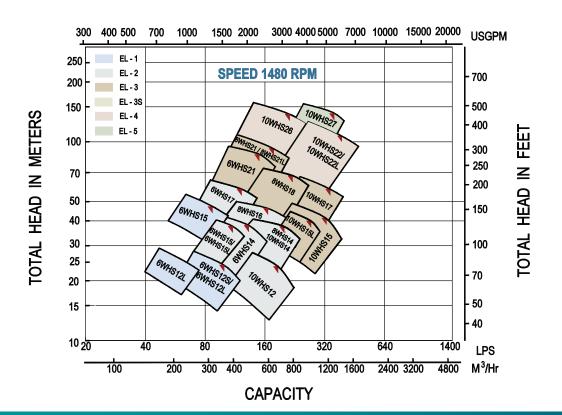
#### VIEW IN DIRECTION OF 'Z'



### Range Chart of Axially Split-Case Pumps - WHS Range

#### SINGLE STAGE SPLIT-CASE PUMPS WITH DOUBLE ENTRY IMPELLER RANGE CHART 50Hz, 4Pole

HORIZONTAL/VERTICAL



### **Experience**





### Experience



Original: KSB Omega 350-430B Replacement: Pumpsense model 16HS19 for an Australian Customer



Original: Flowmore Model 5822-400x350 Replacement: Pumpsense model 14HS21 for Tata Steel





Original: WILO/ M&P 6/8 CME Replacement: Pumpsense model 6HS17S for an UK based Customer



### Experience



Original: Aurora Pump Model Series 410 - 3x4x14 Replacement: Pumpsense Model V3HS13 for an UAE based Customer

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