

# AGRICULTURAL IRRIGATION PUMPS

## TUR - TR-Y IRRIGATION PUMPS WITH GEAR BOX

- TRY Series pumps driven by PTO shaft of tractor they have gear boxes and used for sprinkler systems with high flow rates.
- With their specially designed support frame they get fitted to the back of the tractor and powered by tractor PTO shaft, connection by cardan shaft.
- TRY series pumps have two different gear box reduction ratios ; for TR-Standard I=1/5 and for TR – Super I = 1/7.



### Pump Materials:

Component	Material
Casing, Impeller	Cast iron (EN-JL 1030)
Helical gear	Heat treated steel
Support frame	Welded bar construction
Gear box	Oil lubricated

### PERFORMANCE CHARACTERISTICS TABLE OF TUR TR-Y SERIES SPRINKLER PUMPS WITH GEAR BOX

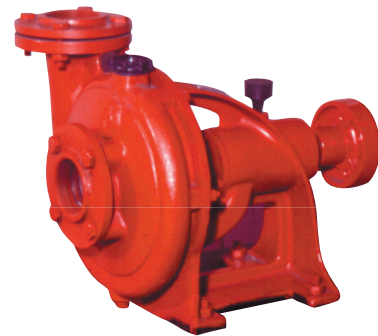
Gear box type Pump type Impeller diameter	Gear box reduction ratio i	Tractor PTO shaft speed (rpm)	Pump Capacity																			
			l/m	600	900	1200	1500	2100	2400	3000	3600	4200										
			m <sup>3</sup> /h	36	54	72	90	126	144	180	216	252										
			l/s	10	15	20	25	35	40	50	60	70										
SuperTR 3Y-k ø250	1 : 7	500	Discharge head mwc	107.2	103.5	96.3	88.5															
			Power HP	37	42	48	53															
NormalTR 3Y-k ø250	1 : 5	540	Discharge head mwc	67	62.2	56	50.2															
			Power HP	20	23.5	27	29.6															
SuperTR 4Y ø205	1 : 7	540	Discharge head mwc		87.5	87	85.5	79.5	75	63.5												
			Power HP		45	48	52	60	65	73												
NormalTR 4Y ø245	1 : 5	540	Discharge head mwc		68.5	68	66.5	60.5	56.5	46.5												
			Power HP		31	34	37	43	46	53												
NormalTR 5Y ø245	1 : 5	500	Discharge head mwc						64	62.8	59.4	54.9	49.3									
			Power HP						43.8	47	53	59	65									

## TUR-Y SERIES SPRINKLER PUMPS

- Turbosan TUR-Y series pumps are designed for suitability of diesel engine power characteristics.
- Suitable for diesel engine and electric motor drive
- Used for agricultural irrigation and potable water supply.

### Pump Materials:

Pump component	Material
Casing, Impeller	Cast iron (EN-JL 1030)
Shaft	Carbon steel (1.0501)
Shaft sealing	Soft packing



### PERFORMANCE CHARACTERISTICS TABLE OF TUR-Y SERIES PUMPS FOR DIFFERENT SPEEDS

Pump type	Speed (rpm)	1800 rpm					2200 rpm					2400 rpm					2900 rpm				
TUR 2 1/2 Y	Hm (mwc)	15	17	22	23	25	30	33	35	37	38	30	37	40	42	44	47	54	58	60	62
	Q (m <sup>3</sup> /h)	42	41	35	32	24	47	43	37	29	25	55	50	45	38	31	65	60	55	51	45
	Nm (HP)	7 HP					12.5 HP					15 HP					30 HP (22KW)				
TUR 3Y	Hm (mwc)	12	18	23	25	27	20	30	35	40	42	24	30	41	48	50	35	53	60	68	73
	Q (m <sup>3</sup> /h)	50	46	40	37	32	60	53	46	40	32	66	62	53	43	36	80	70	65	55	45
	Nm (HP)	8 HP					14 HP					18 HP					30 HP (22KW)				
TUR 4Y	Hm (mwc)	13	18	23	26	27	19	28	35	38	40	23	33	41	45.5	47	33	48	60	71	75
	Q (m <sup>3</sup> /h)	120	105	90	74	61	147	127	108	91	74	160	140	120	100	90	194	170	145	97	70
	Nm (HP)	17 HP					25 HP					35 HP					60 HP (45KW)				
TUR 5Y	Hm (mwc)	24	27	30	31	32	34	40	44	46	47	41	45	49	54	56					
	Q (m <sup>3</sup> /h)	160	140	115	90	70	208	178	150	130	110	225	204	184	143	122					
	Nm (HP)	30 HP					55 HP					75 HP									