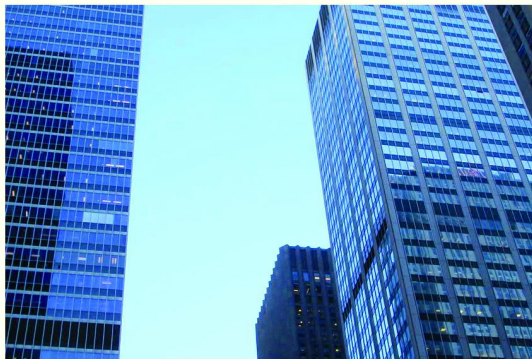




ATTENTION FOCAL



## ► 石家庄瑞特泵业有限公司

石家庄瑞特泵业有限公司是集渣浆泵研发、设计、生产、销售为一体的高新技术企业。本公司成立于2003年，拥有铸造、热处理、机械加工、装备完整独立的渣浆泵生产线，坚持诚信至上、以质取胜、追求卓越、勇于创新的企业理念，为客户提供优质的产品和满意的服务。

石家庄瑞特泵业有限公司位于石家庄高新技术开发区，建筑面积3万多平方米，注册资金5000万，主要为矿山、冶金、市政、电力、煤炭、疏浚、火电烟气脱硫、石油、化工、建材、造纸、制药等行业提供配套用泵。产品行销全国各省、市、自治区以外，还远销俄罗斯、南非、菲律宾、澳大利亚、印度等20多个国家和地区，专业的售前、售中、售后服务，优质的产品赢得了国内外客户的一致认可。

公司采用先进的计算机辅助设计软件进行产品和工艺设计，设计手段和设计水平达到国际先进水平。年产高铬合金铸件5000吨，整泵6000台。主营产品为AH(R)、M(R)、HH、L、G、SP(R)、F、ZGB、ZJ、YTZ、ZBD、DT、TL、LC等型渣浆泵。口径范围为25-1200mm，流量为5-30000m<sup>3</sup>/h，扬程为5-110m。公司产品的主要材质包括高铬耐磨白口铸铁、低碳高铬耐磨耐腐蚀合金、碳钢、不锈钢、双相不锈钢、球墨铸铁、灰铸铁等，还可提供模压天然橡胶、合成橡胶材质的零件和整机。

除上述已有产品外，我公司承接来图来样定制加工服务(OEM)，目前已与国外多家公司合作，为国际知名公司提供耐磨铸件。

瑞特泵业通过不断的技术创新为广大客户提供更加优质的产品，通过不断的管理创新为广大客户提供更加便捷的服务，最大限度满足客户的需求。

公司严格执行全面质量管理体系，并已通过ISO9001:2008GB/T19001-2008质量管理体系认证。

## ► SHIJIAZHUANG RUI TE PUMP CO., LTD.

Shijiazhuang Ruite Pump Co., Ltd. is a high and new technology enterprise which integrates the research and development, design, production and sales of the slurry pump. With the registered capital of 50 million, The company was founded in 2003, and has a complete production line of casting, heat treatment, mechanical processing and equipment. It sticks to the business philosophy of "honesty first, quality win, pursuit of excellence and innovation" to provide customers with quality products and satisfying services.

Shijiazhuang Ruite Pump Co., Ltd. is located in high tech Development Zone of Shijiazhuang and cover more than 30 thousand square meters. We mainly support the pumps for mining, metallurgy, municipal, electricity, coal, dredging, flue gas desulfurization of thermal power, petroleum, chemical industry, building materials, paper, pharmaceutical and other industries. The products is popular at home and abroad. Our foreign customers are from more than 20 countries and regions, including Russia, South Africa, Philippines, Australia, India, etc., The professional pre-sale, sale, after sale services and quality products have won the unanimous recognition from domestic and foreign customers.

With advanced computer aided design software for product and process design, our the design means and design level have reach the international advanced level. The annual production of high chromium alloy castings is 5000 tons, and the whole pump is 6000 sets. The main products are AH(R), M(R), HH, L, G, SP(R), F, ZGB, ZJ, etc. The diameter range is 25-1200mm, the flow is 5-30000m<sup>3</sup>/h, and the head is 5-110m. The main materials of our products include high chromium wear-resistant white cast iron, low carbon and high chromium wear resistant and corrosion resistant alloy, carbon steel, stainless steel, duplex stainless steel, ball grinding cast iron, gray iron and so on. We can also provide pumps and spare parts for natural rubber and synthetic rubber material.

In addition to the above products, our company undertakes the customized processing service (OEM), and has been working with many foreign companies, providing wear-resistant castings for internationally famous companies.

With continuous technological innovation and management innovation, Ruite is providing more and more quality products and services to meets the needs of customers.

The company strictly implements the overall quality management system, and has passed the ISO9001:2008GB/T19001-2008 quality management system certification.



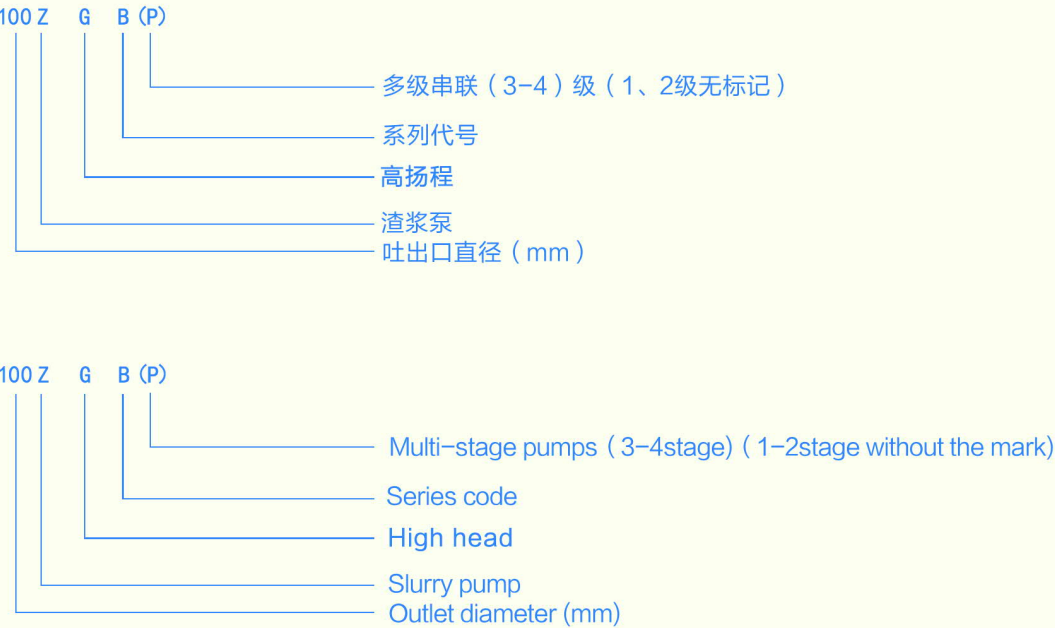


► 概述 Summary

ZGB（P）系列渣浆泵是我公司针对除灰、除渣等工况特点，在多年渣浆泵设计制造经验基础上，广泛吸收国内外先进技术和研制成果，开发设计的新产品。该系列产品具有结构合理、效率高、可靠性高、寿命长、维修方便，运行费用底等显著优点，广泛用于电力、矿山、煤炭、建材和化工等工业部门输送含有磨蚀或腐蚀性的渣浆，特别适用于电厂灰渣输送。

ZGB (P) series slurry pump is a new product developed by our company based on the design and manufacture experience of slurry pump for many years, aiming at the characteristics of ash handling and slag removal. This product has the advantages of reasonable structure, high efficiency, high reliability, long service life, convenient maintenance, operation cost base and other significant advantages, widely used in industrial departments of power, mining, coal, building materials and chemical transporting slurry containing abrasive or corrosive, especially suitable for power plant ash conveying.

► 型号意义 ModelMeaning



► 产品特点 Product features

ZGB(P)系列渣浆泵为卧式、单级、单吸、悬臂、双泵、离心式渣浆泵。该泵从驱动端看为顺时针旋转。  
相同口径的的ZGB和ZGBP型渣浆泵的过流部件可以互换，外型安装尺寸相同。ZGB(P)系列渣浆泵的传动部分采用水平中开式稀油润滑托架，并设有内外两组水冷却系统。

- 必要时可加冷却水。预留的冷却水接口、冷却水压力参考表1。  
ZGB(P)系列渣浆泵的轴封型式有两种：副叶轮加填料组合式密封和机械密封。  
凡串联渣浆泵（二级或二级以上）建议采用有高压轴封水的机械密封。单级或串联一级采用副叶轮加填料组合式密封。  
各种轴封型式的轴封水压、水量如下：  
1.轴封水压  
①对于单级（或串联一级）采用填料加副叶轮组合式密封，轴封水压力一般为0.2-0.3MPa。  
②对于多级串联采用填料加副叶轮组合式密封，二级和二级以上轴封水最低压力一般为：  
 $P_n = \sum_{i=1}^{n-1} H_i + 0.7H_n$  其中n ≥ 2；H<sub>i</sub>为第i级泵扬程；H<sub>n</sub>为第n级泵扬程。  
③对采用机械密封，各级泵的轴封水压力一般要求比泵出口压力大0.1MPa  
2.轴封水量（见表1）

ZGB (P) series of pumps are single-stage, single suction, suspension, white double pumps, centrifugal slurry pump. The pump is rotated clockwise from the drive end.

The over current components of the ZGB and ZGBP type slurry pumps of the same caliber can be interchangeable, and the size of the external installation is the same. The transmission part of the ZGB (P) series slag slurry pump adopts a horizontal medium open oil lubricating bracket, and there are two sets of water cooling systems inside and outside.

Cooling water can be added when necessary. The reserved cooling water interface and the cooling water pressure reference table 1.

There are two types of shaft seal of ZGB (P) series of slurry pump: auxiliary impeller plus packing combination seal and mechanical seal.

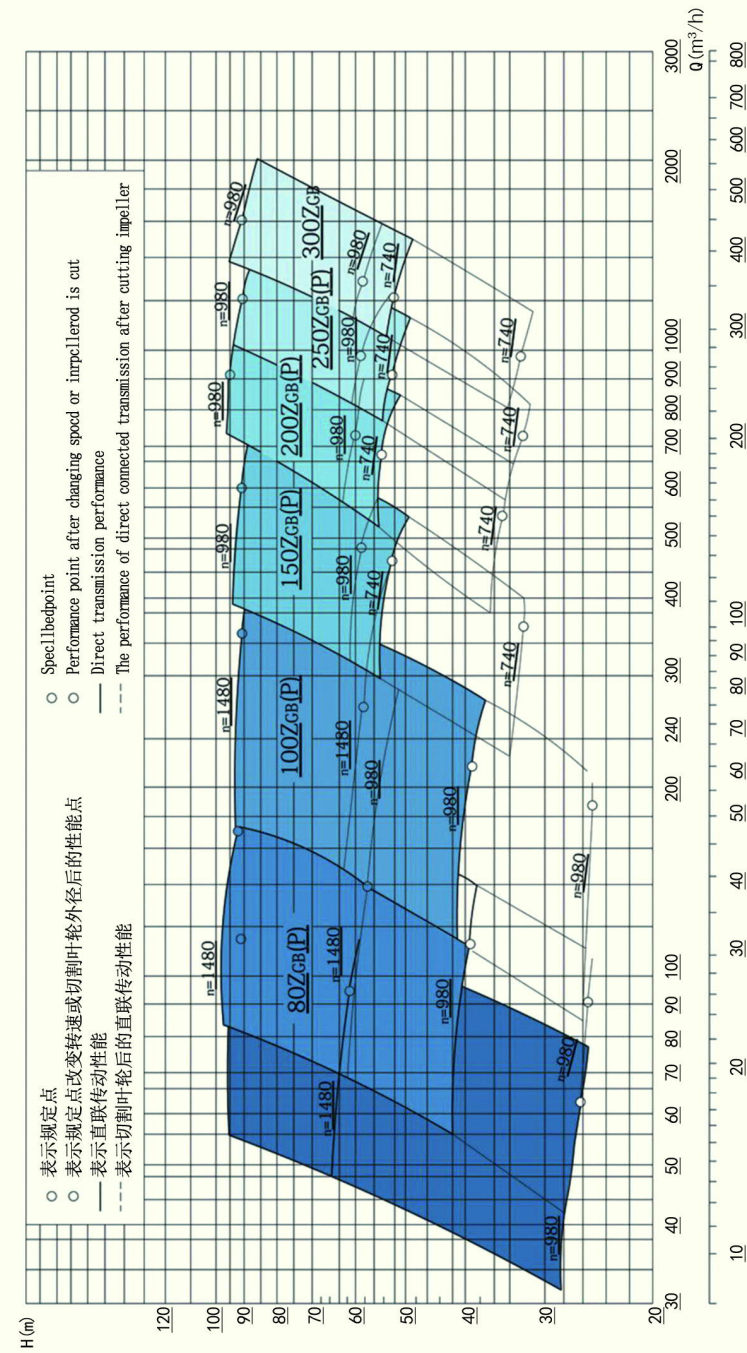
It is suggested that a mechanical seal with high pressure shaft seal water is recommended for the series slag slurry pump (grade two or above two). The combination type seal with the auxiliary impeller and the packing is adopted at the single stage or in series one. Various shaft seal types of shaft seal water pressure and water are as follows:

1. shaft seal water pressure  
(1) the water pressure of the shaft seal is generally 0.2-0.3MPa for the single stage (or in series 1) with the combination of the packing and the auxiliary impeller.  
(2) the minimum pressure of the two and above two grade seal water is the lowest pressure for the multistage series with the combination of the packing and the auxiliary impeller.  $P_n = \sum_{i=1}^{n-1} H_i + 0.7H_n$  is N ≥ 2; H<sub>i</sub> is class I pump head; H<sub>n</sub> is grade N pump lift. For the use of mechanical seal, the pressure of the shaft seal of the pump at all levels is generally higher than the pressure of the pump outlet 0.1MPa  
2. shaft seal water (see Table 1)

表1

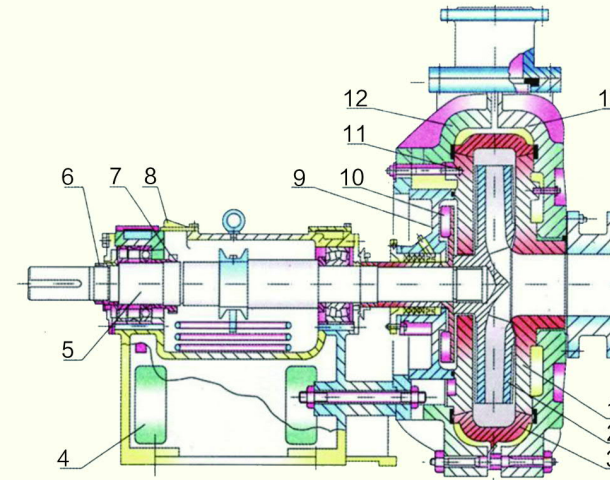
| 泵型号<br>Pump type | 托架<br>Frame | 轴封水量 (L/S)<br>Sealing water | 轴封水接口<br>Sealing water joint | 轴封水接口<br>Sealing water joint | 托架冷却水压口<br>Cooling water pressure |
|------------------|-------------|-----------------------------|------------------------------|------------------------------|-----------------------------------|
| 65ZGB            | 320         | 0.5                         | 1/4"                         | 1/2"、3/8"                    | 0.05-2.2MPa                       |
| 80ZGB<br>100ZGB  | 406         | 0.7                         | 1/2"                         | 3/4"、1/2"                    |                                   |
| 80ZGB<br>100ZGB  | 406A        |                             |                              |                              |                                   |
| 150ZGB<br>200ZGB | 565         | 1.2                         | 1/2"                         | 3/4"、3/4"                    |                                   |
| 150ZGB<br>200ZGB | 565A        |                             |                              |                              |                                   |
| 250ZGB<br>300ZGB | 743         |                             | 1"                           |                              |                                   |
| 250ZGB           | 743A        |                             |                              |                              |                                   |





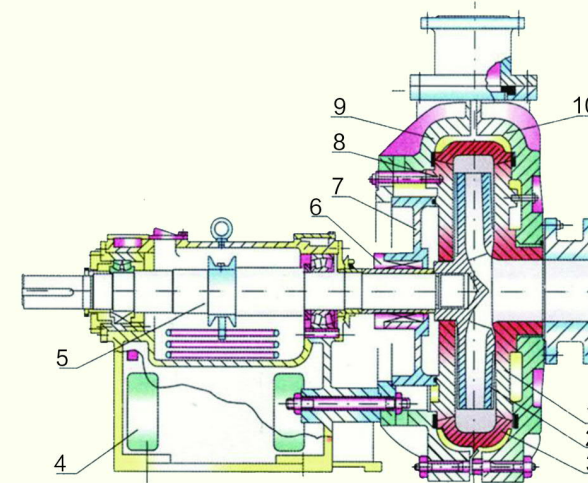
► 结构图 Structure diagram

ZGB系列渣浆泵  
ZGB series slag slurry pump



- |         |                             |
|---------|-----------------------------|
| 1.前护板   | 1.Cover plate liner insert  |
| 2.叶轮    | 2.Impeller                  |
| 3.护套    | 3.Volute liner              |
| 4.托架体   | 4.Base                      |
| 5.轴     | 5.Shaft                     |
| 6.螺母乙   | 6.Adjusting screw(b)        |
| 7.调整螺母甲 | 7.Adjusting screw(a)        |
| 8.调整孔盖  | 8.Adjusting cover           |
| 9.减压盖   | 9.Expeller ring             |
| 10.副叶轮  | 10.Expeller                 |
| 11.后护板  | 11.Frame plate liner insert |
| 12.泵体   | 12.Frame plate              |
| 13.泵盖   | 13.Cover plate              |

ZGBP系列渣浆泵  
ZGBP series slag slurry pump



- |        |                            |
|--------|----------------------------|
| 1.前护板  | 1.Cover plate liner insert |
| 2.叶轮   | 2.Impeller                 |
| 3.护套   | 3.Volute liner             |
| 4.托架体  | 4.Base                     |
| 5.轴    | 5.Shaft                    |
| 6.机械密封 | 6.Mechanical seal          |
| 7.密封箱  | 7.Sealing box              |
| 8.后护板  | 8.Frame plate liner insert |
| 9.泵体   | 9.Frame plate              |
| 10.泵盖  | 10.Cover plate             |





| 型号<br>Type | 吐出口径<br>Outlet | 转速n<br>Speed | 清水性能Clean water performance |              |             |            | 轴功率Pa         | 叶轮直径<br>Impeller<br>diameter |
|------------|----------------|--------------|-----------------------------|--------------|-------------|------------|---------------|------------------------------|
|            |                |              | 流量Q                         | 扬程H          | 效率 η        | 汽蚀余量(NPSH) | Shaft power   |                              |
|            | (mm)           | (r/min)      | (L/S)                       | (m)          | (%)         | (m)        | (kw)          | (mm)                         |
| 65ZGB      | 65             | 1480         | 15. 8-31. 7                 | 58-61. 0     | 48. 0-54. 0 | 3. 0-5. 5  | 19. 7-33. 4   | 390                          |
|            |                | 980          | 10. 5-21. 0                 | 25. 4-26. 7  | 48. 0-54. 0 | 3. 0-5. 5  | 5. 73-9. 69   |                              |
| 80ZGB (P)  | 80             | 1480         | 28. 3-56. 7                 | 87. 5-91. 6  | 45. 3-64. 2 | 2. 7-5. 2  | 56. 0-75. 7   | 490                          |
|            |                | 980          | 18. 8-37. 5                 | 38. 4-40. 2  | 45. 3-64. 2 | 2. 7-5. 2  | 16. 3-22. 0   |                              |
|            |                | 1480         | 25. 7-51. 5                 | 72. 2-75. 5  | 45. 3-64. 2 | 2. 7-5. 2  | 42. 0-56. 7   | 445                          |
|            |                | 980          | 17. 1-34. 1                 | 31. 7-33. 1  | 45. 3-64. 2 | 2. 7-5. 2  | 12. 2-16. 5   |                              |
|            |                | 1480         | 23. 1-46. 2                 | 58. 34-61. 0 | 5. 3-64. 2  | 2. 7-5. 2  | 30. 5-41. 1   | 400                          |
|            |                | 980          | 15. 3-30. 6                 | 25. 6-26. 7  | 45. 3-64. 2 | 2. 7-5. 2  | 8. 8-12. 0    |                              |
| 100ZGB (P) | 100            | 1480         | 58. 3-116. 7                | 85. 1-91. 8  | 57. 4-77. 9 | 2. 6-6. 0  | 91. 4-124. 9  | 490                          |
|            |                | 980          | 38. 6-77. 3                 | 37. 3-40. 3  | 57. 4-77. 9 | 2. 6-6. 0  | 26. 6-36. 6   |                              |
|            |                | 1480         | 52. 5-105. 0                | 68. 9-74. 4  | 57. 4-77. 9 | 2. 6-6. 0  | 66. 7-91. 0   | 445                          |
|            |                | 980          | 34. 8-69. 5                 | 30. 2-32. 6  | 57. 4-77. 9 | 2. 6-6. 0  | 19. 4-26. 4   |                              |
|            |                | 1480         | 46. 7-93. 4                 | 54. 5-58. 8  | 57. 4-77. 9 | 2. 6-6. 0  | 46. 9-64. 0   | 400                          |
|            |                | 980          | 30. 9-61. 8                 | 23. 9-25. 8  | 57. 4-77. 9 | 2. 6-6. 0  | 13. 6-18. 6   |                              |
| 150ZGB (P) | 150            | 980          | 100-200                     | 85. 2-90. 0  | 50. 5-73. 7 | 2. 7-3. 8  | 174. 4-226. 6 | 740                          |
|            |                | 740          | 75. 6-151. 2                | 48. 6-51. 3  | 50. 5-73. 7 | 2. 7-3. 8  | 75. 3-97. 7   |                              |
|            |                | 980          | 91. 2-182. 4                | 73. 0-77. 1  | 50. 5-73. 7 | 2. 7-3. 8  | 135. 6-177. 1 | 685                          |
|            |                | 740          | 70. 2-140. 0                | 41. 6-44. 0  | 50. 5-73. 7 | 2. 7-3. 8  | 59. 9-77. 7   |                              |
|            |                | 980          | 84. 6-169. 2                | 61. 8-65. 2  | 50. 5-73. 7 | 2. 7-3. 8  | 107-139       | 630                          |
|            |                | 740          | 64. 8-129. 6                | 35. 2-37. 2  | 50. 5-73. 7 | 2. 7-3. 8  | 46. 7-60. 7   |                              |
| 200ZGB (P) | 200            | 980          | 150-300                     | 89. 0-94. 2  | 63. 2-76. 3 | 2. 7-6. 7  | 219. 1-342. 9 | 740                          |
|            |                | 740          | 113. 3-226. 5               | 50. 7-53. 7  | 63. 2-76. 3 | 2. 7-6. 7  | 94. 3-147. 5  |                              |
|            |                | 980          | 141. 9-283. 8               | 79. 6-84. 3  | 63. 2-76. 3 | 2. 7-6. 7  | 185. 8-290. 2 | 700                          |
|            |                | 740          | 107. 1-214. 3               | 45. 4-48. 1  | 63. 2-76. 3 | 2. 7-6. 7  | 80. 0-125. 0  |                              |
|            |                | 980          | 129. 7-259. 5               | 66. 6-70. 5  | 63. 2-76. 3 | 2. 7-6. 7  | 141. 8-222. 0 | 640                          |
|            |                | 740          | 97. 9-195. 9                | 38. 0-40. 2  | 63. 2-76. 3 | 2. 7-6. 7  | 61. 0-95. 6   |                              |
| 250ZGB (P) | 250            | 980          | 200-400                     | 84. 0-90. 1  | 62. 1-76. 2 | 3. 7-7. 3  | 284. 4-432. 1 | 740                          |
|            |                | 740          | 151-302                     | 47. 9-51. 4  | 62. 1-76. 2 | 3. 3-7. 3  | 122. 5-186    |                              |
|            |                | 980          | 189. 2-378. 4               | 75. 2-80. 6  | 62. 1-76. 2 | 3. 7-7. 3  | 240. 7-366    | 700                          |
|            |                | 740          | 142. 9-285. 7               | 42. 9-46. 0  | 62. 1-76. 2 | 3. 3-7. 3  | 103. 6-157. 6 |                              |
|            |                | 980          | 131. 6-348. 6               | 63. 8-68. 5  | 62. 1-76. 2 | 3. 3-7. 3  | 142. 2-286. 0 | 945                          |
|            |                | 740          | 99. 4-263. 2                | 36. 4-39. 1  | 62. 1-76. 2 | 3. 3-7. 3  | 61. 3-123. 2  |                              |
| 300ZGB (P) | 300            | 980          | 266. 7-533. 3               | 84. 3-93. 4  | 65. 3-77. 7 | 3. 5-7. 3  | 373. 8-567. 0 | 760                          |
|            |                | 740          | 201. 3-402. 7               | 48. 1-53. 3  | 65. 3-77. 7 | 3. 5-6. 9  | 163. 7-244. 3 |                              |
|            |                | 980          | 246. 7-493. 3               | 72. 1-79. 9  | 65. 3-77. 7 | 3. 5-6. 9  | 295. 8-448. 6 | 703                          |
|            |                | 740          | 177. 9-372. 5               | 41. 1-45. 6  | 65. 3-77. 7 | 3. 5-6. 9  | 121. 7-193. 1 |                              |
|            |                | 980          | 266. 7-453. 3               | 60. 9-67. 5  | 65. 3-77. 7 | 3. 5-6. 9  | 299. 7-348. 2 | 646                          |
|            |                | 740          | 171. 2-342. 3               | 34. 7-38. 5  | 65. 3-77. 7 | 3. 5-6. 9  | 98. 8-149. 8  |                              |