

| SPECIFICATIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Model       | GSZ-75-4                      |      |             |             |             |             |             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |             | GSZ-4-series<br>75kW, 3-phase |      |             |             |             |             |             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| <p><b>Type of Pump</b><br/>Submersible high head and high volume drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p><b>Type of Fluid</b><br/>Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p><b>Discharge Bore &amp; Connection</b><br/>250mm, JIS 10kg/cm<sup>2</sup> Screwed Flange</p> <p><b>Motor Output</b><br/>75kW</p> <p><b>Power Supply</b><br/>Three-phase</p> <p><b>Starting Method</b><br/>Star-Delta</p> <p><b>Motor</b><br/>Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: E<br/>Degree of Protection: IP68</p> <p>No. of Poles &amp; Speed (Synchronous Speed)<br/>4-pole, 1500/1800min<sup>-1</sup> (50/60Hz)</p> <p>Power Supply Voltages &amp; Rated Currents</p> <table border="0"> <tr> <td>50Hz</td> <td>60Hz</td> </tr> <tr> <td>380V – 164A</td> <td>380V – 154A</td> </tr> <tr> <td>400V – 152A</td> <td>440V – 133A</td> </tr> <tr> <td>415V – 150A</td> <td></td> </tr> </table> <p><b>Power Cable</b><br/>Sheath: Chloroprene rubber<br/>Standard Length: 10m<br/>200 to 600V supply:<br/>1 x <math>\begin{pmatrix} 3 \times 30\text{mm}^2 \\ 1 \times 14\text{mm}^2 \\ 2 \times 2\text{mm}^2 \end{pmatrix}</math> O.D. 35.9mm<br/>1 x 3 x 30mm<sup>2</sup>, O.D. 35.9mm</p> <p><b>Dry Weight (excluding cable)</b><br/>1200kg</p> |             | 50Hz                          | 60Hz | 380V – 164A | 380V – 154A | 400V – 152A | 440V – 133A | 415V – 150A |  | <p><b>Impeller</b><br/>Closed impeller made of 304 cast stainless steel</p> <p>Solids Passage<br/>50Hz – <math>\phi</math>25mm<br/>60Hz – <math>\phi</math>25mm</p> <p><b>Cable Entry with Anti-Wicking Block</b><br/>Watertight cable entry with strain-relief device. The anti-wicking block prevents water incursion due to capillary action should the power cable be damaged or the end submerged.</p> <p><b>Bearing</b><br/>Upper: Permanently lubricated, deep-groove, double-shielded C3 ball bearing<br/>Lower: Duplex angular contact ball bearing mounted back-to-back</p> <p><b>Shaft</b><br/>420 stainless steel</p> <p><b>Shaft Seal (Mechanical Seal)</b><br/>Furnished with a double-face mechanical seal located in oil chamber. Both upper and lower seal faces always run in a clean environment.</p> <p>Upper Seal Face: SiC + SiC<br/>Lower Seal Face: SiC + SiC</p> <p><b>Pressure Relief Port</b><br/>Protects the mechanical seal from over rated limits, and also protects the seal faces from abrasive particles by drawing particles away.</p> <p><b>OIL LIFTER (Patented)</b><br/>Equipped in oil chamber. It forcibly supplies lubricating oil to the mechanical seal and continues to supply the oil to the upper seal faces even if lubricant falls below the rated volume.</p> <p>Type of Lubricating Oil &amp; Volume<br/>Turbine Oil (ISO VG32), 9400ml</p> <p><b>Motor Protection Device</b><br/>A miniature thermal protector is embedded in each winding of the motor. Should excessive heat builds up, the bimetal strip opens to cause the control panel to shut the power supply.</p> |  |
| 50Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 60Hz        |                               |      |             |             |             |             |             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| 380V – 164A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 380V – 154A |                               |      |             |             |             |             |             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| 400V – 152A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 440V – 133A |                               |      |             |             |             |             |             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| 415V – 150A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |             |                               |      |             |             |             |             |             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |

NO. A-22147-1

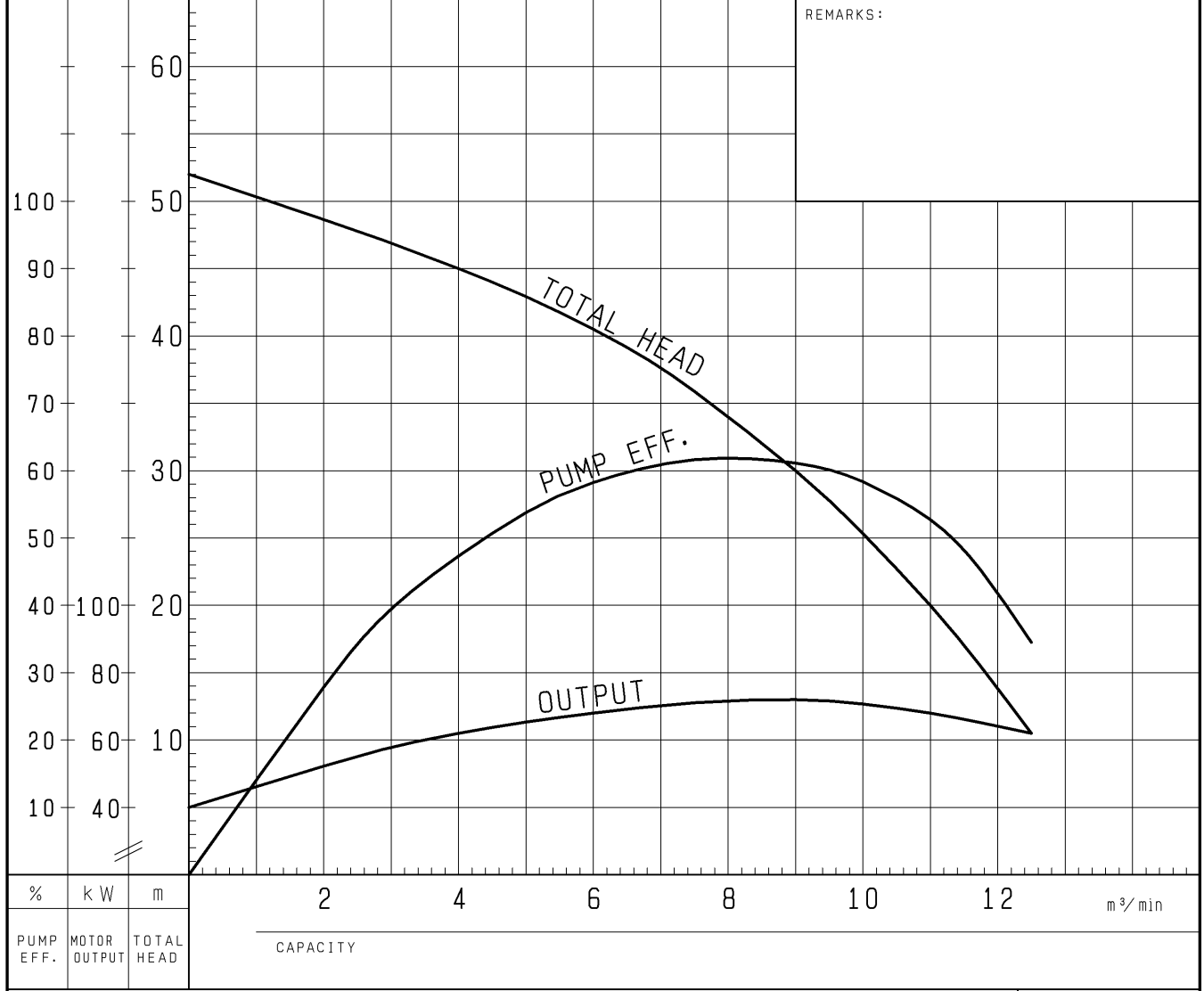
# PUMP PERFORMANCE CURVES

|                                               |                |                 |
|-----------------------------------------------|----------------|-----------------|
| TYPE Submersible<br>High-Head Dewatering Pump | MODEL GSZ-75-4 | FREQUENCY 50 Hz |
|-----------------------------------------------|----------------|-----------------|

CUSTOMER'S NAME \_\_\_\_\_

EQUIPMENT TITLE \_\_\_\_\_ NO. \_\_\_\_\_

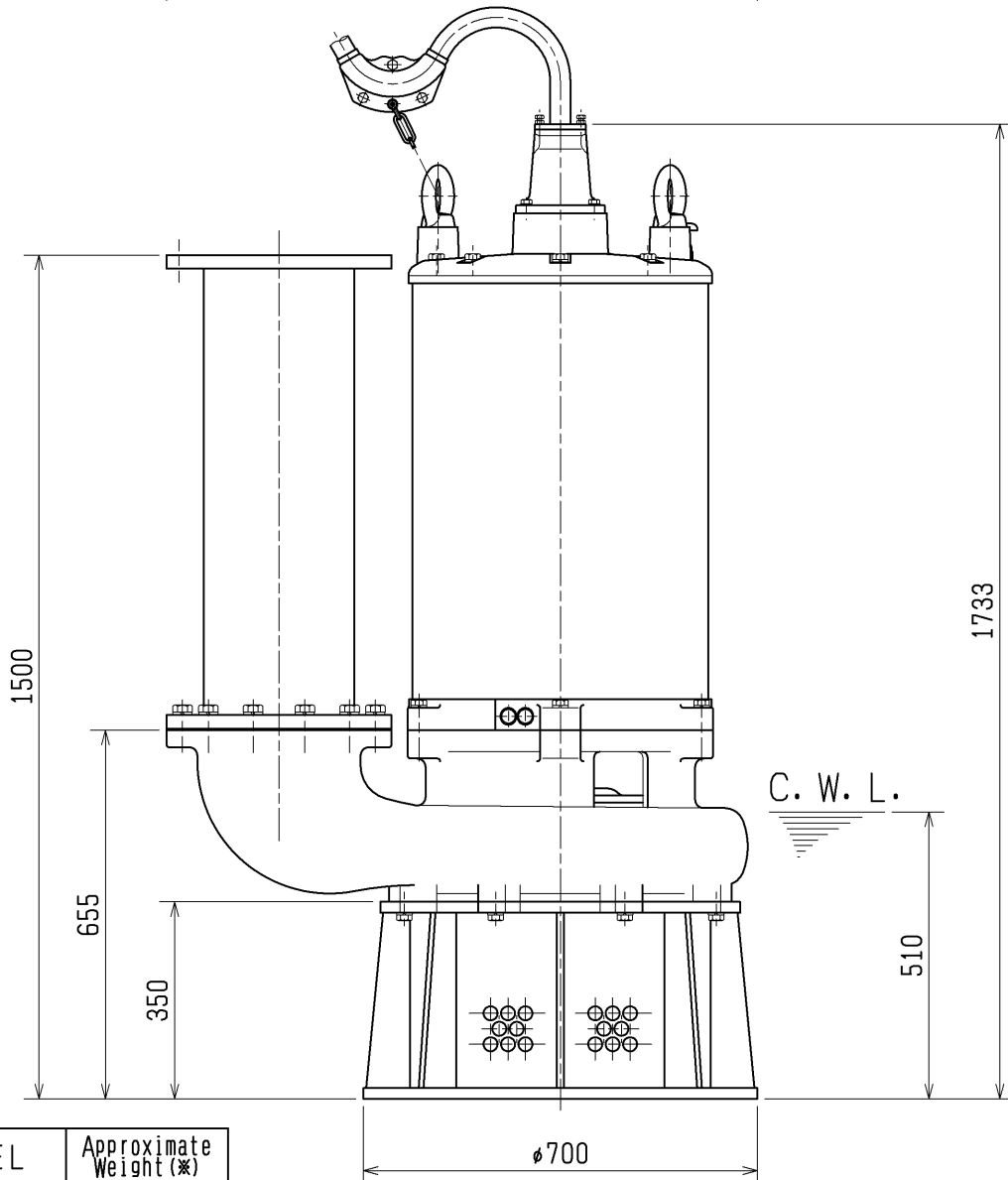
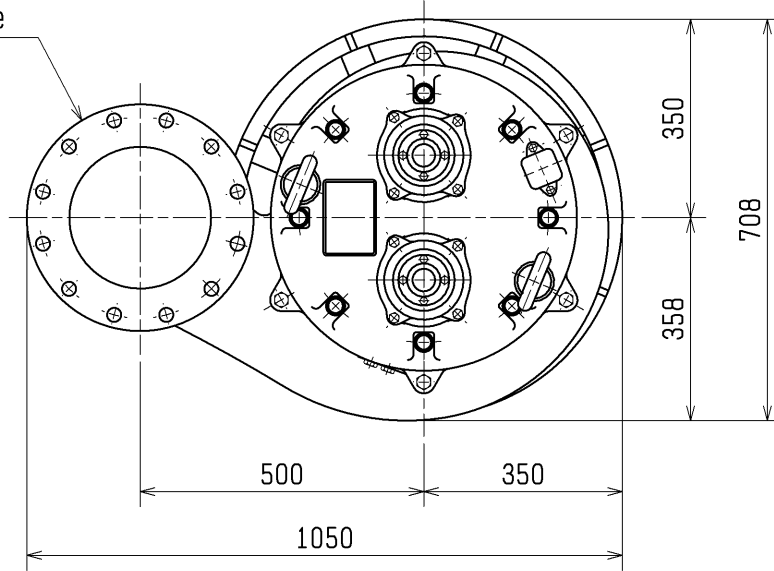
|                    | STANDARD SPECIFICATIONS            | REQUIRED SPECIFICATIONS |
|--------------------|------------------------------------|-------------------------|
| DISCHARGE BORE     | 250 mm                             | mm                      |
| TOTAL HEAD         | 40 m                               | m                       |
| CAPACITY           | 6 m <sup>3</sup> /min              | m <sup>3</sup> /min     |
| MOTOR OUTPUT       | 75 kW                              | kW                      |
| PHASE × VOLTAGE    | 3 φ × V                            | φ × V                   |
| CURRENT            | A                                  | A                       |
| POLES / REVOLUTION | 4 P / S. S. 1500 min <sup>-1</sup> | P / min <sup>-1</sup>   |
| STARTING METHOD    | STAR DELTA                         |                         |
| INSULATION CLASS   | E                                  |                         |



TSURUMI MFG. CO., LTD.

|                   |                                       |       |                    |
|-------------------|---------------------------------------|-------|--------------------|
| DIMENSION DRAWING |                                       | No.   | No. A-22149-1      |
| TYPE              | Submersible High-Head Dewatering Pump | MODEL | GSZ-55-4, GSZ-75-4 |

JIS10K Flange  
Nominal Dia.  
φ250

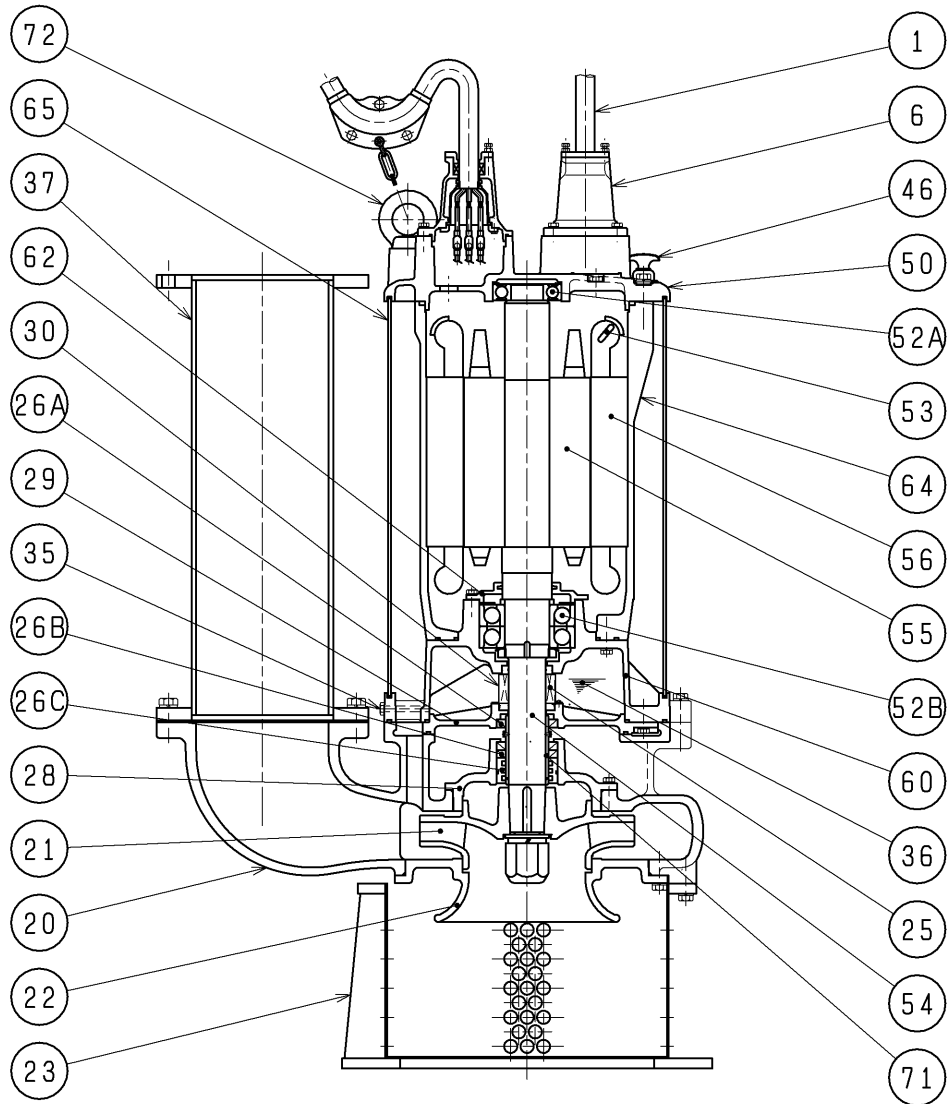


| MODEL    | Approximate Weight (※) |
|----------|------------------------|
| GSZ-55-4 | 1150kg                 |
| GSZ-75-4 | 1200kg                 |

※excluding cable

C. W. L. :Continuous running Water Level

|                          |                                       |       |                    |
|--------------------------|---------------------------------------|-------|--------------------|
| <b>SECTIONAL DRAWING</b> |                                       | No.   | No. A-22150-1      |
| TYPE                     | Submersible High-Head Dewatering Pump | MODEL | GSZ-55-4, GSZ-75-4 |



| REQ. SPECIFICATION |  |
|--------------------|--|
| -----              |  |
| -----              |  |

※55kW:Chromium Steel  
 75kW:Stainless Steel Casting

| No. | DESCRIPTION     | QTY | MATERIAL / NOTE                     | No. | DESCRIPTION       | QTY | MATERIAL / NOTE       |
|-----|-----------------|-----|-------------------------------------|-----|-------------------|-----|-----------------------|
| 1   | Cabtyre Cable   | 2   | Chloroprene Sheath                  | 46  | Air Release Valve | 1   | Steel Sheet           |
| 6   | Stuffing Box    | 2   | Gray Iron Casting                   | 50  | Motor Bracket     | 1   | Gray Iron Casting     |
| 20  | Pump Casing     | 1   | Gray Iron Casting                   | 52A | Upper Bearing     | 1   | 6312ZZC3              |
| 21  | Impeller        | 1   | ※                                   | 52B | Lower Bearing     | 1   | 7317ADB               |
| 22  | Suction Cover   | 1   | Gray Iron Casting                   | 53  | Motor Protector   | 3   |                       |
| 23  | Strainer        | 1   | Structure Sheet                     | 54  | Shaft             | 1   | Stainless Steel 420J2 |
| 25  | Mechanical Seal | 1   | H-70                                | 55  | Rotor             | 1   |                       |
| 26A | Oil Seal        | 1   | TC8011515                           | 56  | Stator            | 1   |                       |
| 26B | Oil Seal        | 2   | TC8011515                           | 60  | Bearing Housing   | 1   | Gray Iron Casting     |
| 26C | Labyrinth Ring  | 1   | Stainless Steel 403                 | 62  | Bearing Cover     | 1   | Gray Iron Casting     |
| 28  | Seal Housing    | 1   | Gray Iron Casting                   | 64  | Motor Frame       | 1   | Gray Iron Casting     |
| 29  | Oil Casing      | 1   | Gray Iron Casting                   | 65  | Outer Cover       | 1   | Structure Sheet       |
| 30  | Oil Lifter      | 1   | Steel Sheet                         | 71  | Shaft Sleeve      | 1   | Stainless Steel 403   |
| 35  | Oil Plug        | 2   | Stainless Steel 304                 | 72  | Eyebolt           | 2   | Structure Steel       |
| 36  | Lubricant       |     | Turbine Oil (ISO VG32)              |     |                   |     |                       |
| 37  | Discharge Pipe  | 1   | Carbon Steel Pipe & Structure Steel |     |                   |     |                       |