Pump Introduction

Construction

200WN to 500WN dredge pumps are of single casing, single stage cantilevered horizontal centrifugal pumps. Two types of coupling with gear box: frame and pump box.

600WN to 1000WN dredge pumps are of double casings, single stage cantilevered centrifugal pumps. These pumps are equipped with frame and lubrication is force thin oil. The design of double casing the pump working till the volute liner almost worn down and guarantee no leakage when volute liner is worn down.

Easy Uninstallation & Convenient Maintenance

WN dredge pump is of front uninstallation construction to make uninstall easily and convenient maintenance. And special tools are equipped for uninstalling the parts.

Standard four-head trapezoid thread connection between impeller and shaft can transfer powerful torsion and be convenient to uninstall. Impeller uninstall ring at shaft sleeve side also make the impeller uninstallation much easier.

Good Performance

Good NPSH can not only guarantee suction but also make deep dredge and high allowable suction density. Minimum NPSH: 4m.

With wide impeller passage, pump can continuously pump gravel or high plastic clay without clogging. Max allow particle size: 350mm.

Performance curves descend obviously to make pumps adopt pipeline distance changes.

By changing the impeller diameter or impeller rotating speed, it can easily change the discharge with the same flow rate.

Material

Material of wet parts is high wear resistant high chrome alloy.
Considering the maintenance, wear resistant parts are nearly of the same wear life to reduce maintenance & interchange costs.

Low Hydraulic loss, High efficiency, Energy Saving

Efficiency of WN is 2 or 3 percentage higher than other common pumps.

Reliable Shaft Seal, No leakage

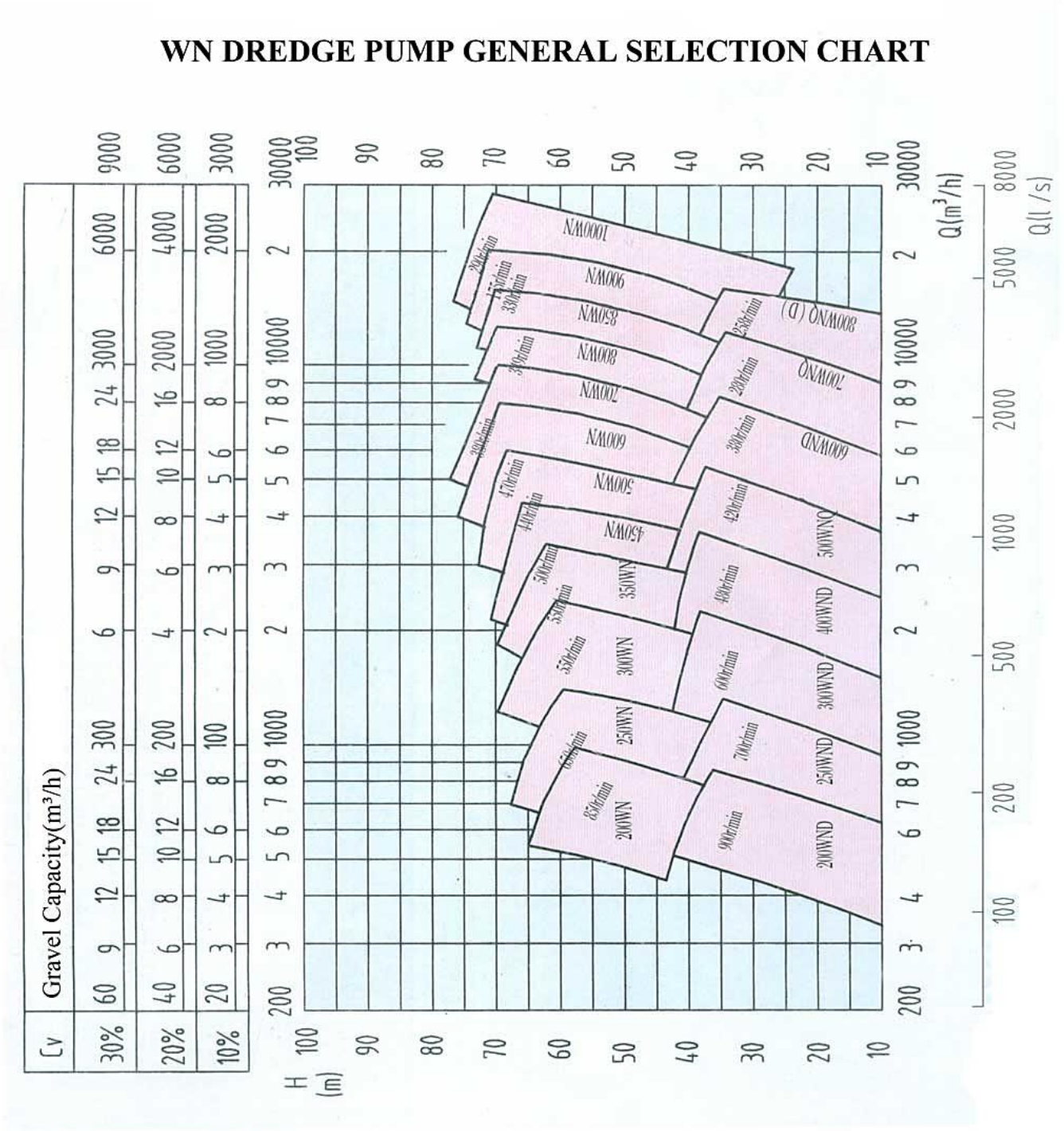
Shaft Seal types of 200WN to 500WN: Mechanical seal, packing, or combination of mechanical and packing
600WN to 1000WN uses helical casing L rubber seal which is made of 3 pieces of L seal ring and one special thread shaft sleeve.

Turning

700WN to 1000WN can be equipped with turning to change rotating directions.

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Pump Performance



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WN DREDGE PUMP PERFORMANCE DATA (GENERAL SELECTION ONLY)

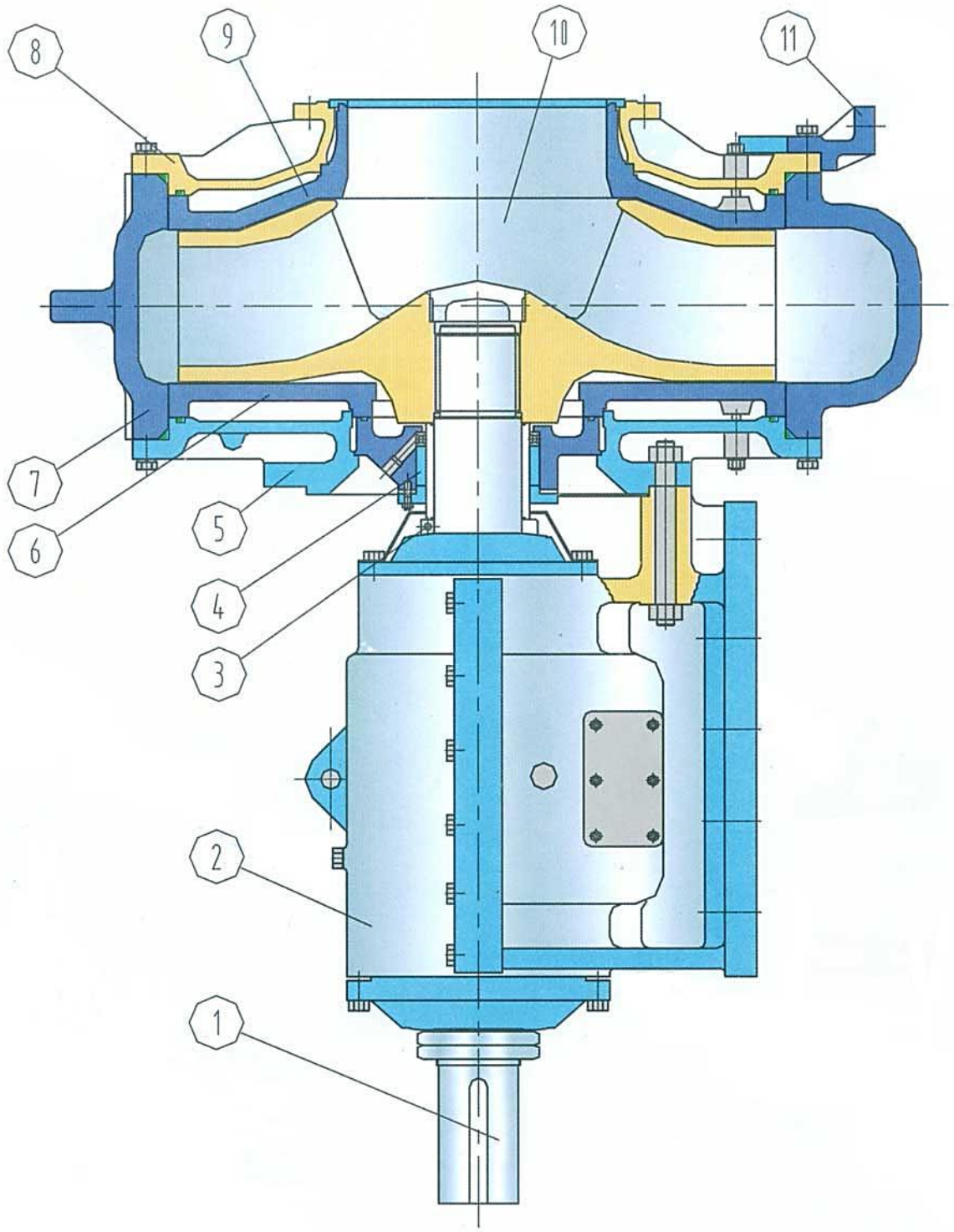
型号 Type	流量 Capacity (m^3 / h)	扬程 Head (m)	转速 Speed (r/min)	效率 Efficiency (%)	汽蚀余量 NPSHr (m)	进口直径 Inlet Diameter (mm)	出口直径 Outlet Diameter (mm)	最大过流粒径 Max.Diameter of Flowd Parti (mm)	重量 Weight (kg)
200WND	600~800	20~40	700~900	60~65	<4.5	250	200	178	2500
200WN	750~1000	40~65	700~850	70~72	<4	250	200	180	3000
250WND	950~1100	20~40	500~700	65~70	<4	300	250	220	3000
250WN	1100~1300	40~65	500~650	70~74	<4	350	250	144	3513
300WND	1500~1800	20~40	400~600	65~68	<4	350	300	241	6000
300WN	1800~2200	40~65	400~550	74~78	<4	450	300	241	7000
350WN	2600~3000	40~65	400~550	74~78	<4.5	450	350	245	7300
400WN	2800~3200	20~40	400~550	74~78	<4.5	450	400	250	7500
450WN	3200~3850	40~67	350~500	76~80	<4.5	600	450	254	7850
500WNQ	3600~4200	20~40	220~320	72~75	<4.8	600	500	330	8000
500WN	4500~5500	40~65	350~450	78~80	<4.8	650	500	250	11300
600WN	7000	62	470	80	<6	700	600	220	30000
600WNQ	7000	30	380	83	<6	700	600	220	16000
700WN	10000	85	380	85	<6	760	700	280	45000
700WNQ	10000	28	280	85	<6	760	700	280	21000
800WN	12500	59	349	81	<6	800	750	300	40000
800WNQ	12500	32	258	81	<6	800	750	300	23000
800WND	12500	32	258	81	<6	800	750	300	23000
850WN	14400	70	330	85	<6	900	850	320	65000
900WN	16000	30	175	85	<6	1000	900	340	80000
1000WN	16000~25000	23~76	181~290	85~87	<6	1200	1000	350	121000

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Pump Construction

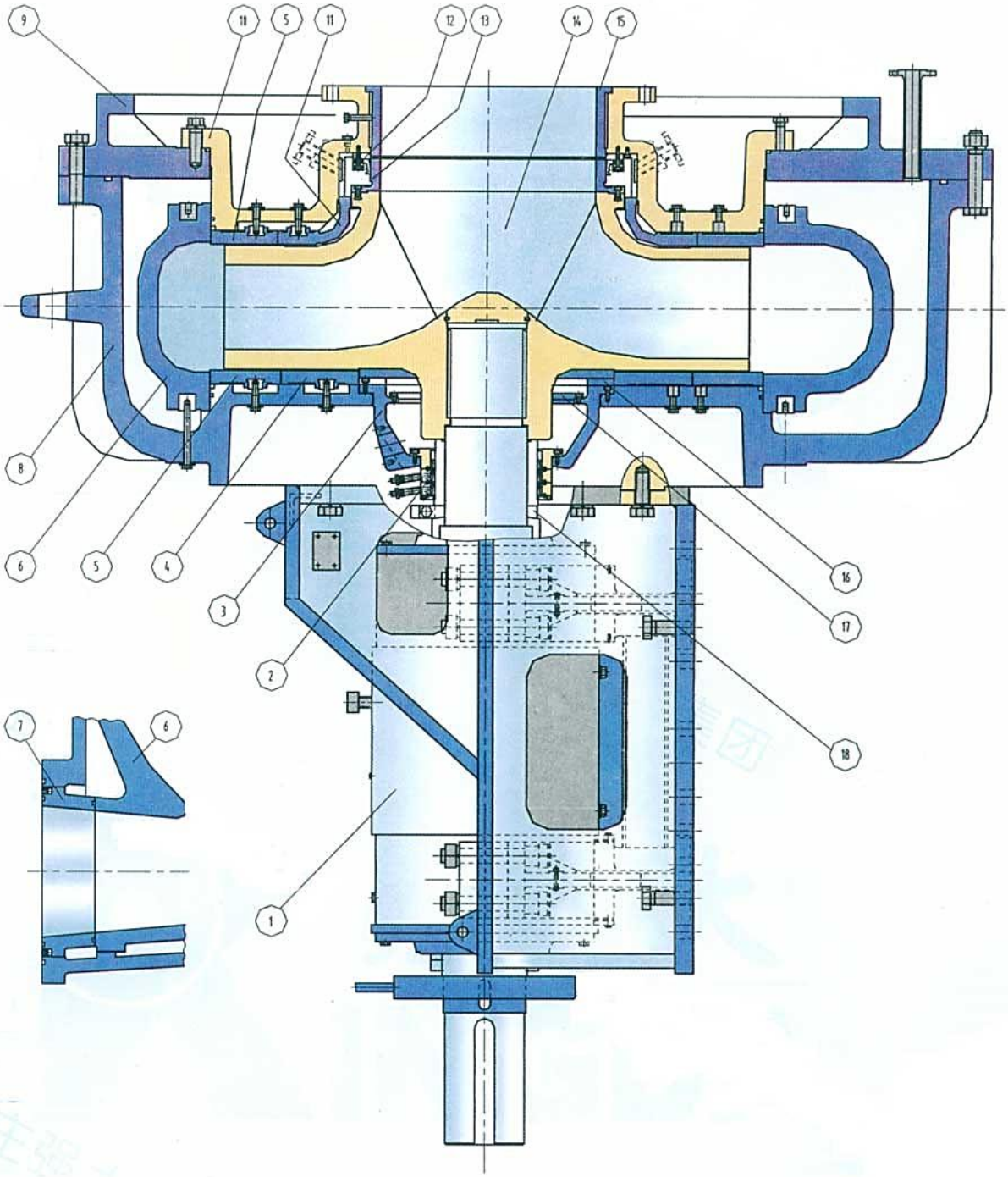
WN200-500 WITH FRAME CONSTRUCTIONAL DRAWING



1. Shaft 2. Frame 3. Impeller Install/Uninstall Ring 4. Sealing Assembly
5. Joint Plate 6. Back Liner 7. Casing 8. Pump Cover 9. Front Liner
10. Impeller 11. Support Plate

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WN600-1000 CONSTRUCTIONAL DREAWING

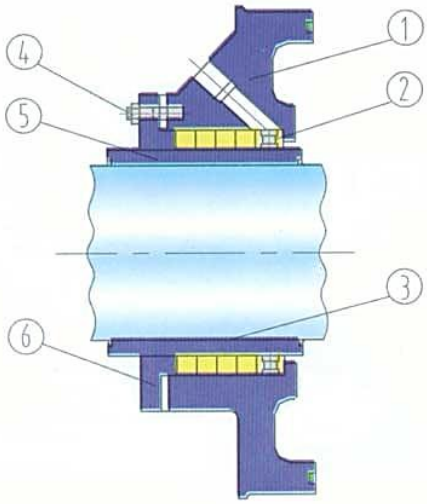


1. Base 2. Sealing Assembly 3. Sealing Box 4. Back Liner 5. Scapular Ring
6. Volute Liner 7. Outlet Screened Pipe 8. Casing 9. Big Pump Cover
10. Small Pump Cover 11. Front Liner 12. Water Jacket 13. Wear-Resistant Ring
14. Impeller 15. Inlet Screened Pipe 16. Sealing Box Protecting Ring
17. Gravel Proof Plate 18. Impeller Install/Uninstall Ring

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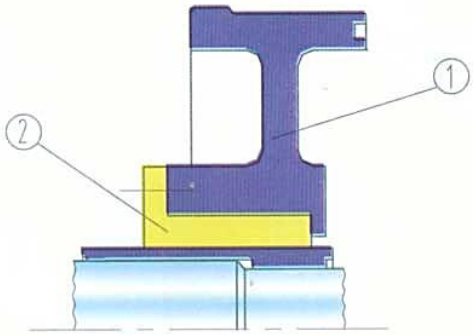
Shaft Seal Type

WN SHAFT SEAL TYPES



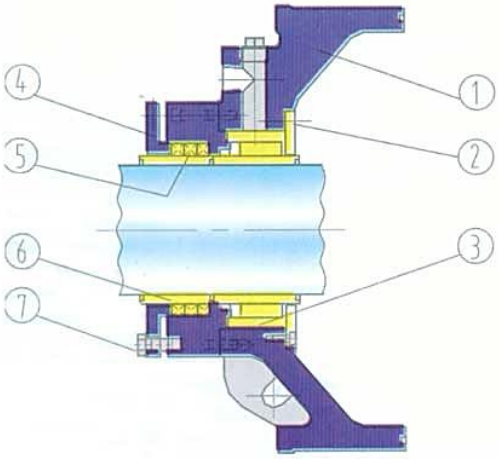
1. Seal Box
2. Water Jacket
3. Packing
4. Packing Ring Nut & Bolt
5. Shaft Sleeve
6. Packing Ring

Packing Seal



1. Seal Box
2. Mechanical Seal

Mechanical Seal



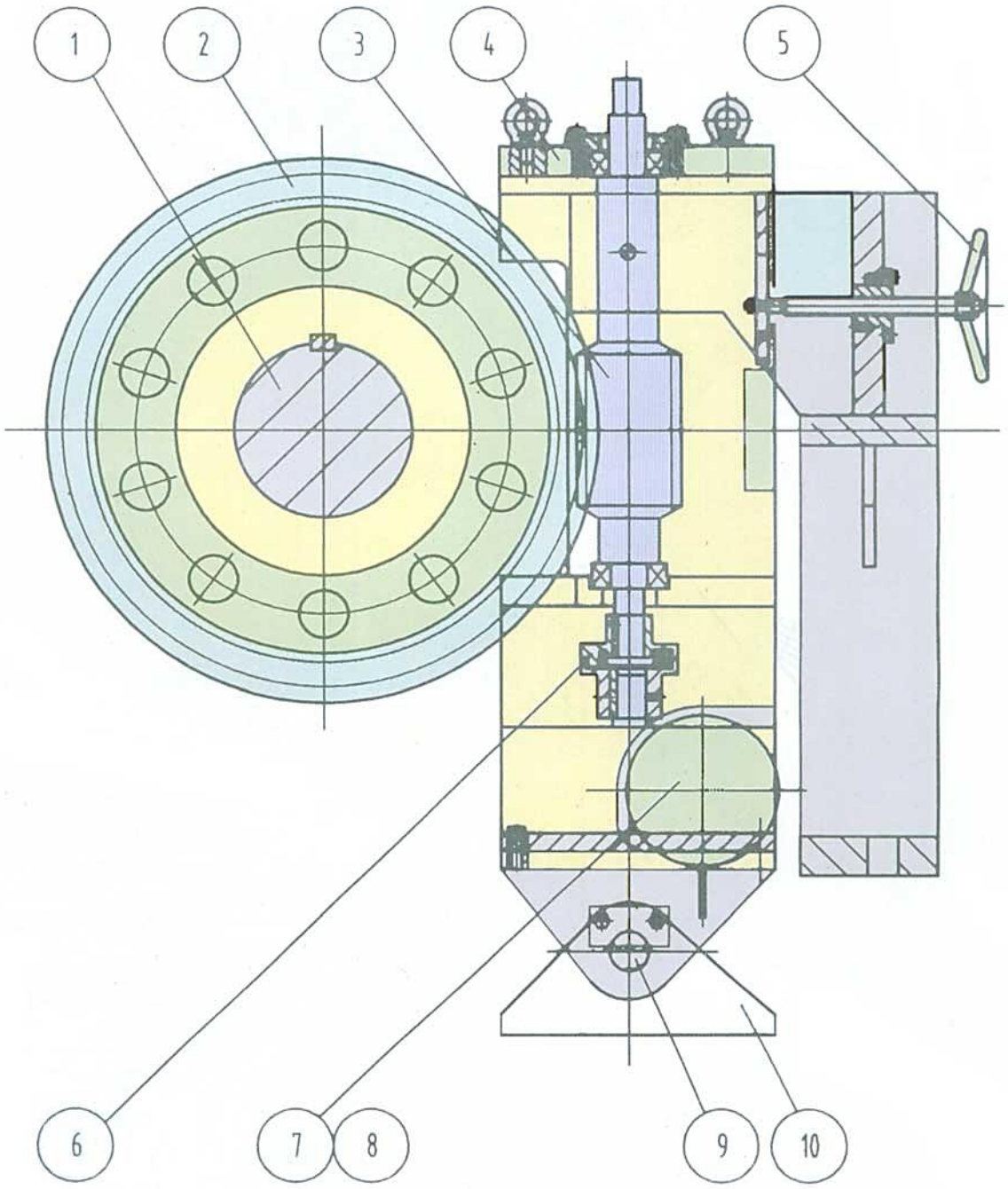
1. Seal Box
2. Seal Plate
3. Mechanical Seal
4. Packing Ring
5. Packing
6. Shaft Sleeve
7. Packing Ring Nut & Bolt

Packing & Mechanical Seal

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Pump Turning Construciton

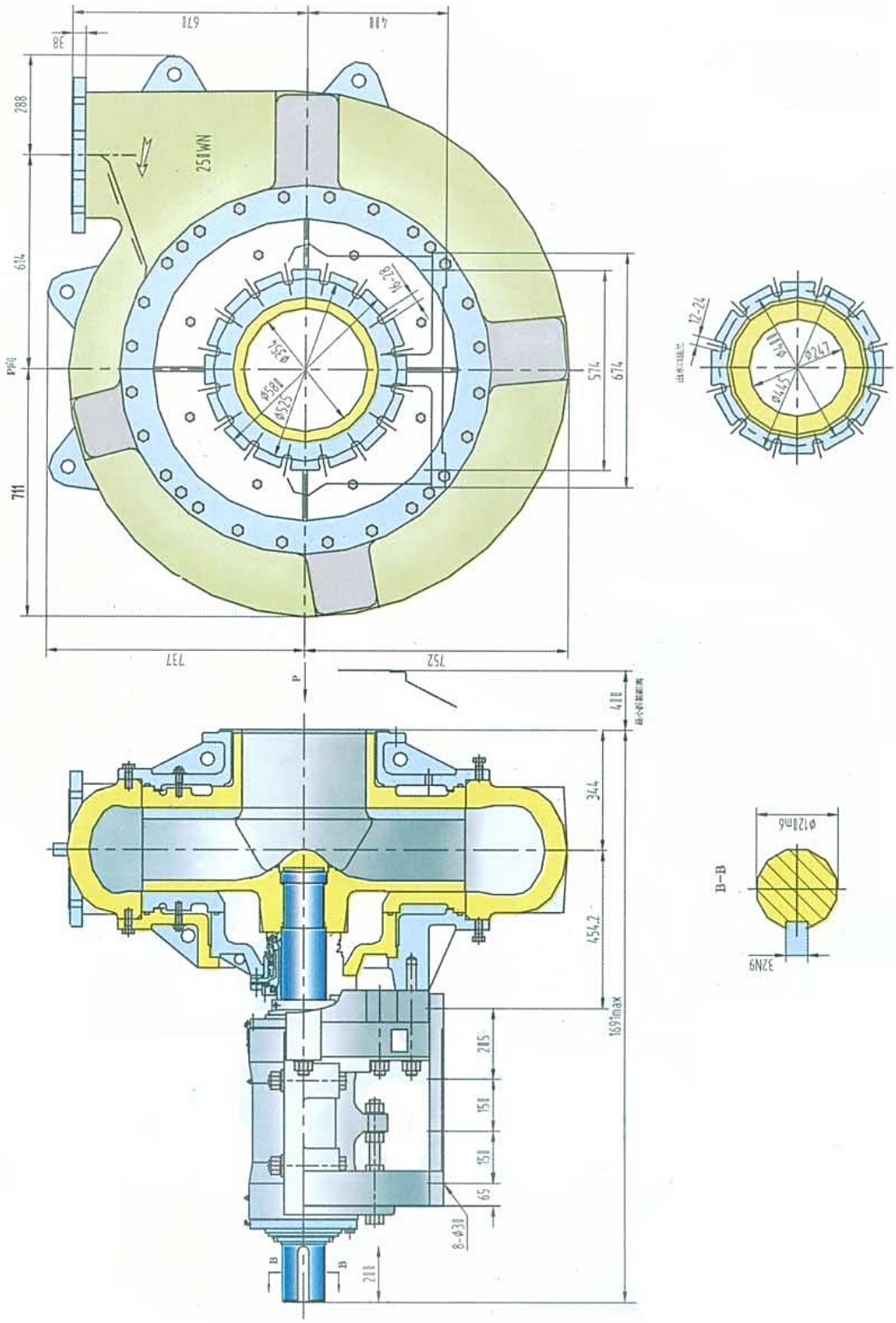
WN DREDGE PUMP TURNING CONSTRUCTIONAL DRAWING



1. Pump Shaft 2. Worm Gear 3. Worm 4. Bearing Housing 5. Screw Mandrel
6. Coupling 7. Motor 8. Engine 9. Spiale 10. Support Frame

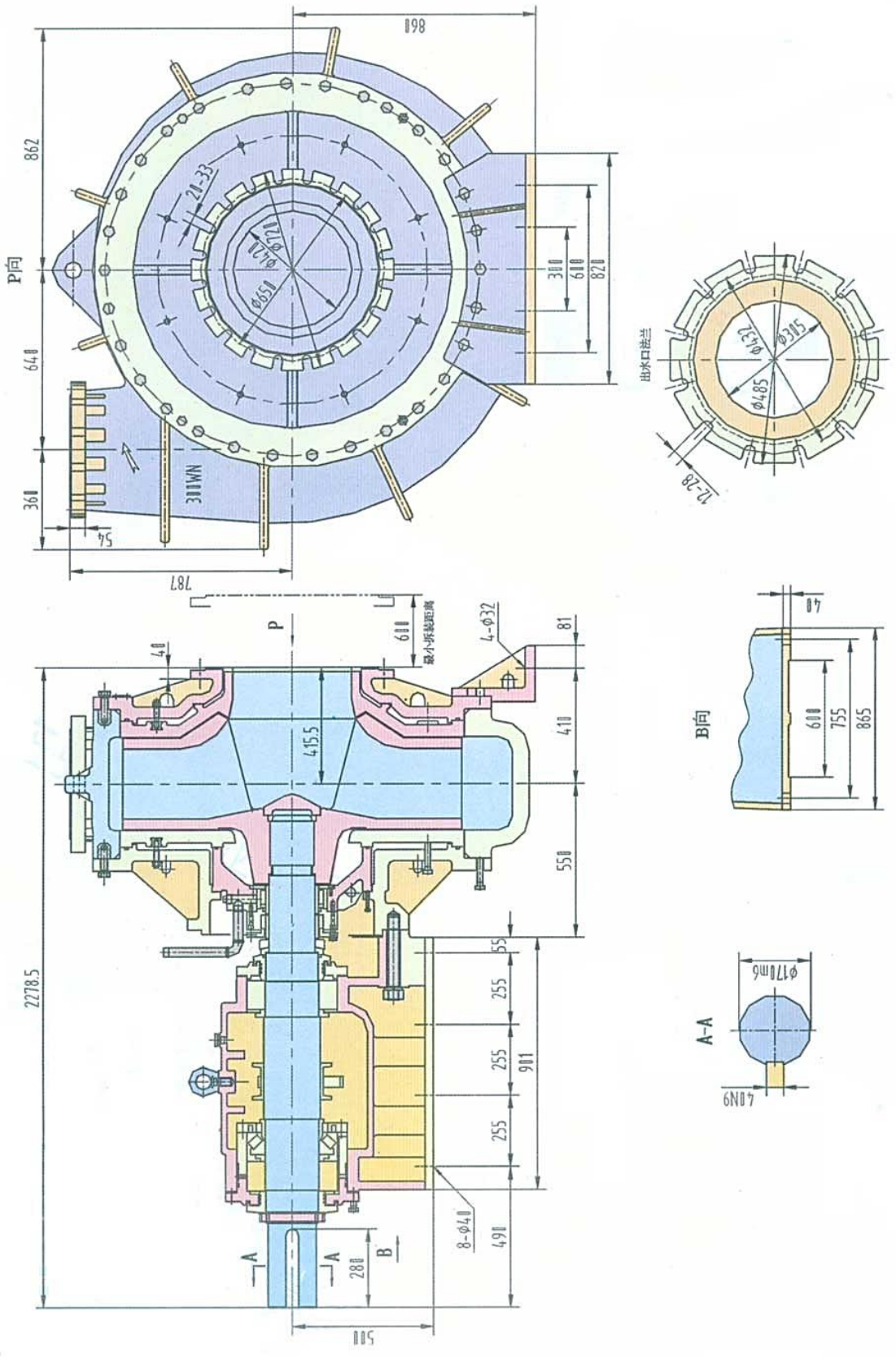
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Installation Dimensions



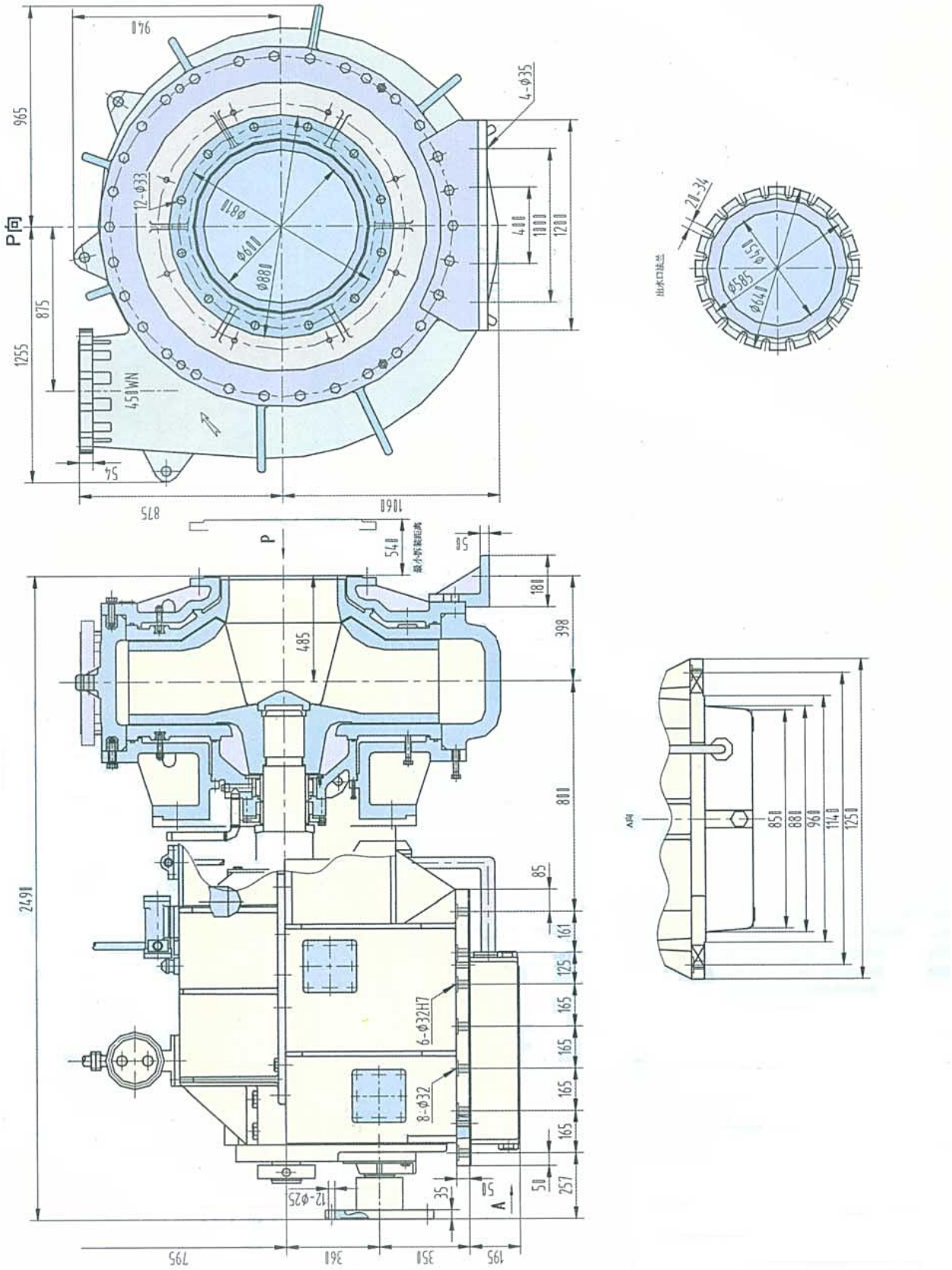
250WN DREDGE PUMP WITH FRAME INSTALLATION DIMENSIONS

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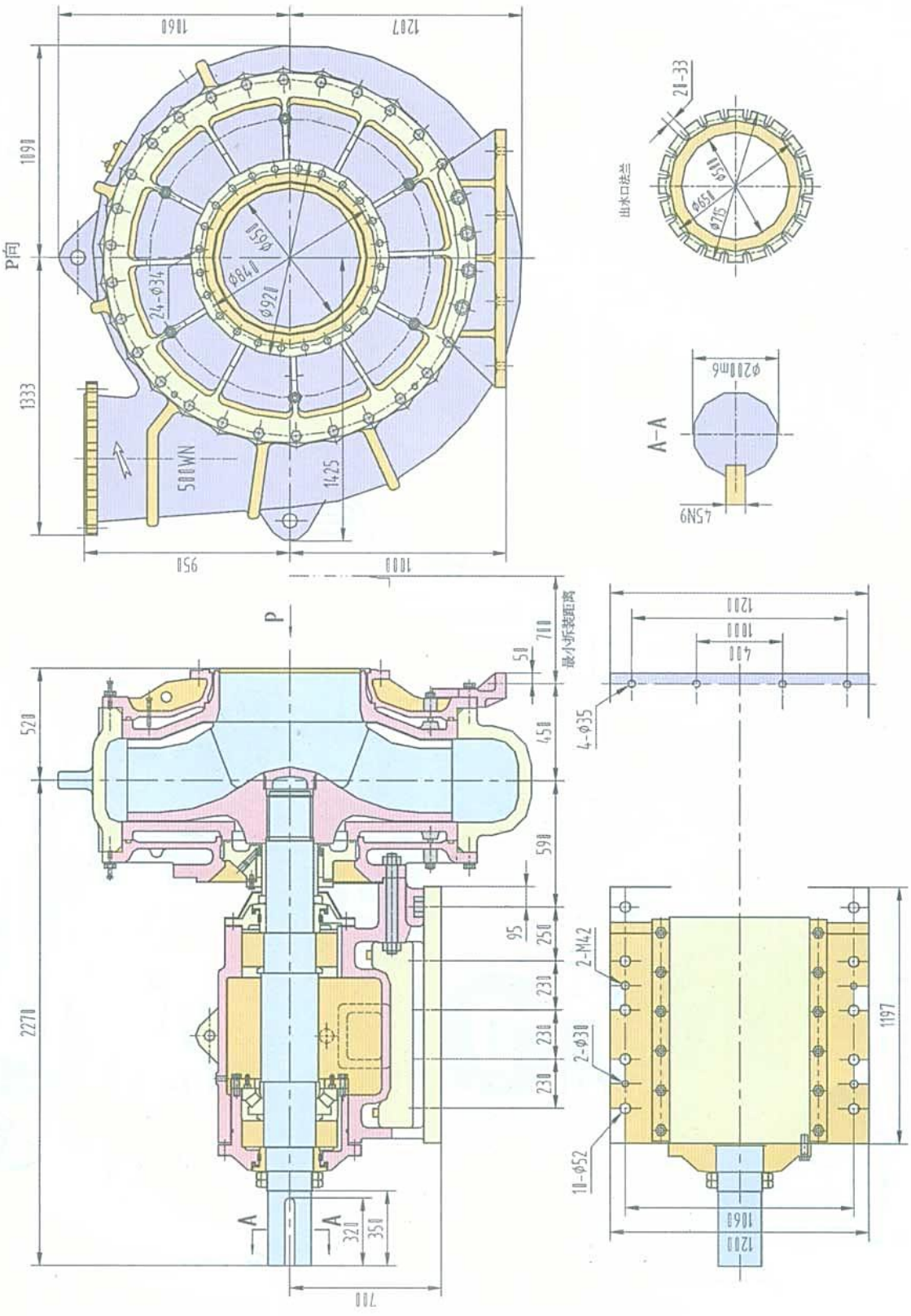
300WN DREDGE PUMP WITH FRAME INSTALLATION DIMENSIONS

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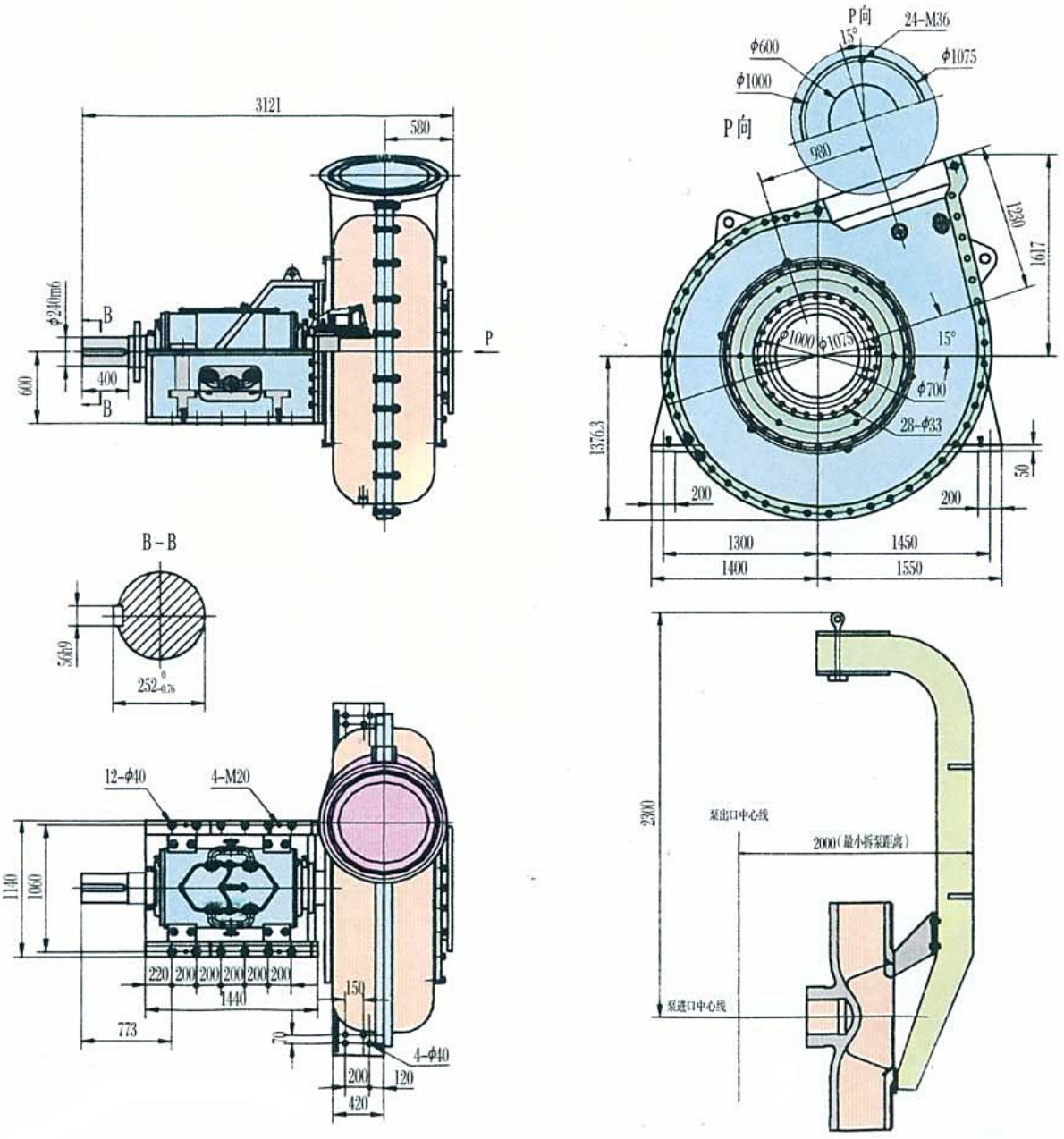
450WN DREDGE PUMP WITH GEARBOX INSTALLATION DIMENSIONS

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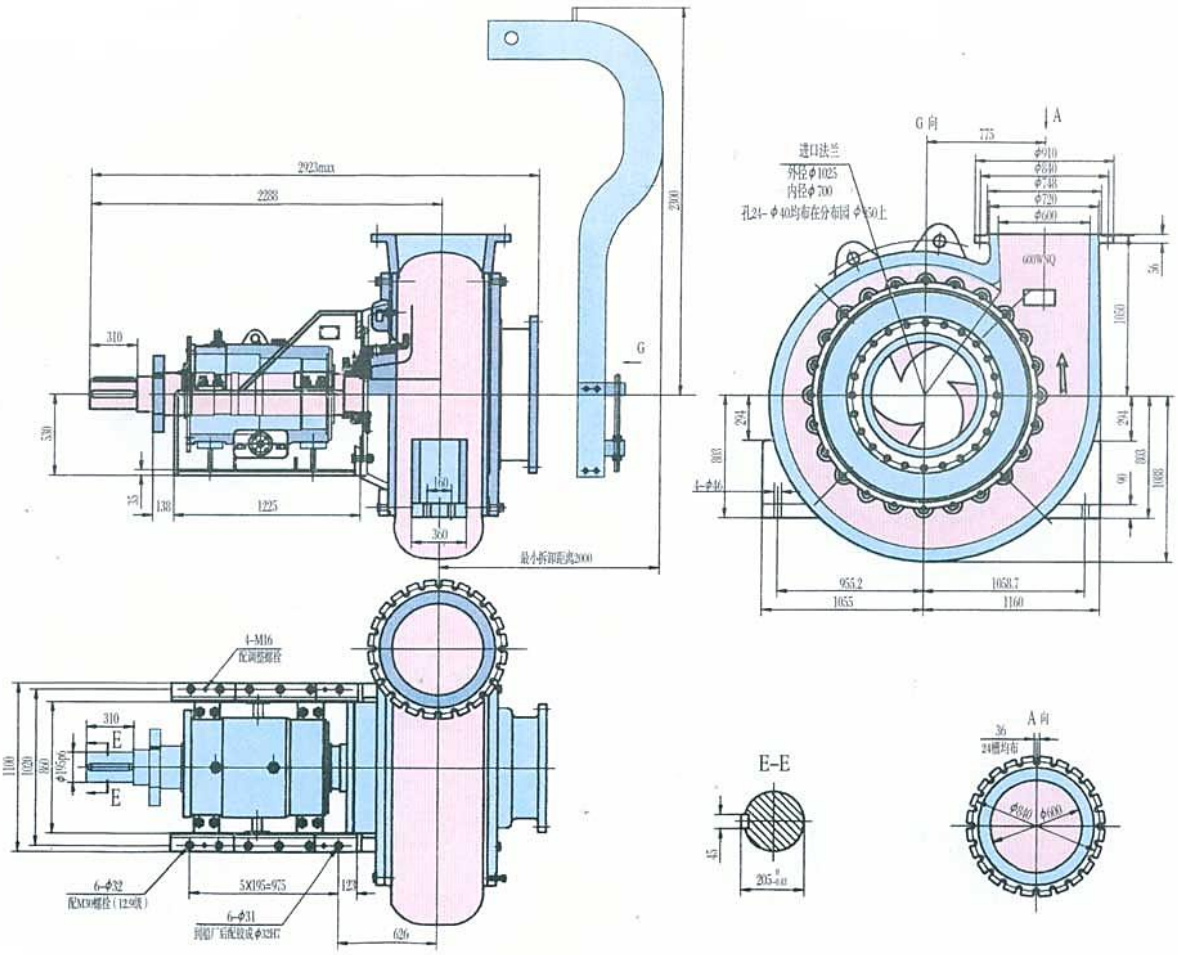
500WN DREDGE PUMP WITH FRAME INSTALLATION DIMENSIONS

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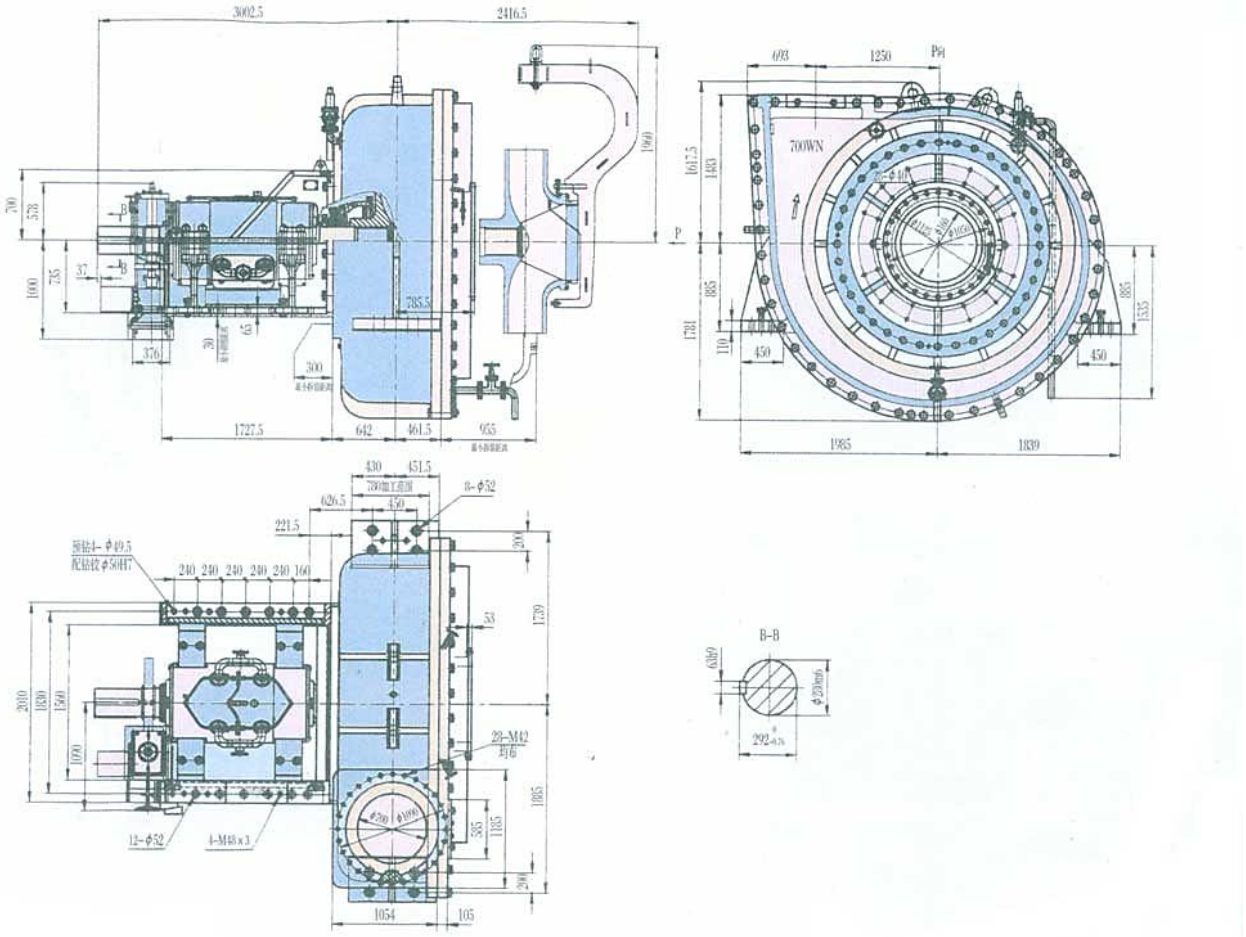
600WN DREDGE PUMP INSTALLATION DIMENSIONS

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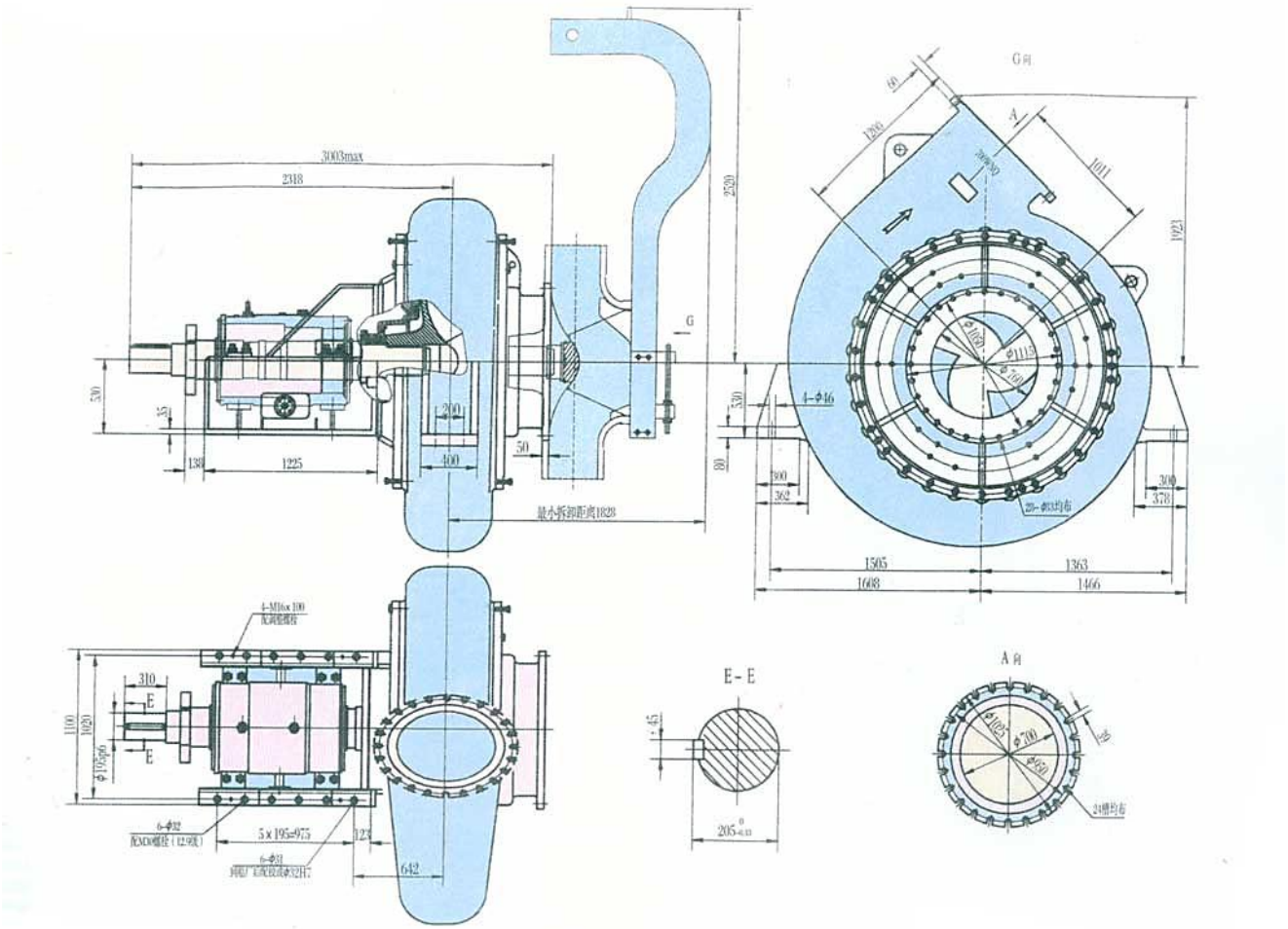
600WNQ UNDER WATER DREDGE PUMP INSTALLATION DIMENSIONS

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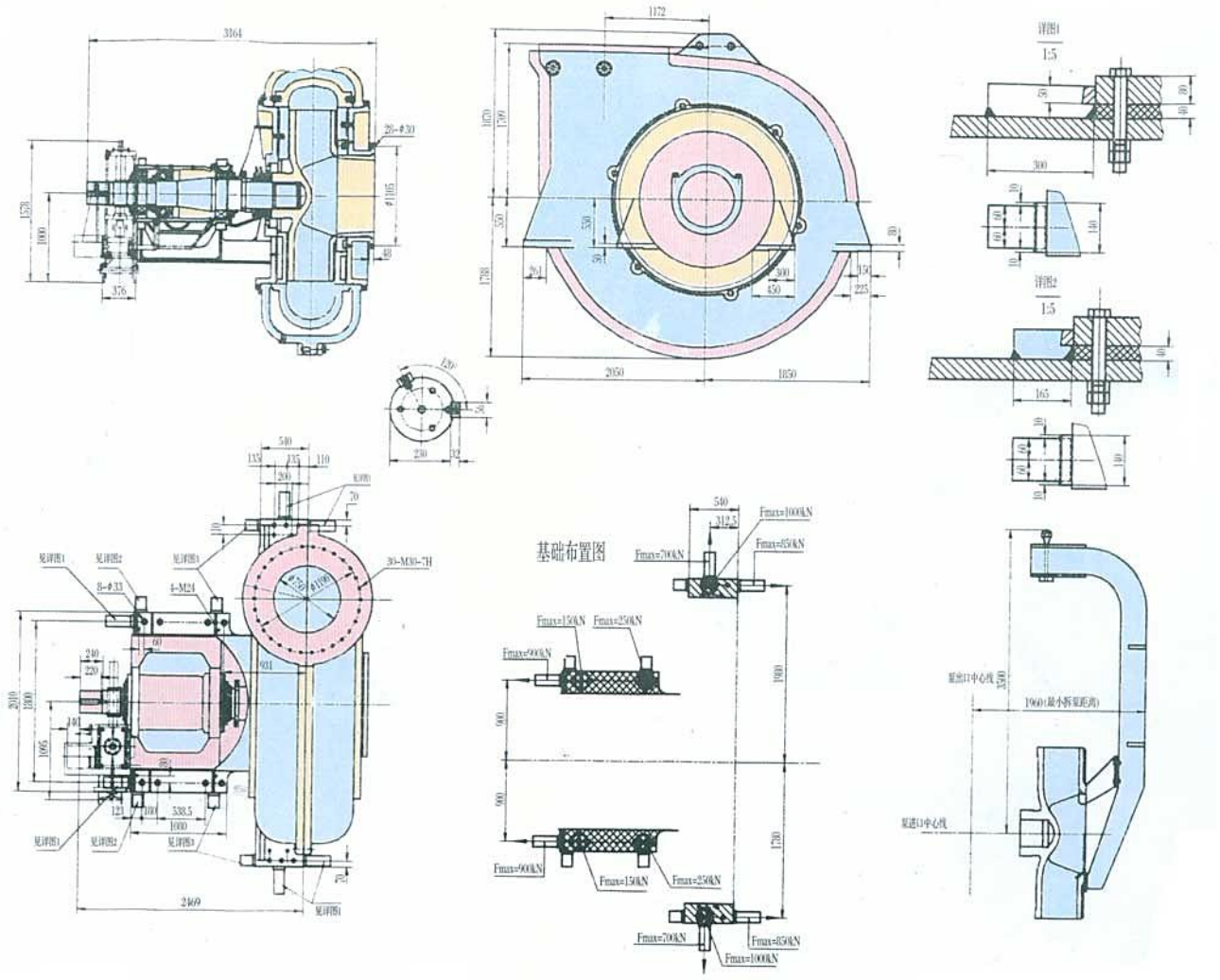
700WN DREDGE PUMP INSTALLATION DIMENSIONS

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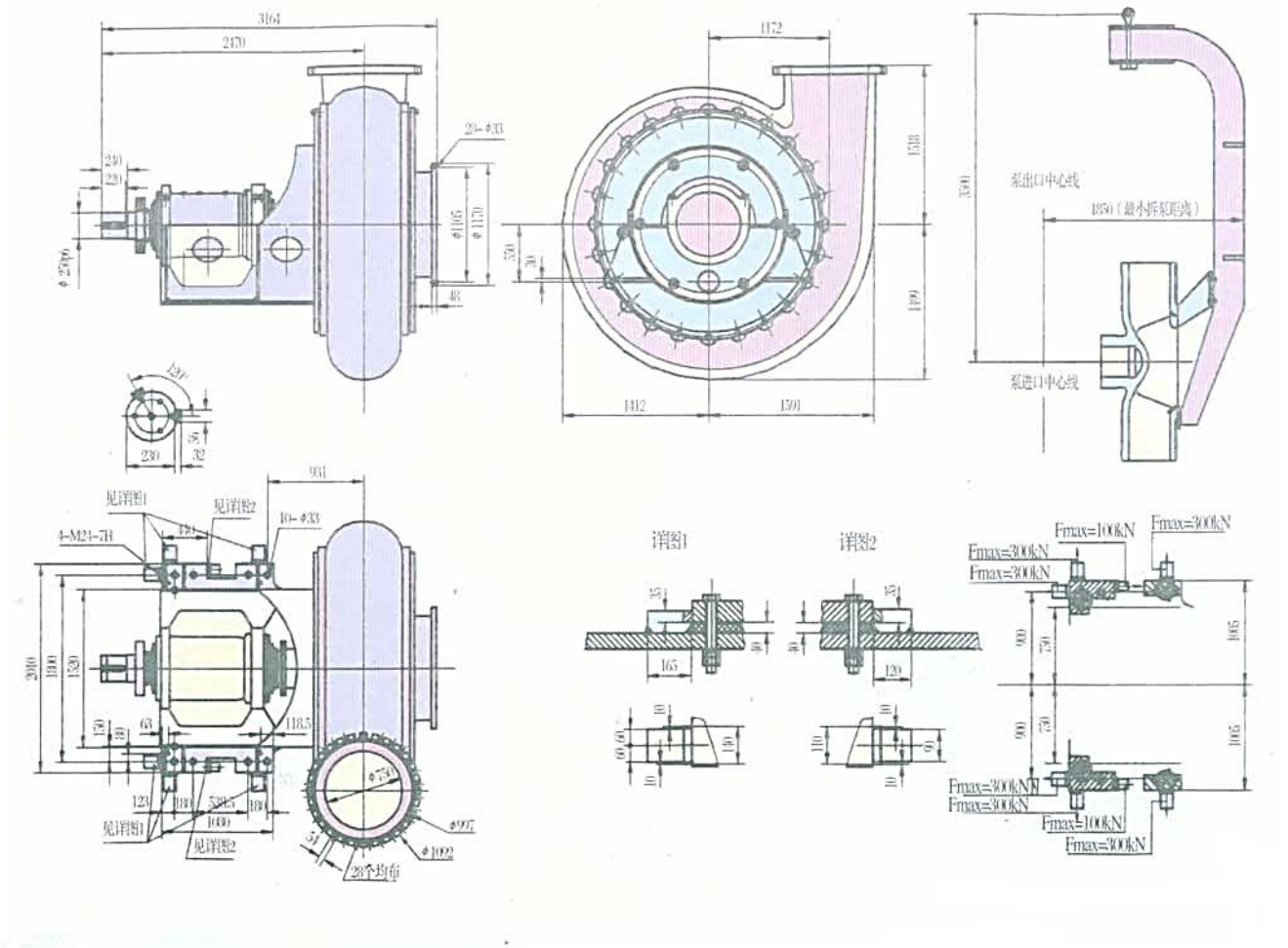
700WNQ DREDGE PUMP INSTALLATION DIMENSIONS

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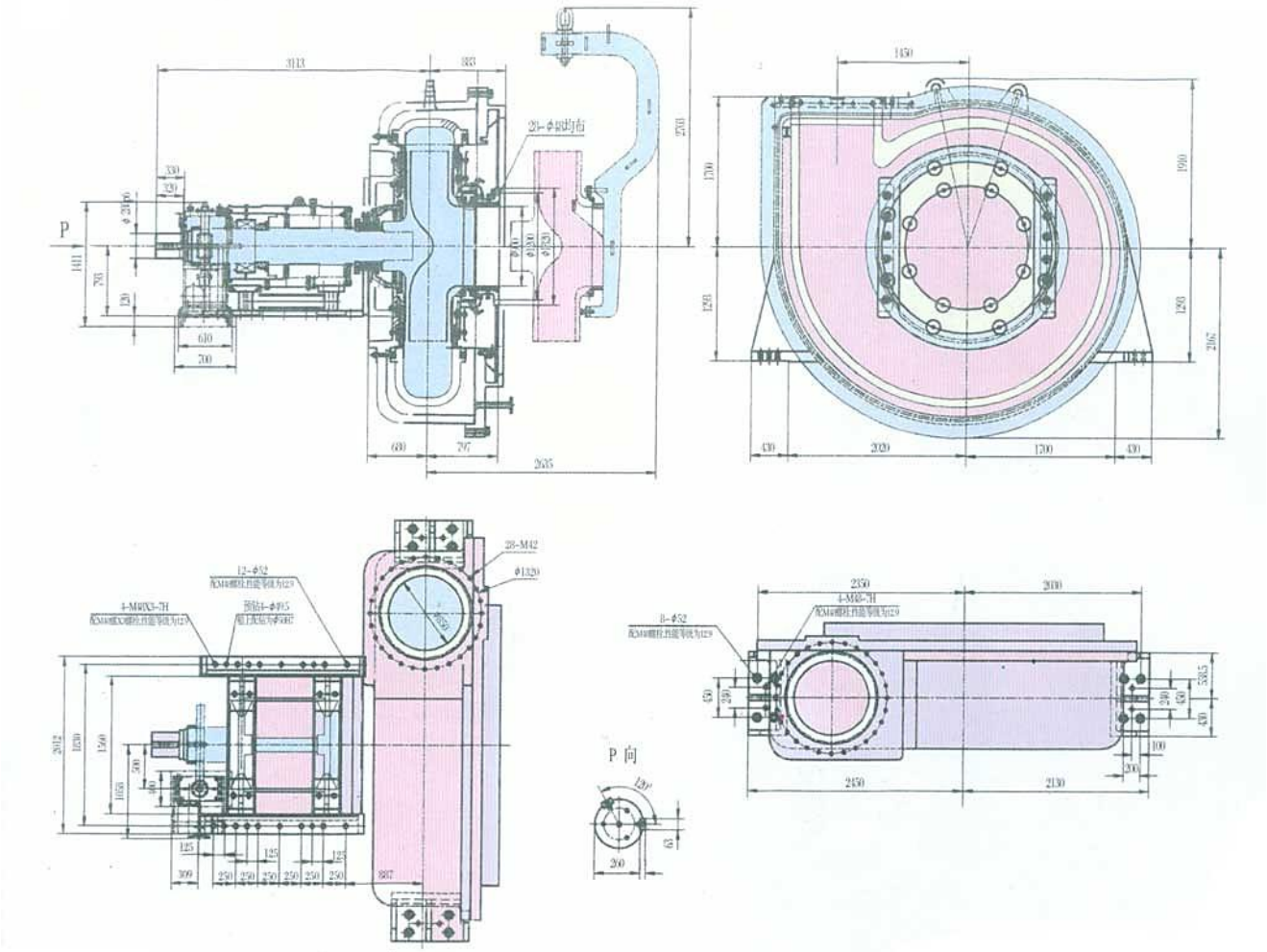
800WN DREDGE PUMP INSTALLATION DIMENSONS

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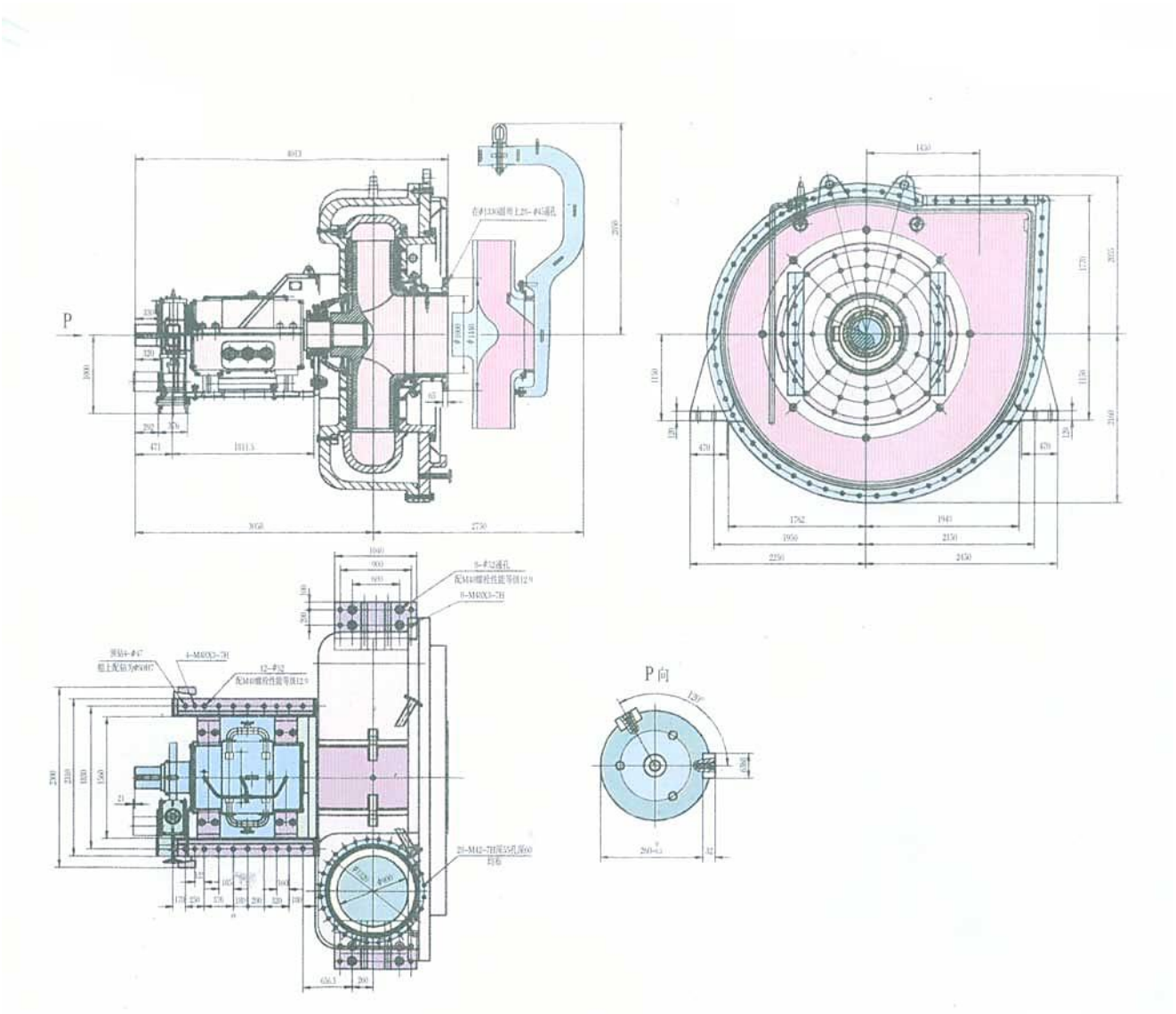
800WND DREDGE PUMP INSTALLATION DIMENSIONS

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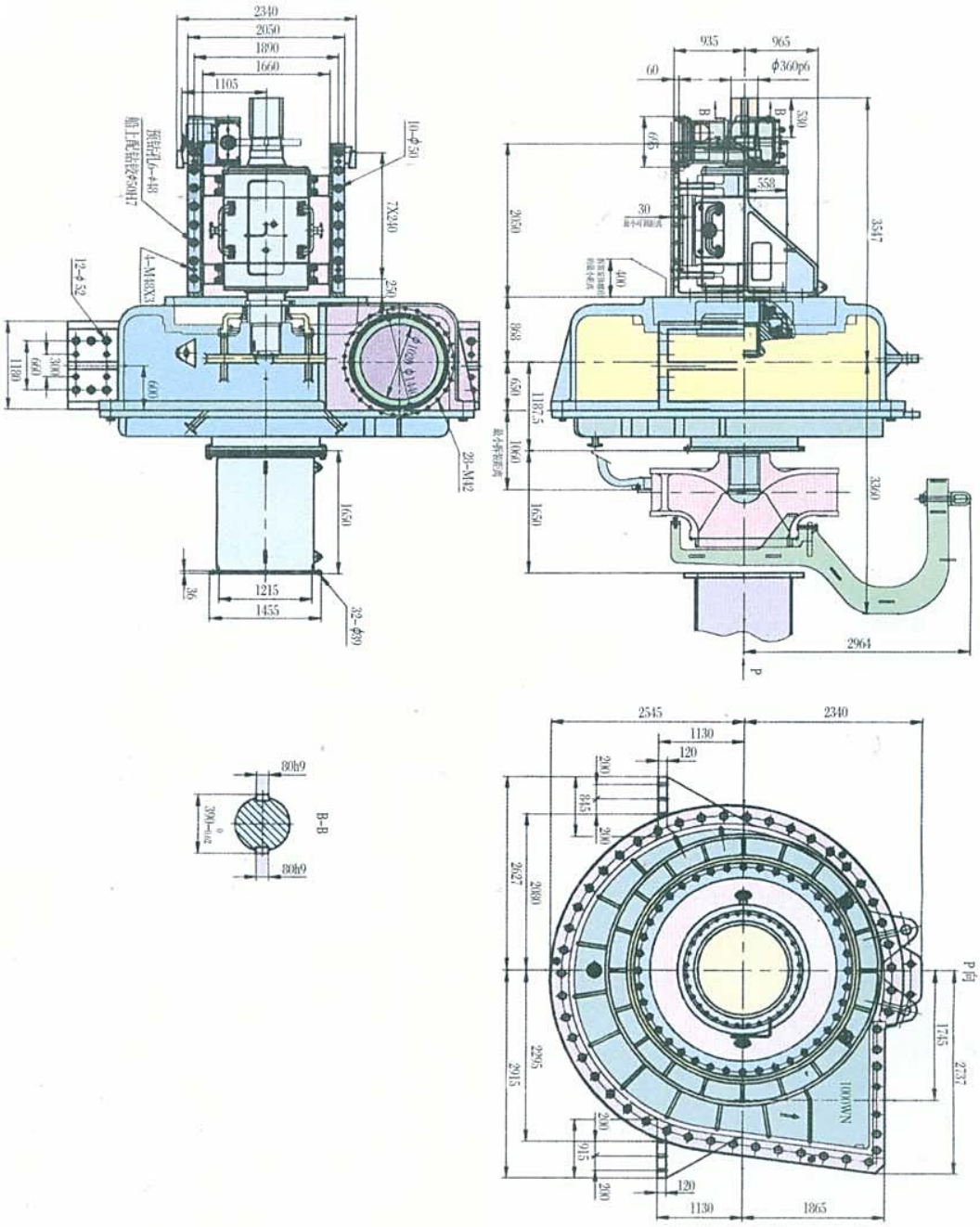
850WN DREDGE PUMP INSTALLATION DIMENSIONS

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900WN DREDGE PUMP INSTALLATION DIMENSIONS

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1000WN DREDGE PUMP INSTALLATION DIMENSIONS

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