

# **KIRIT INDUSTRIES**















































Since 1959





Address: Nr. Giyanager Society, Opp. Union Co-Operative Bank, Naroda. Ahmedabad-382330, Gujarat, (INDIA).



Part	Material							
Pumps series	Series 11,31,31N, 51, 61	Series 45						
Pump body	Cast Iron	Cast iron						
Front cover	Cast Iron	Cast Iron						
Back Cover	Cast Iron	Cast Iron						
Gears	Cast Iron Spur gears	Helical steel gears						
Shaft	Steel	Steel						
Shaft Seal	Nitrile/ NBR rubber oil seal / silicon rubber oil seal,PTFE gland packing	Nitrile/ NBR rubber oil seal / silicon rubber oil seal,PTFE gland packing						
Max operating temp.	200 *C	200 *C						
Base plate	Cast iron ( not available in 31J, 51, 61 )	N/A						
Pedestal	Cast iron ( Not available in 31 J, 51, 61 )	N/A						
Pulley	Cast iron	N/A						
Key	En-8	En-8						
Hex bolts	Steel	Steel						
Max operating RPM	400	900						

#### **APPLICATIONS:**

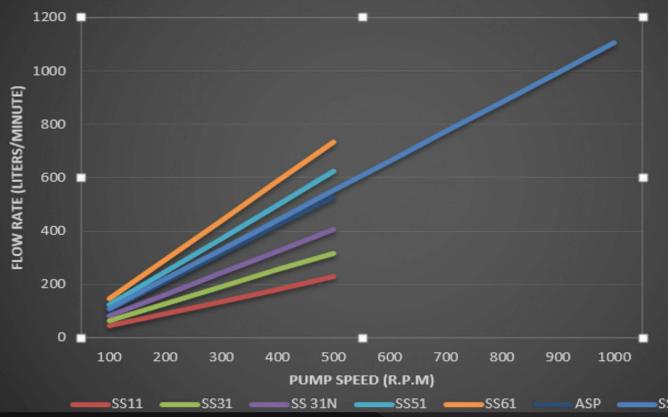
The "K.I" rotary gear pumps are widely used for loading and unloading or transferring of bitumen, tar, Ido, furnance oils, castor oils, vegetable oils, chemicals, molasses, color and paints, soaps, silicate of soda, starch, glue, honey, glycerine and many more other viscous materials from and to the trucks, tankers, other mobile vehicles and plant manufacturing above materials. It is also used in bitumen sprayer machines, road paver machines, sugar mills, rolling mills, foundries. etc.

#### Features:

- The "K.I" series Rotary Gear Pumps are specially design for all type of viscous liquids.
  - → K.I Special design optimize characteristic for mounting pump on tanker, trucks or any mobile vehicles for loading/Unloading.
- Design features easy installation & maintenance
- → Wide range of flow rate according to the application
- Different mounting options for suction and delivery options.
- → Working pressure upto 10kg/cm2, upto 2,50,000 SSU.



### Theoretical Flow Capacity



PUMP TYPE	SUCTION & DELIVERY	CAPACITY @400 rpm			Pu	lley	Recommended Motor H.P At Different Pressure / Head											
		LPM US GPN	US	M3/H R	Section	V	KG/cm2	1	2	3	4	5	6	7	8	9	10	
			GPM				Height in Ft	10	20	30	40	50	60	70	80	90	100	
K.I- SSV11	1 ½" x 1 ½"	182	48.7	10.92	А	15 x 2 ¾"	H.P		1.5		2.5					5.0		
K.I- SSV15	2"x2"	182	48.7	10.92	<u></u> ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	H.P	1.5			2.5				5.0			
K.I- SSV31	2" x 2 "	254	67.1	15.24	А	15 x 2 ¾"	H.P	2.5			5.0					7.5		
K.I-SS31 J	2" x 2"	254	67.1	15.24	111111111111	**************************************	H.P		2.5		5.0					7.5		
K.I-SSV31 N	2 ½" x 2 ½"	323.2	85.38	19.39	А	15 x 2 ¾"	H.P		5.0	A	7.5				Ħ	10.0		
K.I- SSV45	2 ½" x 2 ½"	443.2	117.08	26.59	В	15 x 2 ¾"	H.P	7.5 10.0						12.5				
K.I-SSV51	2" x 2"	498	131.55	29.88	В	15 x 2 ¾"	H.P	7.5			10.0					12.5		
K.I-BTV51 / STV51	2" x 2"	498	131.55	29.88	9 В9	15 x 2 ¾"	H.P	7.5			10.0				12.5			
K.I-SS51 J	2 ½" x 2 ½"	498	131.55	29.88			H.P	7.5				).0	N.	12.5				
K.I-SS51 N	2 ½" x 2 ½"	498	131.55	29.88			H.P		7.5		10.0				12.5			
K.I-SSV61	2 ½" x 2 ½"	588	155.33	35.28	В	15 x 2 ¾"	H.P		10.0		12.5			15				
K.I- BTV61 / STV61	2 ½" x 2 ½"	588	155.33	35.28	В	20 x 2 ¾"	H.P	1	10.0		12.5			15.0				
K.I- SSV61	3" x 3"	588	155.33	35.28	В	15 x 2 ¾"	H.P	10.0				12.5				15.0		
K.I- BTV61/ STV61	3" x 3"	588	155.33	35.28	В	20 x 2 ¾"	H.P	10.0			12.5				15.0			
ASP	DN 50	498	131.55	29.88			H.P											

Nomenclature- K.I Signature gear pumps

**SS= Side suction and side delivery** 

V = Pump with pulley

ST= side suction and top devilery (90\* pipe line)

BT= Bottom suction and top delivery (180\* straight pipe line)

Note:-

Model K.I-SS 11, 15, 31, 31N, 45, 51N comes with 3 port design (Except 51N) with 90\* pipe line connection

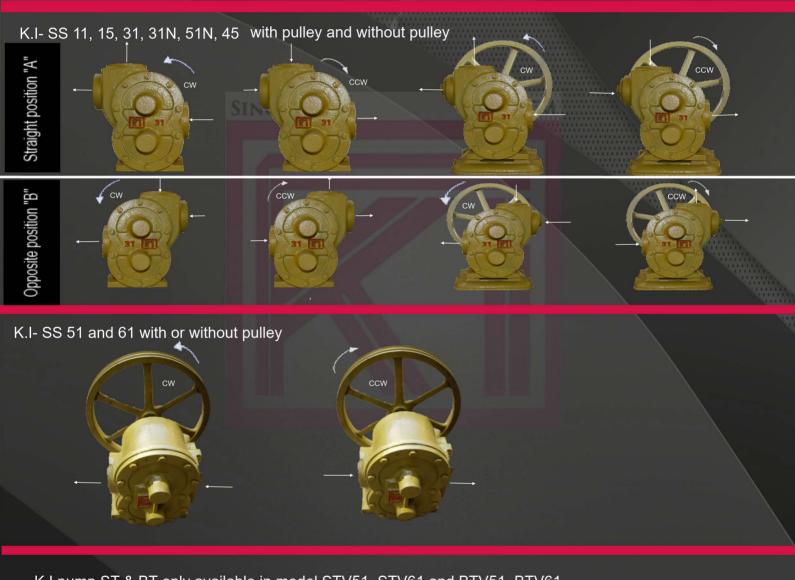
Model K.I- SS 51 & 61 comes with 180\* side to side connection. And bottom to top connection.

Model K.I- SS15 and 45 are available in helical steel gears and upto max 900 RPM.

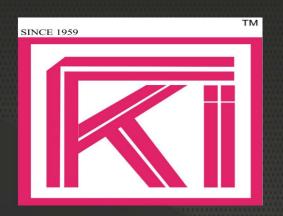
## **Direction of Rotation**

Rotation Direction is determined when facing the drive shaft. The Diagrams will serve as a helpul basis for you to Determine the direction of rotation wanted according to your piping system. We can build the pump at the factory to meet your installation requirements. If the pump build is not specified, it will be shipped the standard "A" Configuration. Once in the filed, If you need to change the configuration, It can be done Easily by Disassembling the pump and rebuilding it to your desired arrangement. No new parts are needed.

Note:- Ths diagrams are for the idea for piping positions, for more details please contact our sales team.







## 45 series Heavy Duty Pumps

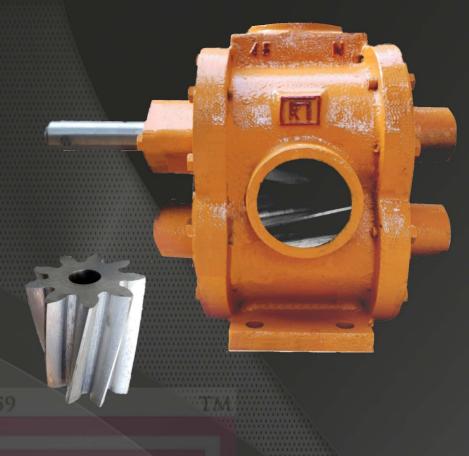
General purpose pumps for industrial and moblile transfer, PTO driven pumps.



These pumps operate smoothly and with equal efficiency in either direction of rotation. They effectively handle heavy, viscous materials such as asphalt, Molasses, Roofing compounds, printing inks, fuel oil, Gasolines and similar thin and thick liquids.

Pumps can be supplied in several materials of construction, with different mounting postions.

Pumps are very techinicaly designed to run directly through pto in automoblies and can be connected to standard gear reduction box. these pumps operate equally well regardless of the mounting configuration or the direction of rotation.



#### MATERIALS OF CONSTRUCTION

Standard fitted

Housing...... Cast iron

Gears..... Steel

Shafts..... Steel

inlet & outlet

port...... 2.5"

Lit/min

@900 RPM..... 990

Speed...... 100 to 900 RPM

#### **FEATURES**

#### **Quiet- Running Helical Gears**

- \* Steel made gears are accurately machined for Quiet, efficient operation long life.
- \* Accurate machined helical gears are easily replaced and reduces down time.
- \* Precise machining insures proper meshing and reduces friction and vibration.

#### **Rugged Housing**

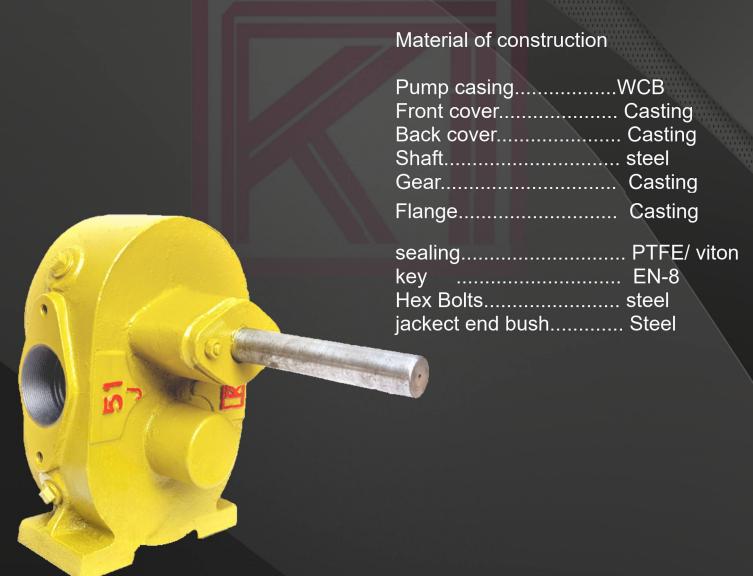
- \* Standard Castings are cast iron.
- \* Precise manufacturing tolerances provide minimum clearances for maximum pumping efficiency.
- \* Faceplate, housing and blackplates are positively aligned and are very easily replaced with the new one, no skilled required.

## K.I signature Jacketed Rotary gear pump

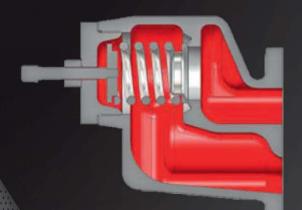
Kirit Industries "K.I Jacketed Rotary gear pumps are specially design Which are Suitable for liquids which Solidify / Crystallize at room temperature or needs to maintain temperature of the liquids like Bitumen, Coal tar, Asphalt, Wax, Grease, Furnace oil, LSHS, HHS, HFO, Glucose, Soap stock, High viscosity oils, Adhesives, Resin, Ghee, Chocolate etc. Steam or hot oil etc is circulated in the jacket on the pump body to heat the liquid being pumped.

This model is Specially Designed for Bitumen and Asphalt. Model K.I SS31 J and SS51 J. Which comes with 2" ports and 2,5" port. This pumps are foot mounted and material of construction is selected for continious and long life of the pump.

This pumps are designed to run at 100 to 400 RPM. Which ensures the best performance in its class. 250000 SSU & 200 \*C max.







In the event of overpressure situations, our adjustable relief valve protects personnel and equipment by returning liquids to the suction side of the pump. Various spring sizes can be specified to handle a wide range of operating conditions.

Kirit Pump's inverted Poppet relief valve is designed without close fitting guides that can clog and cause excessive pressures when the valve does not open freely. The valve will provide protection in only one direction of rotation.

# Our Available Sealing Options



Seal Flange

Oil Seal



Seals



# **Our Other Products**



