



G.P.T.CO

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General

GAZ, GAZL series slurry pump is suitable for handling slurry with abrasive and corrosive solids, which maximum weight density of 45% (ash and coal slurry) and 60% (ore and heavy slurry). It widely used in power, metallurgy, mining, coal, construction materials and other sectors. GAZ series can be installed in series according to end user's requirements. GAZ, GAZL series slurry pumps lead in various technical performance in our domestic counterparts. With most of the approaching the quality, high performance, best service advanced world level in efficiency, the pumps are used all over the world and exported to Europe, America, and Africa..

Application

Widely used in delivery slurry with solids in electric power, metallurgy, coal, building material and other industries. Such as hydraulic removing ash for thermal power plants, pump mill slurry in metallurgy delivery coal slurry and heavy slurry for coal.

Typical application

Mine: black, colored slurry feed pump and delivery for kinds of concentrates and tailings;

Metallurgy: transport of various kinds of aluminum and steel mill slurry;

Coal: delivery for coal mining, washing, all kinds of coarse and fine coal slurry;

Electricity: transport for power plant ash, ash washing, various ash slurry, or mortar;

Building Materials: delivery for all kinds of including sediment slurry (such as cement plant slurry);

Chemical: delivery of phosphate fertilizer, potash fertilizer plant all kinds of abrasive slurry;

Water Works: lake, river dredging, sediment, gravel, clay high plastic suction and discharge.



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Medium temperature:

General ≤ 80 °C

Special up to 110 °C

Solid-liquid mixture concentration by weight:

Mortar concentration $\leq 45\%$

$\leq 60\%$ pulp density

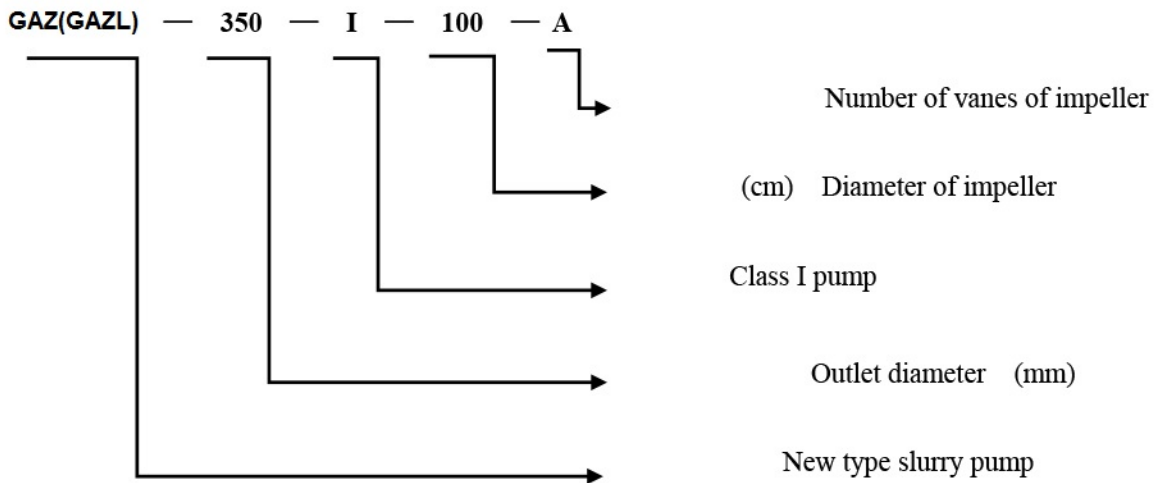
Flow Range:

30 ~ 2000 m³ / h

Head range:

15 ~ 130 m

Model Meaning



Mode and Features of Structure

Model structure

GAZ horizontal and GAZL vertical series pumps

Outlet diameters of the pumps

From 600mm, 400mm, 350mm, 300mm, 250mm, 200mm, 150mm, 100mm, 80mm, 65mm, 50mm, 40mm.



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Structural Features



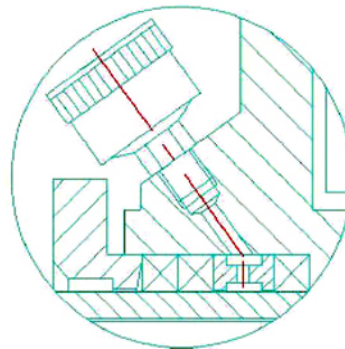
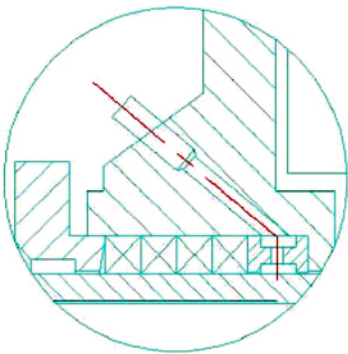
The pump is split vertical direction double casing structure. Discharge port can be positioned at 8 different position at an interval 45°.

Shaft Seal

Expeller seal with gland packing

Gland packing seal

Mechanical seal



Features of use

High in efficiency

Long in service life

Steady in operation

Features of Material

Metal

High-abrasive metal material

High-abrasive and corrosion resisting metal materials

Corrosion resisting metal materials

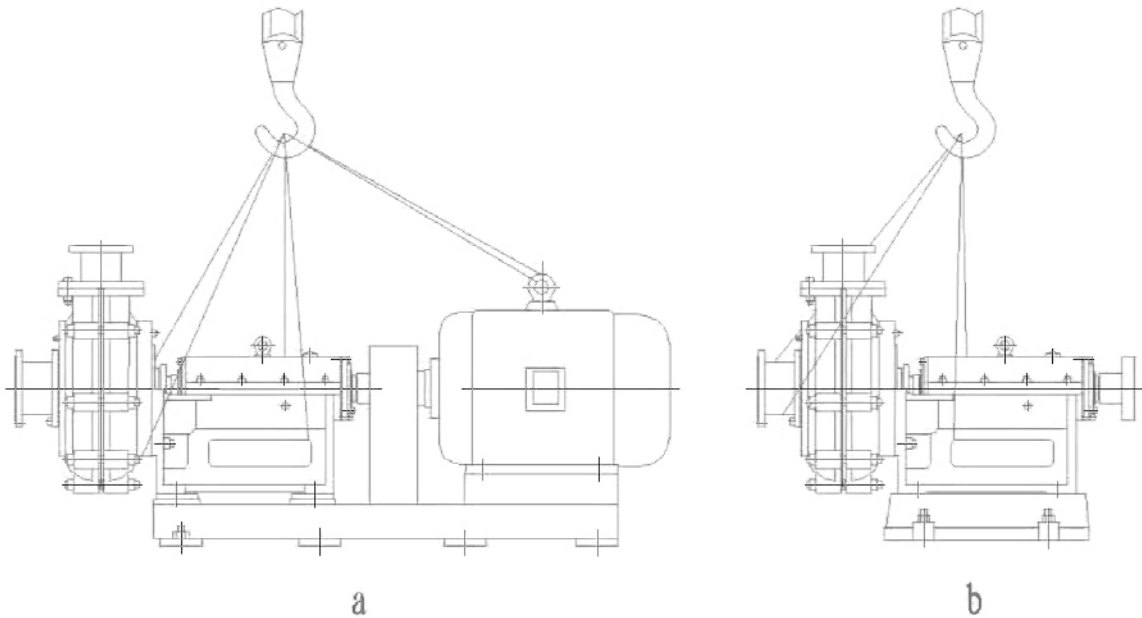


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Lifting

Lifting position as shown

Rope in contact with the pump site should padded soft material protection to avoid damage the pump or cause the rope cut appearance.



Install

1.Check

Check the pump's model parameters and parts and technical information.

2.Adjust

Before installation, please refer to the installation diagram to build the foundation.

Horizontal pump set need the secondary concrete grouting. After finished, the center tolerance of pump set with design is in $\pm 2\text{mm}$.

Level tolerance is 0.1/1000.

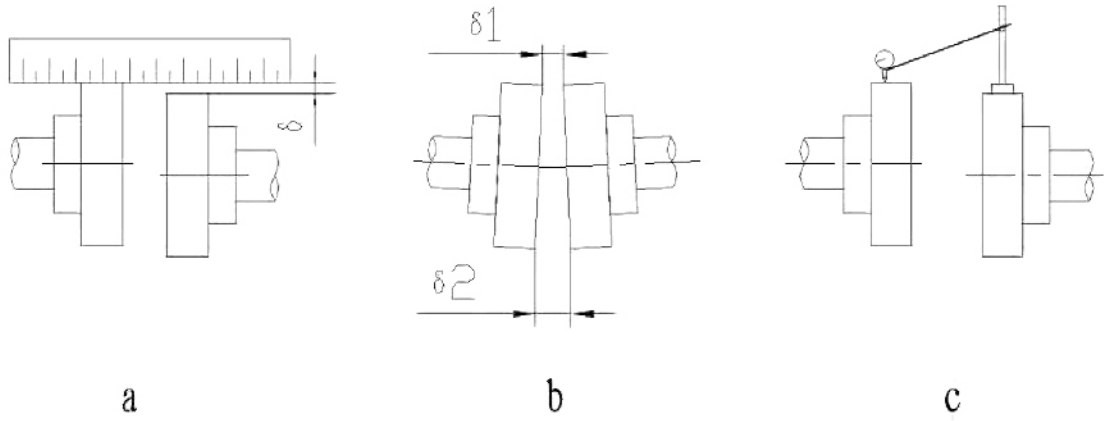
Coupling adjust

A. Knife edge ruler add feeler

Adjust couplings outer by knife edge ruler, to make sure the couplings matching. Max deviation δ not exceed 0.10mm (Pic a). Check coupling gap by feeler, max deviation Δ should not exceed 0.1mm ($\Delta = \delta_2 - \delta_1$) (Pic b).



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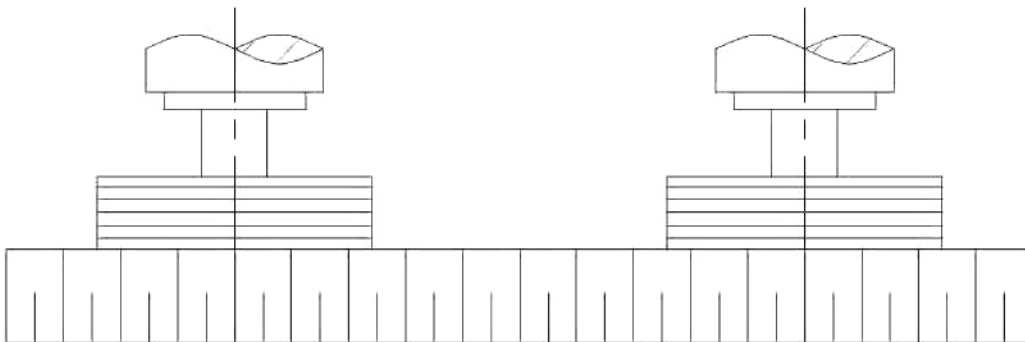


B. Magnetic dial indicator and feeler gauge

Fix magnetic dial indicator on one coupling outer and run the shaft, the tester fix to another coupling outer, check the beat should not exceed 0.15mm(Pic c). Check coupling gap by feeler, max deviation should not exceed 0.1mm

Adjust belt pulley: If drive by belts, must make sure the parallelism of the shafts.

If the distance short, can check by ruler. If longer, check by lines.



3. Installation of inlet and outlet piping system

A. Inlet piping system

Diameter of pipe should same or bigger than pump inlet, the rules is avoid the cavitation, and can not stay in the pipe.

Add gate valve to make pump maintenance easily. Same diameter with inlet pipe.

Add expansion joint between inlet of pipe and pump to easy pump assembly and disassembly.



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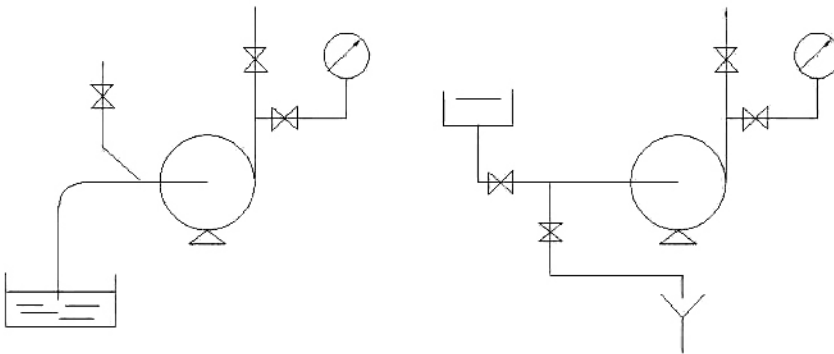
B. Outlet piping system

Diameter is depend on medium , sedimentation and velocity. Generally, same with pump outlet or bigger.

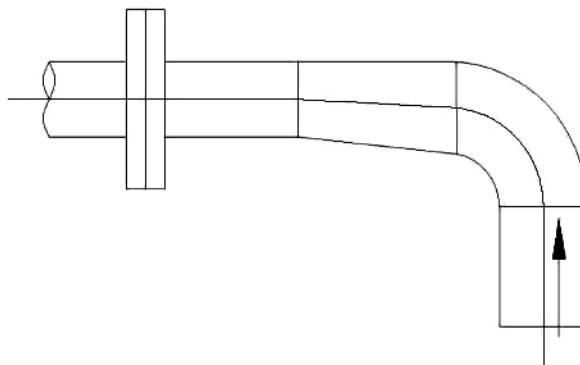
Add gate valve, same diameter with pipe.

Pressure gauge should installed in between the pump outlet and fist gate valve.

C. Piping system tips: as below picture.



Pipe diameter shall consider comprehensive factors such as system resistance, the critical settling velocity of slurry. Inlet pipe should be short and straight as far as possible. At the inlet of the pump, it will be better to equip a same diameter straight pipe, the length shall be not less than three times of inlet diameter (Inlet pipe flow average 1.5 ~ 3 m/s). Depending on the conveyor of slurry settling velocity.Using high arrangement, pump inlet pipe should avoid to form a slug, recommends the horizontal up highway variable diameter tube.The figure below.





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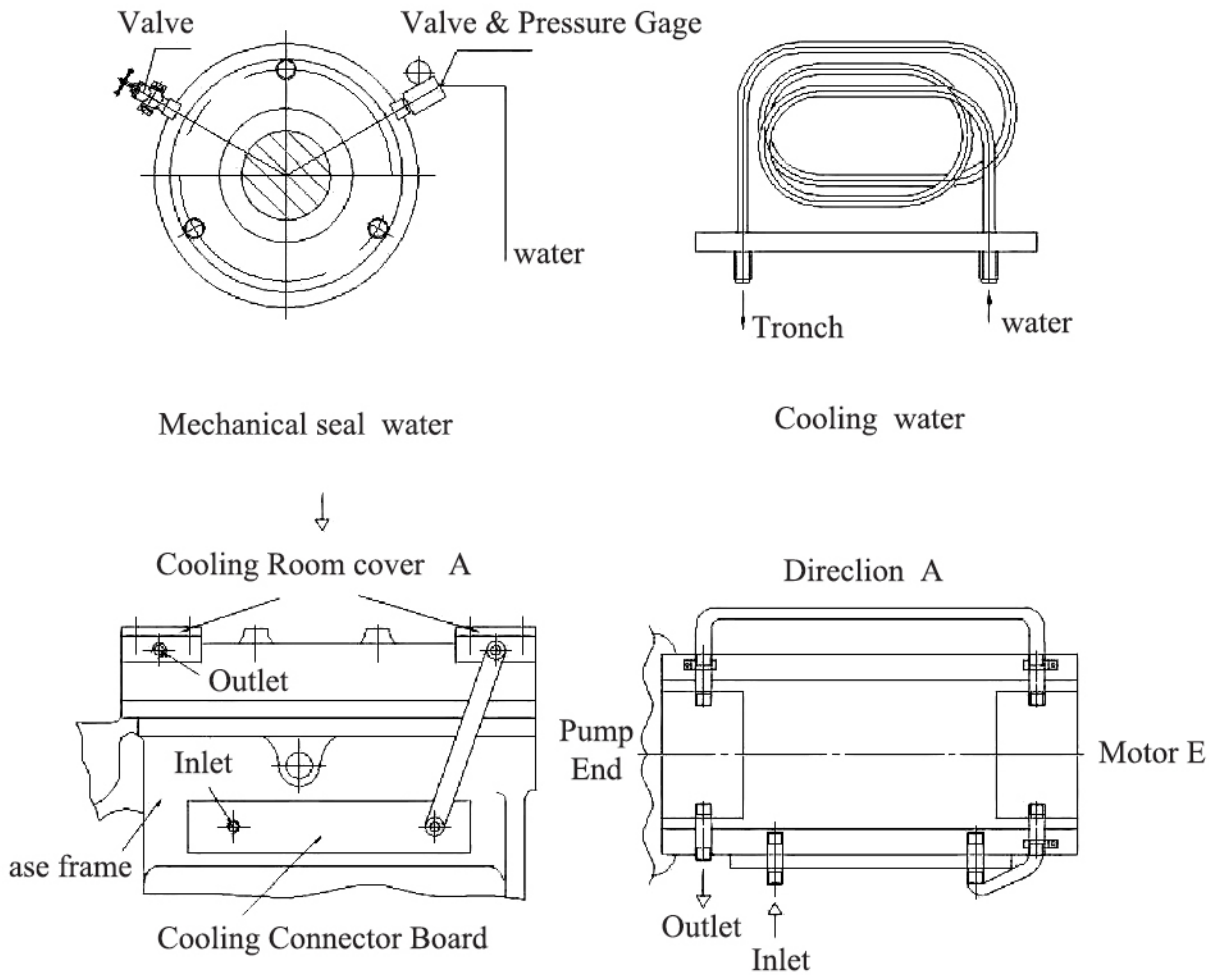
When adjust flow by valve, regulating valve should be located in the pump outlet, but not allowed in the inlet pipe to avoid cavitation.

D. Sealing water and cooling water tube

Should install as below picture.

The model bigger than GAZ150-50 no cooling system.

If adopt grease lubrication, do not need sealing water.



Cooling Water Tube Schematic



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Driving Patterns

Direct Driven (DC)

Direct driven via hydraulic coupling (HC)

Belt driven(CR , CL , ZV , CV)



GDC



GHC



GCR(CL)

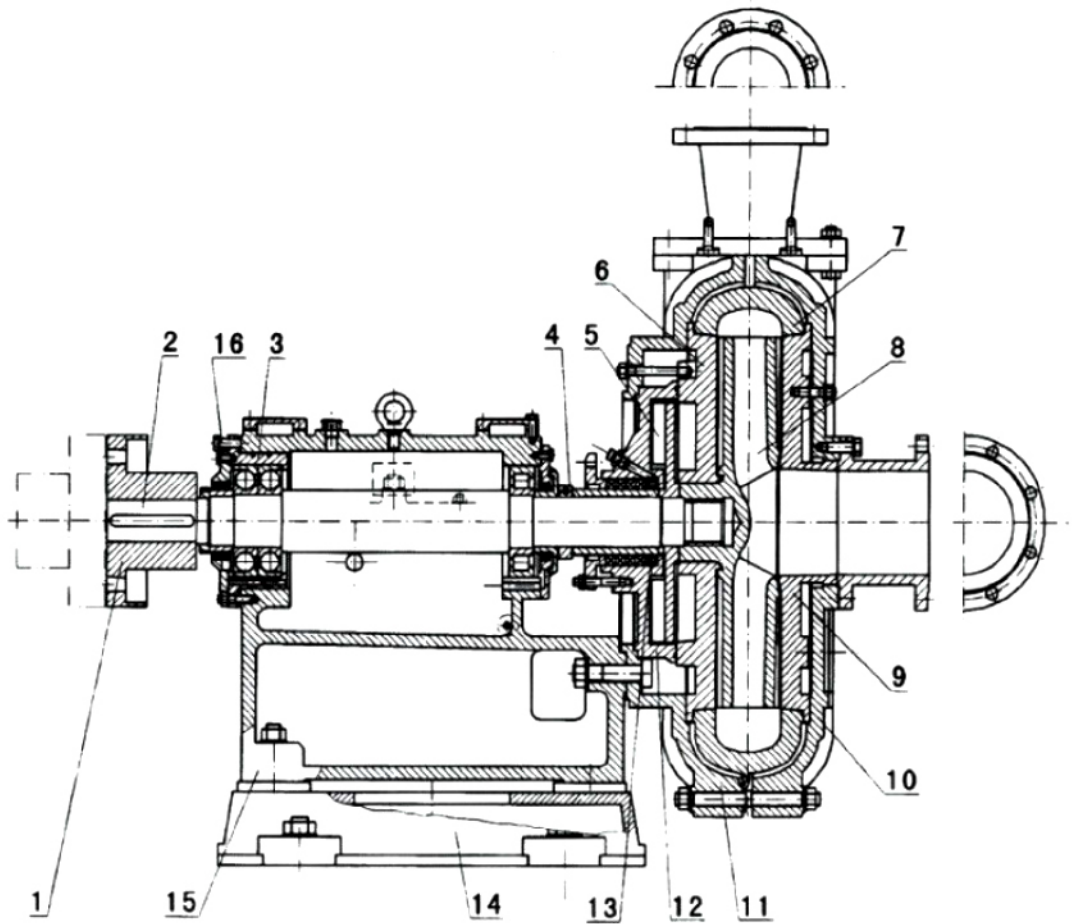


GZV



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GAZ Series Construction Drawing



- | | | |
|---------------------|----------------------|---------------------|
| 1. Coupling | 7. Volute casing | 12. Stuffing box |
| 2. Shaft | 8. Impeller | 13. Water-seal |
| 3. Bearing housing | 9. Front liner plate | 14. Base |
| 4. Disassemble ring | 10. Front casing | 15. Support |
| 5. Expeller | 11. Rear casing | 16. Adjusting bolts |
| 6. Rear liner plate | | |



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GAZ Performance Chart 1

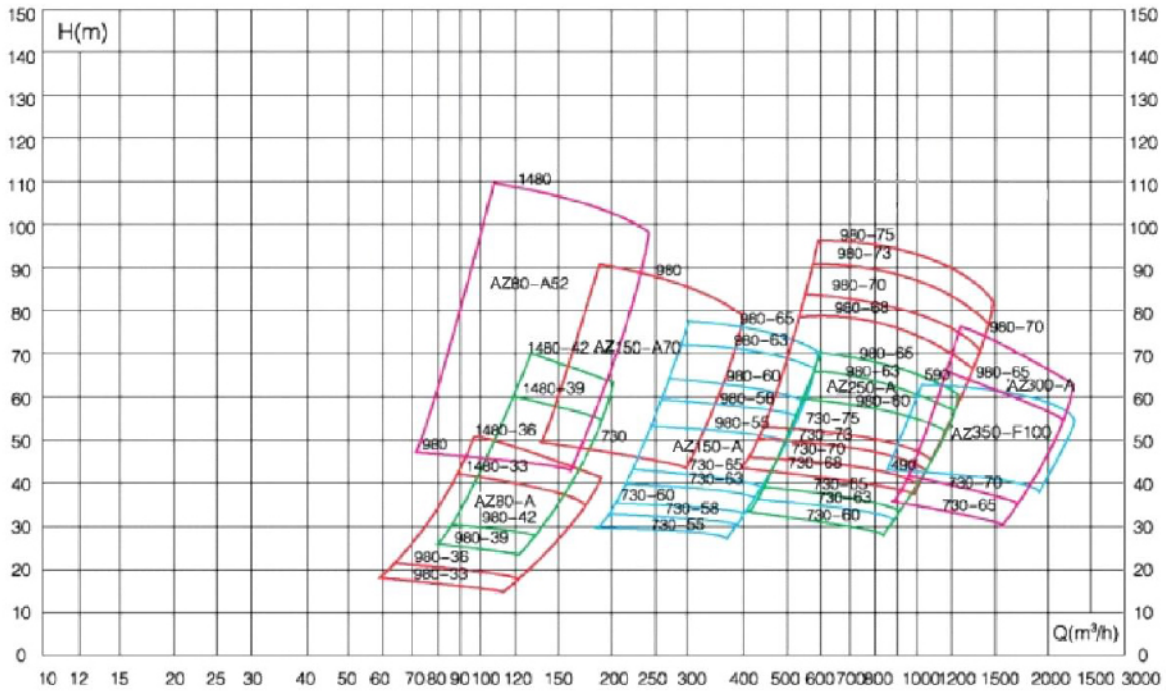


Chart 1

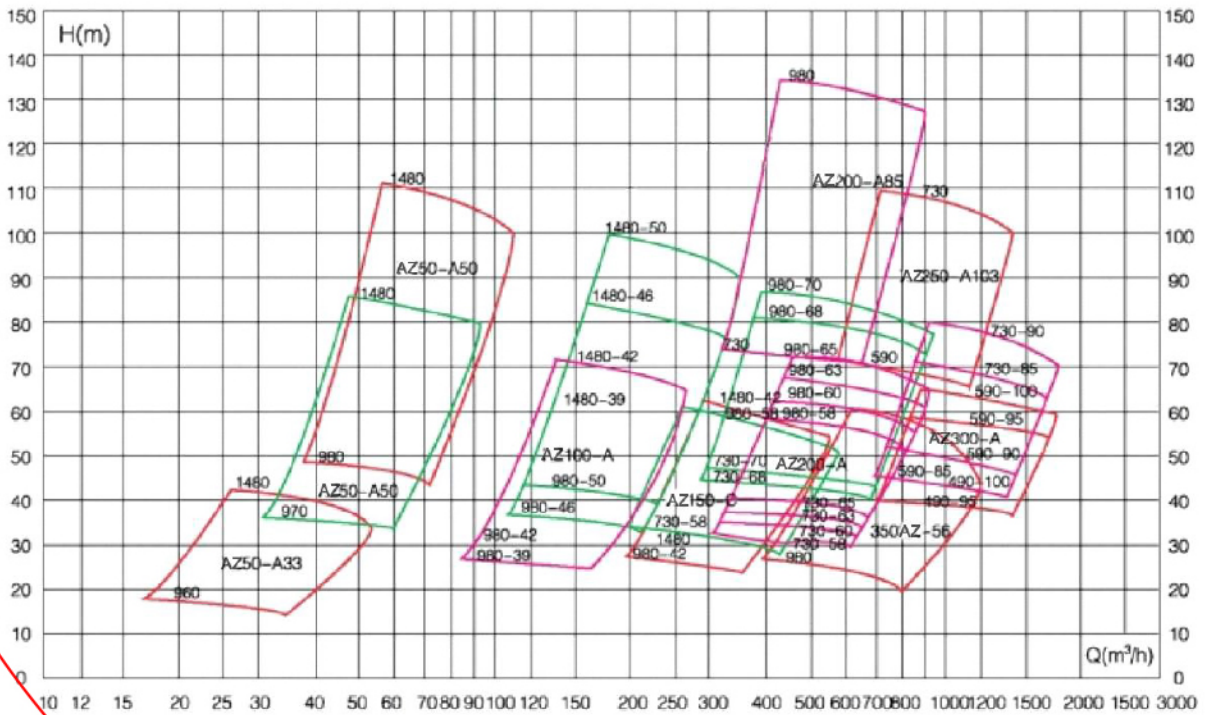


Chart 2



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GAZ Performance Parameters Table

Type	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	NPSHr (m)	Eff (%)	Shaft Power P (kw)	Mating motor		Weight (kg)	Dia. of pump	
							Power (kw)	Specific		Inlet	Outlet
GAZ40-1-A17	9	44.6	2900	4.5	33.2	3.3	5.5	Y132S1-2	230	40	40
	18	42.7			49.5	4.2	7.5	Y132S2-2			
	23	39.3			52.4	4.7	7.5	Y132S2-2			
GAZ40-1-A17	4	10.3	1400	2.5	33.2	0.3	0.55	Y80S1-4	230	40	40
	9	9.9			49.5	0.5	1.1	Y90S-4			
	11	9.1			52.4	0.5	1.1	Y90S-4			
GAZ50-1-A33	26	42.5	1480	6.0	32.8	9.2	15	Y160L-4	680	80	50
	40	40.0			40.6	10.7	18.5	Y180M-4			
	54	34.5			41.4	12.3	18.5	Y180M-4			
GAZ50-1-A33	17	17.9	960	2.9	32.8	2.5	4	Y132M1-6	680	80	50
	26	16.8			40.6	2.9	5.5	Y132M2-6			
	35	14.5			41.4	3.3	5.5	Y132M2-6			
GAZ50-1-A46	48	85.8	1480	2.9	32.2	34.8	45	Y225M-4	690	80	50
	77	82.3			41.7	41.4	55	Y250M-4			
	94	79.9			44.7	45.8	55	Y250M-4			
GAZ50-1-A46	31	36.9	970	1.4	32.3	9.7	15	Y180L-6	690	80	50
	50	35.4			41.7	11.6	15	Y180L-6			
	62	34.3			44.7	13.0	18.5	Y200L1-6			
GAZ50-1-A50	57	110.7	1480	3.8	33.9	50.7	75	Y280S-4	1078	80	50
	91	105.5			43.0	60.8	75	Y280S-4			
	111	99.8			45.1	66.9	90	Y280M-4			
GAZ50-1-A50	38	48.5	980	3.0	33.9	14.8	22	Y200L2-6	1078	80	50
	60	46.3			43.0	17.6	30	Y255M-6			
	74	43.8			45.1	19.6	30	Y255M-6			
GAZ65-1-A27	42	28.2	1450	2.7	54.2	6.0	11	Y160M-4	795	100	65
	54	24			60.0	7.0	11	Y160M-4			
	71	25.9			61.5	8.1	11	Y160M-4			
GAZ65-1-A27	28	12.2	960	1.8	54.2	1.7	3	Y132S-6	795	100	65
	37	11.9			60.0	2.0	4	Y132M1-6			
	47	11.2			61.5	2.3	4	Y132M1-6			
GAZ65-1-A30	47	34.8	1460	3.0	56.2	7.9	11	Y160M-4	820	100	65
	62	33.9			62.0	9.2	15	Y160L-4			
	79	32.0			63.5	10.8	15	Y160L-4			



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GAZ Performance Parameters Table

Type	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	NPSHr (m)	Eff η (%)	Shaft Power P (kw)	Mating motor		Weight (kg)	Dia. of pump	
							Power (kw)	Specific		Inlet	Outlet
GAZ65-1-A30	31	15.0	960	2.0	56.2	2.3	4	Y132M1-6	820	100	65
	41	14.7			62.0	2.6	5.5	Y132M2-6			
	52	13.8			63.5	3.1	5.5	Y132M2-6			
GAZ80-1-A33	90	43.2	1480	3.4	56.2	18.8	30	Y200L-4	860	125	80
	128	40.3			64.0	21.9	30	Y200L-4			
	174	35.9			65.7	25.9	37	Y225S-4			
GAZ80-1-A33	60	18.9	980	2.3	56.2	5.5	7.5	Y160M-6	860	125	80
	85	17.6			64.0	6.4	11	Y160L-6			
	116	15.7			65.7	7.5	11	Y160L-6			
GAZ80-1-A36	98	51.4	1480	3.7	58.2	23.6	30	Y200L-4	885	125	80
	140	48.0			66.0	27.7	37	Y225S-4			
	190	42.7			67.7	32.6	45	Y225M-4			
GAZ80-1-A36	65	22.5	980	2.5	58.2	6.8	11	Y160L-6	885	125	80
	93	21.0			66.0	8.1	11	Y160L-6			
	126	18.7			67.7	9.5	15	Y180L-6			
GAZ80-1-A39	121	60.7	1480	4.0	57.6	34.7	45	Y225M-4	945	125	80
	158	57.9			63.0	39.5	55	Y250M-4			
	189	55.4			64.7	44.1	55	Y250M-4			
GAZ80-1-A39	80	26.6	980	2.4	57.6	10.1	15	Y180L-6	945	125	80
	105	25.4			63.0	11.5	18.5	Y200L1-6			
	125	24.3			64.7	12.8	18.5	Y200L1-6			
GAZ80-1-A42	130	70.4	1480	4.2	59.6	41.8	55	Y250M-4	970	125	80
	170	67.2			65.0	47.9	75	Y280S-4			
	204	64.2			66.7	53.5	75	Y280S-4			
GAZ80-1-A42	86	30.9	980	2.5	59.6	12.1	18.5	Y200L1-6	970	125	80
	113	29.5			65.0	14.0	22	Y200L2-6			
	135	28.1			66.7	15.5	22	Y200L2-6			
GAZ80-1-A52	107	109.8	1480	4.3	38.8	82.5	110	Y315S-4	1080	125	80
	182	105.5			52.0	100.6	132	Y315M-4			
	242	99.0			56.3	115.9	160	Y315L1-4			
GAZ80-1-A52	71	48.1	980	2.1	38.8	24.0	30	Y225M-6	1080	125	80
	121	46.3			52.0	29.3	37	Y250M-6			
	160	43.4			56.3	33.6	45	Y280S-6			



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GAZ Performance Parameters Table

Type	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	NPSHr (m)	Eff η (%)	Shaft Power P (kw)	Mating motor		Weight (kg)	Dia. of pump	
							Power (kw)	Specific		Inlet	Outlet
G AZ100-1-A33	119	41.6	1480	3.2	58.7	23.0	30	Y200L-4	870	150	100
	202	37.8			69.0	30.1	37	Y225S-4			
	205	36.5			69.6	32.1	45	Y225M-4			
G AZ100-1-A33	79	18.2	980	1.8	58.7	6.7	11	Y160L-6	870	150	100
	134	16.6			69.0	8.8	15	Y180L-6			
	149	16.0			69.6	9.3	16	Y180L-6			
G AZ100-1-A36	130	49.5	1480	3.5	60.7	28.9	37	Y225S-4	890	150	100
	220	45.0			71.0	38.0	55	Y250M-4			
	245	43.4			71.6	40.4	55	Y250M-4			
G AZ100-1-A36	86	21.7	980	2.0	60.7	8.4	15	Y180L-6	890	150	100
	146	19.7			71.0	11.0	15	Y180L-6			
	162	19.0			71.6	11.7	18.5	Y200L ₁ -6			
G AZ100-1-A39	130	61.0	1480	3.8	51.7	41.8	55	Y25.M-4	1060	150	100
	228	57.8			66.0	54.4	75	Y280S-4			
	255	56.5			68.4	57.4	75	Y280S-4			
G AZ100-1-A39	86	26.7	980	2.4	51.7	12.1	18.5	Y200L ₁ -6	1060	150	100
	150	25.4			66.0	15.7	22	Y200L ₂ -6			
	169	24.7			68.4	16.6	30	Y225M-6			
G AZ100-1-A42	140	70.8	1480	4.0	53.7	50.3	75	Y280S-4	1078	150	100
	245	67.0			68.0	65.7	90	Y280M-4			
	275	65.5			70.4	69.7	90	Y280M-4			
G AZ100-1-A42	93	31.0	980	2.5	53.7	14.6	22	Y200L ₂ -6	1078	150	100
	162	29.4			68.0	19.1	30	Y225M-6			
	182	28.7			70.4	20.2	30	Y225M-6			
G AZ100-1-B42	96	70.7	1480	2.8	51.9	35.6	45	Y225M-4	1070	150	100
	149	63.8			61.0	42.4	55	Y250M-4			
	205	56.3			63.2	49.7	75	Y280S-4			
G AZ100-1-B42	64	31.0	980	1.8	51.9	10.4	15	Y180L-6	1070	150	100
	99	28.0			61.0	12.4	18.5	Y200L ₁ -6			
	136	24.7			63.2	14.5	22	Y200L ₂ -6			
G AZ100-1-A46	166	84.8	1480	4.2	55.3	69.3	90	Y280M-4	1310	150	100
	176	80.4			66.5	90.9	110	Y315S-4			
	331	77.5			66.2	105.5	132	Y315M-4			



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GAZ Performance Parameters Table

Type	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	NPSHr (m)	Eff η (%)	Shaft Power P (kw)	Mating motor		Weight (kg)	Dia. of pump	
							Power (kw)	Specific		Inlet	Outlet
GAZ100-1-A46	109	37.2	980	2.3	55.3	20.0	30	Y225M-6	1310	150	100
	183	35.3			66.5	26.5	37	Y250M-6			
	219	34.0			66.2	30.6	37	Y250M-6			
GAZ100-1-A50	180	100.2	1480	4.5	57.3	85.7	110	Y315S-4	1440	150	100
	300	95.0			68.5	113.3	132	Y315M-4			
	360	91.6			68.2	131.7	160	Y315L ₁ -4			
GAZ100-1-A50	119	43.9	980	2.5	57.3	24.8	30	Y225M-6	1440	150	100
	199	41.7			68.5	33.0	45	Y280S-6			
	238	40.2			68.2	38.2	55	Y280M-6			
GAZ150-1-C42	300	62.8	1480	4.5	64.0	80.2	110	Y315S-4	1550	200	200
	450	58.0			74.0	96.1	132	Y315M-4			
	550	54.3			76.4	106.5	132	Y315M-4			
GAZ150-1-C42	199	27.5	980	2.2	64.0	23.3	30	Y225M-6	1550	200	200
	298	25.4			74.0	27.9	37	Y250M-6			
	364	23.8			76.4	30.9	45	Y280S-6			
GAZ150-1-A48	221	39.7	980	3.0	62.3	38.4	55	Y280M-6	1610	200	200
	365	36.9			74.0	49.6	75	Y315S-6			
	442	34.8			75.8	55.3	75	Y315S-6			
GAZ150-1-A48	164	22.0	730	2.5	62.3	15.8	22	Y225M-8	1610	200	200
	272	20.5			74.0	20.5	30	Y250M-8			
	329	19.4			75.8	22.9	30	Y250M-8			
GAZ150-1-A50	230	43.1	980	3.0	63.3	42.6	55	Y280M-6	1630	200	200
	380	40.0			75.0	55.2	75	Y315S-6			
	460	37.8			76.8	61.7	75	Y315S-2			
GAZ150-1-A50	171	23.9	730	2.5	63.3	17.6	30	Y250M-8	1630	200	200
	283	22.2			75.0	22.8	30	Y250M-8			
	343	21.0			76.8	25.5	37	Y280S-8			
GAZ150-1-A55	248	53.4	980	3.5	55.2	65.3	90	Y315M-6	1760	200	150
	431	50.8			69.0	86.4	110	Y315L ₁ -6			
	504	49.3			71.6	94.5	110	Y315L ₁ -6			
GAZ150-1-A55	184	29.6	730	2.3	55.2	26.9	37	Y280S-8	1760	200	150
	321	28.2			69.0	35.7	45	Y280M-8			
	376	27.4			71.6	39.2	55	Y315S-8			



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GAZ Performance Parameters Table

Type	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	NPSHr (m)	Eff η (%)	Shaft Power P (kw)	Mating motor		Weight (kg)	Dia. of pump	
							Power (kw)	Specific		Inlet	Outlet
GAZ150-1-A57	190	56.3	980	2.9	46.1	63.2	90	Y315M-6	1800	200	150
	301	55.4			58.5	77.6	110	Y315L1-6			
	427	52.9			66.6	92.4	110	Y315L1-6			
GAZ150-1-A57	142	31.2	730	1.8	46.1	26.2	37	Y280S-8	1800	200	150
	224	30.7			58.5	32.0	45	Y280M-8			
	318	29.4			66.6	38.2	55	Y315S-8			
GAZ150-1-C58	268	61.0	980	3.2	56.6	78.7	110	Y315L1-6	1760	200	150
	458	56.0			66.2	105.5	132	Y315L2-6			
	596	51.2			69.1	120.3	160	Y355M1-6			
GAZ150-1-C58	200	33.8	730	2.0	56.6	32.5	45	Y280M-6	1760	200	150
	341	31.1			66.2	43.6	55	Y315S-6			
	444	28.4			69.1	49.7	75	YR315M-8			
GAZ150-1-A58	261	59.3	980	3.8	57.2	73.7	90	Y315M-6	1780	200	150
	454	56.5			71.0	98.4	132	Y315L2-6			
	532	54.9			73.6	108.1	132	Y315L2-6			
GAZ150-1-A58	194	32.9	730	2.5	57.2	30.4	37	Y280S-8	1780	200	150
	338	31.4			71.0	40.7	55	Y315S-8			
	396	30.5			73.6	44.7	55	Y315S-8			
GAZ150-1-A60	270	63.5	980	3.8	58.2	80.2	110	Y315L1-6	1800	200	150
	470	60.5			72.0	107.6	132	Y315L2-6			
	550	58.7			74.6	117.9	160	Y355M1-6			
GAZ150-1-A60	201	35.2	730	2.5	58.2	33.1	45	Y280M-8	1800	200	150
	350	33.6			72.0	44.5	55	Y315S-8			
	410	32.6			74.6	48.8	75	Y315M-8			
GAZ150-1-A63	291	71.1	980	4.0	54.2	104.0	132	Y315L2-6	2050	200	150
	485	68.6			68.0	133.2	160	Y355M1-6			
	582	65.2			69.2	149.3	185	Y355M2-6			
GAZ150-1-A63	216	39.5	730	2.5	54.2	42.9	55	Y315S-8	2050	200	150
	361	38.0			68.0	54.9	75	Y315M-8			
	433	36.2			69.2	61.7	75	Y315M-8			
GAZ150-1-A65	300	75.7	980	4.0	55.2	112.0	132	Y315L2-6	2100	200	150
	500	73.0			69.0	144.1	185	Y355M2-6			
	600	69.4			70.2	161.5	200	Y355M3-6			



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GAZ Performance Parameters Table

Type	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	NPSHr (m)	Eff η (%)	Shaft Power P (kw)	Mating motor		Weight (kg)	Dia. of pump	
							Power (kw)	Specific		Inlet	Outlet
GAZ150-1-A65	223	42.0	730	2.5	55.2	46.2	75	Y315M-8	2100	200	150
	372	40.5			69.0	59.5	75	Y315M-8			
	447	38.5			70.2	66.8	90	Y315L1-8			
GAZ150-1-A70	186	91.2	980	3.0	48.4	95.4	132	Y315L2-6	2985	200	150
	285	87.1			58.4	115.8	160	Y355M1-6			
	401	79.8			62.3	139.9	185	Y355M2-6			
GAZ150-1-A70	139	50.6	730	2.0	48.4	39.6	55	Y315S-8	2985	200	150
	212	48.3			58.4	47.7	75	Y315M-8			
	299	44.3			62.3	57.9	75	Y315M-8			
GAZ200-1-A58	421	57.9	980	4.0	63.4	104.7	132	Y315L2-6	2380	250	200
	715	54.2			79.0	133.6	160	Y355M1-6			
	841	51.9			81.7	145.5	185	Y355M2-6			
GAZ200-1-A58	313	32.1	730	2.5	63.4	43.2	55	Y315S-8	2380	250	200
	533	30.1			79.0	55.3	75	Y315M-8			
	626	28.8			81.7	60.1	75	Y315M-8			
GAZ200-1-A60	435	62.0	980	4.0	64.4	114.0	132	Y312L2-6	2400	250	200
	740	58.0			80.0	146.1	185	Y355M2-6			
	870	55.5			82.7	159.0	185	Y355M2-6			
GAZ200-1-A60	324	34.4	730	2.5	64.4	47.1	75	Y315M-8	2400	250	200
	551	32.2			80.0	60.4	90	Y315L1-8			
	648	30.8			82.7	65.7	90	Y315L1-8			
GAZ200-1-A63	456	67.6	980	4.3	62.2	135.0	160	Y355M1-6	2430	250	200
	795	64.0			76.0	182.3	220	Y355-6			
	921	61.6			78.6	196.6	250	Y355-6			
GAZ200-1-A63	339	37.5	730	2.5	62.2	55.7	75	Y315M-8	2430	250	200
	592	35.5			76.0	75.3	110	Y315L2-8			
	686	34.2			78.6	81.3	110	Y315L2-8			
GAZ200-1-A65	470	72.0	980	4.3	63.2	145.8	185	Y355M2-6	2450	250	200
	820	68.1			77.0	197.5	250	Y355-6			
	950	65.6			79.6	213.2	250	Y355-6			
GAZ200-1-A65	350	40.0	730	2.5	63.2	60.3	75	Y315M-8	2450	250	200
	611	37.8			77.0	81.7	110	Y315L2-8			
	708	36.4			79.6	88.2	110	Y315L2-8			



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GAZ Performance Parameters Table

Type	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	NPSHr (m)	Eff η (%)	Shaft Power P (kw)	Mating motor		Weight (kg)	Dia. of pump	
							Power (kw)	Specific		Inlet	Outlet
GAZ200-1-A68	397	81.5	980	3.8	54.8	160.8	200	Y355M3-6	3140	250	200
	717	77.7			70.7	214.6	250	Y355-6			
	948	73.2			74.6	253.6	315	Y400-6			
GAZ200-1-A68	296	45.2	730	2.8	54.8	66.5	90	Y315L1-8	3140	250	200
	534	43.1			70.7	88.7	110	Y315L2-8			
	706	40.7			74.6	104.9	132	Y355M1-8			
GAZ200-1-A70	409	86.4	980	3.8	55.8	172.5	200	Y355M3-6	3160	250	200
	738	82.3			71.7	230.70	280	Y400-6			
	976	77.6			75.6	272.8	315	Y400-6			
GAZ200-1-A70	305	47.96	730	2.8	55.8	71.3	90	Y315L1-8	3160	250	200
	550	45.7			71.7	95.5	132	Y355M1-8			
	727	43.1			75.6	112.9	132	Y255M1-8			
GAZ200-1-A73	438	97.5	980	4.5	60.4	192.5	250	Y355-6	3190	250	200
	730	90.7			71.0	254.0	315	Y400-6			
	876	86.2			71.8	286.4	315	Y400-6			
GAZ200-1-A73	326	54.1	730	3.0	60.4	79.5	110	Y315L2-8	3160	250	200
	544	50.3			71.0	105.0	132	Y355M1-8			
	652	47.8			71.8	118.2	160	Y355M2-8			
GAZ200-1-A75	450	102.9	980	4.5	61.4	205.4	250	Y355-6	3200	250	200
	750	95.7			72.0	271.5	355	Y400-6			
	900	91.0			72.8	306.4	355	Y400-6			
GAZ200-1-A75	335	57.1	730	3.0	61.4	84.8	110	Y315L2-8	3200	250	200
	559	53.1			72.0	112.3	132	Y355M1-8			
	670	50.5			72.8	126.6	160	Y355M2-8			
GAZ200-1-A85	441	133.7	980	5.0	50.0	321.1	400	Y400-6	4150	250	200
	858	128.2			68.4	437.9	560	Y450-6			
	907	127.9			70.5	448.1	560	Y450-6			
GAZ200-1-A85	329	74.2	730	2.8	50.0	133.0	160	Y355M2-8	4150	250	200
	639	71.1			68.4	180.9	220	Y400-8			
	676	71.0			70.5	185.4	220	Y400-8			
GAZ250-1-A60	551	60.5	980	4.2	61.8	146.9	185	Y355M2-6	3530	300	250
	895	56.4			72.0	190.9	250	Y355L2-6			
	1153	52.3			73.9	222.2	280	Y400-6			



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GAZ Performance Parameters Table

Type	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	NPSHr (m)	Eff (%)	Shaft Power P (kw)	Matung motor		Weight (kg)	Dia. of pump	
							Power (kw)	Specific		Inlet	Outlet
GAZ250-1-A60	411	33.6	730	2.8	61.8	60.7	75	Y315M-8	3530	300	250
	667	31.3			72.0	79.0	110	Y315L2-8			
	858	29.1			73.9	92.0	110	Y315L2-8			
GAZ250-1-A63	597	66.7	980	4.5	63.8	164.8	200	Y355-6	3540	300	250
	940	62.2			74.0	215.2	250	Y355-6			
	1211	57.7			75.9	250.7	315	Y400-6			
GAZ250-1-A63	431	37.0	730	3.0	63.8	68.1	90	Y315L1-8	3540	300	250
	701	34.5			74.0	89.0	110	Y355M2-8			
	901	32.0			75.9	103.4	132	Y355M1-8			
GAZ250-1-A65	597	71.0	980	4.5	64.8	178.1	220	Y355-6	3550	300	250
	970	66.2			75.0	233.2	280	Y400-6			
	1249	61.4			76.9	271.6	315	Y400-6			
GAZ250-1-A65	445	39.4	730	3.0	64.8	73.7	90	Y315L1-8	3550	300	250
	723	36.7			75.0	96.3	132	Y355M1-8			
	930	34.1			76.9	112.3	132	Y355M1-8			
GAZ250-1-A68	544	80.1	980	3.7	58.3	203.5	250	Y355-6	3560	300	250
	997	75.6			72.0	285.1	355	Y400-6			
	1342	68.4			71.6	349.1	450	Y450-6			
GAZ250-1-A68	405	44.5	730	2.7	58.3	84.2	110	Y315L2-8	3560	300	250
	743	41.9			72.0	117.8	160	Y355M2-8			
	999	38.0			71.6	144.4	185	Y355L1-8			
GAZ250-1-A70	560	84.9	980	3.9	59.3	218.3	280	Y400-6	3570	300	250
	1027	80.1			73.0	306.9	400	Y400-6			
	1381	72.5			72.6	375.6	450	Y450-6			
GAZ250-1-A70	417	47.1	730	2.9	59.3	90.2	110	Y315L2-8	3570	300	250
	764	44.4			73.0	126.5	160	Y355M2-8			
	1029	40.2			72.6	155.2	185	Y355L1-8			
GAZ250-1-A73	584	92.4	980	4.1	61.3	239.7	280	Y400-6	3590	300	250
	1071	87.2			75.0	339.1	400	Y400-6			
	1441	78.8			74.6	414.5	500	Y450-6			
GAZ250-1-A73	435	51.3	730	3.0	61.3	99.1	132	Y355M1-8	3590	300	250
	797	48.3			75.0	139.8	185	Y355L1-8			
	1073	43.8			74.6	171.6	200	Y355L2-8			



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GAZ Performance Parameters Table

Type	Capacity Q (m3/h)	Head H (m)	Speed n (r/min)	NPSHr (m)	Eff (%)	Shaft Power P (kw)	Mating motor		Weight (kg)	Dia. of pump	
							Power (kw)	Specific		Inlet	Outlet
GAZ250-1-A75	600	97.5	980	4.1	62.3	255.7	315	Y400-6	3600	300	250
	1100	92.0			76.0	362.6	450	Y450-6			
	1480	83.2			75.6	443.6	560	Y450-6			
GAZ250-1-A75	447	54.1	730	3.0	62.3	105.7	132	Y355M1-8	3600	300	250
	819	51.0			76.0	149.7	185	Y355L1-8			
	1102	46.2			75.6	183.4	220	Y400-8			
GAZ250-1-A78	690	108.4	980	5.1	54.1	376.5	450	Y450-6	4620	300	250
	1145	104.8			67.0	487.7	630	Y450-6			
	1380	101.4			70.6	539.8	630	Y450-6			
GAZ250-1-A78	514	60.1	730	3.2	54.1	155.5	185	Y355L1-8	4620	300	250
	853	58.1			67.0	201.4	250	Y400-8			
	1028	56.3			70.6	223.3	280	Y400-8			
GAZ250-1-A80	708	114.0	980	5.4	56.1	391.8	500	Y450-6	4630	300	250
	1175	110.2			69.0	511.1	630	Y450-6			
	1416	106.7			72.6	566.7	710	Y500-6			
GAZ250-1-A80	527	63.2	730	3.4	56.1	161.7	200	Y400-8	4630	300	250
	875	61.1			69.0	211.0	280	Y400-8			
	1054	59.2			72.6	234.1	280	Y400-8			
GAZ250-1-A83	734	122.7	980	5.5	58.1	422.1	500	Y450-6	4665	300	250
	1219	118.6			71.0	554.5	710	Y500-6			
	1469	114.8			74.6	615.6	800	Y500-6			
GAZ250-1-A83	547	68.1	730	3.5	58.1	174.6	220	Y400-8	4665	300	250
	908	65.8			71.0	229.2	280	Y400-8			
	1094	63.7			71.6	254.4	315	Y450-8			
GAZ250-1-A85	752	128.7	980	5.5	59.1	446.0	560	Y450-6	4686	300	250
	1248	124.4			72.0	587.2	710	Y500-6			
	1504	120.4			75.6	652.3	800	Y500-6			
GAZ250-1-A85	560	71.4	730	3.5	59.1	184.2	220	Y400-8	4686	300	250
	930	69.0			72.0	242.7	315	Y450-8			
	1120	66.8			75.6	269.5	315	Y450-8			
GAZ250-1-A90	690	82.4	730	5.3	60.6	255.5	315	Y450-8	5150	300	250
	1009	79.1			70.0	310.5	400	Y450-8			
	1374	74.3			73.8	376.7	450	Y450-8			



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GAZ Performance Parameters Table

Type	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	NPSHr (m)	Eff η (%)	Shaft Power P (kw)	Mating motor		Weight (kg)	Dia. of pump	
							Power (kw)	Specific		Inlet	Outlet
GAZ250-1-A90	558	53.8	590	3.4	60.6	134.9	160	Y355L2-10	5150	300	250
	816	51.7			70.0	164.1	200	Y450-10			
	1111	48.5			73.8	198.8	250	Y450-10			
GAZ250-1-A96	736	937	730	5.5	64.6	290.7	355	Y450-8	5200	300	250
	1076	90.0			74.0	356.4	450	Y450-8			
	1466	84.5			77.8	433.6	560	Y500-8			
GAZ250-1-A96	595	61.2	590	3.5	64.6	153.5	185	Y450-10	5200	300	250
	870	58.8			74.0	188.3	250	Y450-10			
	1185	55.2			77.8	229.0	280	Y450-10			
GAZ250-1-A103	734	110.5	730	4.3	60.3	366.3	450	Y450-8	5650	300	250
	1067	106.7			69.6	455.5	560	Y500-8			
	1573	98.9			74.5	568.7	710	Y500-8			
GAZ250-1-A103	593	72.2	590	2.8	60.3	193.4	250	Y450-10	5650	300	250
	862	69.7			69.6	235.1	280	Y450-10			
	1271	64.6			74.5	300.1	355	Y450-10			
GAZ300-1-A56	789	46.0	980	5.5	66.5	148.6	185	Y355M2-6	2950	350	300
	1415	40.8			80.4	195.6	250	Y355L2-6			
	1568	38.8			80.9	204.8	250	Y355L2-6			
GAZ300-1-A56	588	25.5	730	3.5	66.5	61.4	75	Y315M-8	2950	350	300
	1054	22.6			80.4	80.7	110	Y315L2-8			
	1168	21.5			80.9	84.5	110	Y315L2-8			
GAZ300-1-A65	1178	66.2	980	6.6	69.0	307.8	400	Y450-6	4000	350	300
	1967	57.5			77.0	400.0	500	Y450-6			
	2166	55.2			77.4	420.7	500	Y450-6			
GAZ300-1-A65	877	36.7	730	3.7	69.0	127.0	160	Y355M2-8	4000	350	300
	1465	31.9			77.0	165.3	200	Y355L2-8			
	1614	30.6			77.4	173.8	220	Y400-8			
GAZ300-1-A70	1269	76.8	980	7.0	72.0	368.6	450	Y450-6	4150	350	300
	2118	66.7			80.0	480.9	630	Y450-6			
	2333	64.0			80.4	505.8	630	Y450-6			
GAZ300-1-A70	945	42.6	730	3.9	72.0	152.3	185	Y355L1-8	4150	350	300
	1578	37.0			80.0	198.8	250	Y400-8			
	1738	35.5			80.4	209.0	250	Y400-8			



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GAZL Performance Parameters Table

Type	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	NPSH r (m)	Eff η (%)	Shaft Power P (kw)	Mating motor		Weight (kg)	Dia. of pump	
							Power (kw)	Specific		Inlet	Outlet
GAZ300-1-A85	871	71.3	730	5.6	66.1	255.9	315	Y450-8	4850	350	300
	1556	65.6			77.5	358.7	450	Y450-8			
	1742	63.1			78.4	381.8	450	Y450-8			
GAZ300-1-A85	704	46.6	590	3.8	66.1	135.2	160	Y355L2-10	4850	350	300
	1285	42.9			77.5	189.6	220	Y450-10			
	1408	41.2			78.4	201.5	250	Y450-10			
GAZ300-1-A90	922	79.9	730	5.7	69.1	290.3	355	Y450-8	5000	350	300
	1648	73.6			80.5	410.3	500	Y500-8			
	1844	70.7			81.4	436.2	560	Y500-8			
GAZ300-1-A90	745	52.2	590	3.9	69.1	153.3	185	Y450-10	5000	400	300
	1332	48.1			80.5	216.7	280	Y450-10			
	1490	46.2			81.4	230.3	280	Y450-10			
GAZ300-1-A95	867	58.8	590	4.1	63.7	217.9	280	Y450-10	5600	400	300
	1696	53.9			77.4	321.6	400	Y500-10			
	1735	53.9			77.7	325.3	400	Y500-10			
GAZ300-1-A95	720	40.6	490	3.0	63.7	125.0	185	Y450-12	5600	400	300
	1408	37.2			77.4	184.3	220	Y500-12			
	1441	36.9			77.7	186.4	220	Y500-12			
GAZ300-1-A100	913	65.2	590	4.1	66.7	243.0	315	Y450-10	5750	400	300
	1785	59.7			80.4	361.0	450	Y500-10			
	1826	59.3			80.7	365.4	450	Y500-10			
GAZ300-1-A100	758	45.0	490	3.0	66.7	139.3	185	Y450-12	5750	400	300
	1482	41.2			80.4	206.8	250	Y450-12			
	1517	40.9			80.7	209.4	250	Y450-12			



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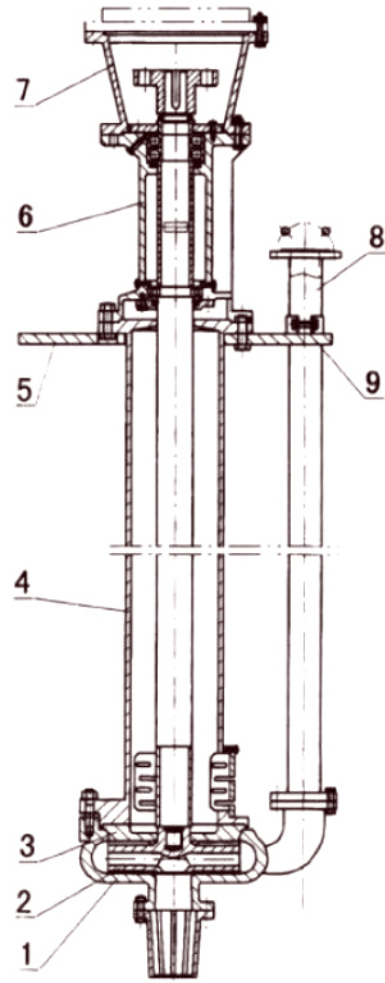
GAZ slurry pumps show in our factory





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GAZL Series Construction Drawing



- 1. Volute casing
- 2. Impeller
- 3. Rear liner plate

- 4. Support
- 5. Left supporting plate
- 6. Bearing body

- 7. Motor supporting
- 8. Drain-pipe
- 9. Right supporting plate



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GAZL Performance Parameters Table

Type	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	Eff η (%)	Shaft Power P (kw)	Mating motor		Weight (kg)	Outlet Dia. mm
						Power (kw)	Specification		
GAZL50-20	17	10.7	1440	34.9	1.4	4	Y112M-4B5	250	50
	25	9.2		38.6	1.6				
	38	5.9		31.2	2.0				
GAZL50-20	11	4.3	910	34.9	0.4	1.1	Y90L-6B5	250	50
	16	3.7		38.6	0.4				
	24	2.4		31.2	0.5				
GAZL50-18	15.3	8.7	1470	34.9	1.0	3	Y100L ₂ -4B5	250	50
	22.5	7.5		38.6	1.2				
	34.2	1.8		31.2	1.5				
GAZL50-18	9.9	3.5	910	34.9	0.3	1.1	Y90L-6B5	250	50
	14.4	3.0		38.6	0.3				
	21.6	1.9		31.2	0.3				
GAZL65-30	38	34.7	1470	43.7	8.2	18.5	Y180M-4V1	530	65
	58	31.9		51.9	9.7				
	98	26.0		51.7	13.4				
GAZL65-30	25	14.8	960	43.7	2.3	5.5	Y132M ₂ -6B5	530	65
	38	13.6		51.9	2.7				
	64	11.1		51.7	3.7				
GAZL65-27	34	28.1	1470	43.7	6.0	15	Y160-4V1	530	65
	52	25.8		51.9	7.1				
	88	21.0		51.7	9.8				
GAZL65-27	23	12.0	960	43.7	1.7	4.0	Y132M ₁ -6B5	530	65
	34	11.0		51.9	2.0				
	58	9.0		51.7	2.7				
GAZL80-36	105	45.5	1480	52.1	25.0	45	Y225M-4V1	660	80
	144	41.4		58.2	27.9				
	201	32.5		54.2	32.8				
GAZL80-36	69	19.5	970	52.1	7.0	15	Y180L-6V1	660	80
	94	17.8		58.2	7.8				
	132	14.0		54.2	9.3				
GAZL80-33	96	38.2	1480	52.1	19.3	37	Y225S-4V1	660	80
	132	34.8		58.2	21.5				
	184	27.3		54.2	25.3				



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GAZL Performance Parameters Table

Type	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	Eff η (%)	Shaft Power P (kw)	Mating motor		Weight (kg)	Outlet Dia. mm
						Power (kw)	Specification		
GAZL80-33	63	16.4	970	52.1	5.4	11	Y160L-6V1	660	80
	86	15.0		58.2	6.0				
	121	11.8		54.2	7.2				
GAZL100-34	157	36.8	1480	60.2	26.1	45	Y225M-4V1	850	100
	214	32.6		65.1	29.2				
	293	24.4		58.2	33.5				
GAZL100-34	103	15.8	970	60.2	7.4	15	Y180L-6V1	850	100
	140	14.0		65.1	8.2				
	192	10.5		58.2	9.4				
GAZL100-31	143	30.6	1480	60.2	19.8	37	Y225S-4V1	850	100
	195	27.1		65.1	22.1				
	267	20.3		58.2	25.4				
GAZL100-31	94	13.1	970	60.2	5.6	11	Y160L-6V1	850	100
	128	11.6		65.1	6.2				
	175	8.7		58.2	7.1				
GAZL150-35	198	17.9	980	63.1	15.3	37	Y250M-6V1	900	150
	332	13.2		68.1	17.5				
	364	12.1		66.8	18.0				
GAZL150-35	147	10.0	730	63.1	6.3	15	Y200L-8V1	900	150
	247	7.3		68.1	7.2				
	271	6.7		66.8	7.4				
GAZL150-35	119	6.5	590	63.1	3.3	11	Y160L-6B3	900	150
	200	4.8		68.1	3.8				
	219	4.4		66.8	3.9				
GAZL150-32	181	15.0	980	63.1	11.7	22	Y200L ₂ -6V1	900	150
	304	11.0		68.1	13.4				
	332	10.1		66.8	13.8				
GAZL150-32	134	8.4	730	63.1	4.8	11	Y180L-8V1	900	150
	226	6.1		68.1	5.5				
	248	5.6		66.8	5.7				
GAZL150-32	109	5.4	590	63.1	2.5	7.5	Y160M-5B5	900	150
	183	4.0		68.1	2.9				
	200	3.7		66.8	3.0				



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GAZ Slurry pump Operation

1- Start-up

Check pump set before start as below tips.

1.1 Put pump in stable foundation to bear weight, eliminate vibration. Tighten foundation bolts.

1.2 Support pipe and valve separately. There is seal in pump flanges. When tighten bolts if volute liner is higher than flanges, can not too tight to damage seal.

1.3 Rotate shaft as pump direction by hand, to drive impeller, if have friction, adjust the gap.

1.4 Check motor rotate, ensure as pump arrow direction. If reverse, will fall off impeller then damage pump. If direct connection, pump shaft must precision of motor shaft. Belt connection, should be parallel. Adjust pulley to perpendicular to belt to avoid vibration & abrasion.

1.5 Install a detachable short tube at pump inlet for easier disassemble pump cover plate and replace. If expeller seal, need add lubricating grease by oil cup if have in expeller ring.

Gland packing seal, check shaft seal water volume & pressure before start pump. Adjust gland clamp bolt and seal water to keep leakage drop by drop. If too tight, shaft sleeve will easier to heat up and waist of power. Too loose, will leak more. Seal water pressure usually higher $3.5 \times 10^{-2} \text{MPa}$ (0.35kgf/cm^2) than pump outlet.

2- Operation

2.1 Check seal water pressure and flow regularly, adjust gland assembly and replace packing rings timely. Make sure suitable clean water pass shaft.

2.2 Check bearing assembly regularly. If heat up, stop-off pump to wait cooling then restart. If continually heat up and temperature increased, must stop off and disassembly to check. Usually because oil too much or have impurity. It should be clean, suitable amount. Add regularly.

3- Shut off

Before stop try to delivery some clean water, to wash the pump. Then off valve, pump, shaft seal water.



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Note Tips

1. Must make sure the pump shaft rotate as the pump arrow direction. Before check pump rotate must separate with pump. Forbid reverse to avoid damage pump and parts.
2. If gland packing seal, must add packing rings as requirement before start.
3. If mechanical seal, send sealing water first before start pump as the instruction. And stop the sealing water after stop the pump in 5~10 minutes. No run without sealing water, it will burn up the seal.
4. If oil lubrication, add oil to standard before start. Can not too much, it will lead to bearing heating or leaking. No run without oil, it will burn up bearing. First running, need change oil in 500~800 hours.
5. When assembly the mechanical seal, must install the coupling and pulley first. If not the hammering force will damage the seal.
belts, check the pulley parallelism
7. Inlet and outlet pipe should add the support, never support by pump body, it will damage the pump
8. Before running, add liquid to pump fully.



G.P.T.CO

GQAS(quality assurance system)

Reliable and comprehensive quality assurance system ensures the excellent quality of our products. We have got the “ International Standard ” certification, manufactured according to GB, Department of superscript, and industry standards, we implement a comprehensive quality management during the entire process of production, accordance with the process file processing strictly, and a variety of detection methods etc. We have meet the requirements of GB3216-89 national Class B accuracy, <<Centrifugal pump, mixed flow pump and vortex pumps test method >>, computer test data monitoring of water test pumping station application. There are physical chemistry laboratory, metallographic analysis room in our factory, for testing material properties in different respects.

Shijiazhuang An Pump Machinery Co., Ltd has got the ISO 9001 quality assurance system certification.

1. Quality Policy

Advocates quality is the life of enterprise, assiduous, the pursuit of excellence

2. Quality objectives

qualified products rate 98%, factory qualified pass rate: 100%

3. Quality Commitment

1) We will continue to improve the awareness of quality, implementing as GB/T19001-2000 quality assurance model standard, meeting technical requirements stipulated in the contract. We are not only discharge for the supplier host, but also for the quality of spare parts, external assistance products etc.

2) We promise the delivery time stipulated in the contract.



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Testing Equipment

Item	Equipment	Item	Equipment
1	J09A Measuring machine	13	Hr-4B High-speed automatic analyzer
2	G72A Optical balance	14	HLN-11 Leeb hardness tester
3	JGA Parallel detector	15	HR-150A Hardness tester
4	BJ-3 Dial indicator detection instrument	16	M20-1 sampling machine
5	500×280 Offset detector	17	TNC-17 Test Bench
6	JDY-2 Omnipotent length measurement device	18	WZ-60 Universal testing machine
7	M-2 Metallographic detector	19	197A Universal microscope
8	P-2 Metallographic detector	20	DL4310 Oscilloscope
9	Q-2 Metallographic detector	21	S0910 Bearing vibration measuring instrument
10	LG-1 Optical meter	22	Dxy100k Hydraulic test pump
11	722 Grating spectral dividing plan	23	Wear tester
12	HCA-313 Silicon manganese phosphorus automatic analyzer	24	200 (500) Grinding machine



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Factory Production Equipments

Equipment	Qty	Note	Equipment	Qty
Metal cutting	18	6 metal cuttings, 2 imported ones	Lifting equipment	3
Casting equipment	16	1 casting mechanized production line 1 melting mechanized production line	Transport equipment	4
			Power Equipment	12
工业炉窑 Industrial kilns	4	2 far infrared furnaces 1 annealing kiln	Testing equipment	24
热处理设备 Heat Treatment Equipment	6	1 High microscopic control furnace	Others	2