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1、Company Introduction

Tangshan Guanneng Machine Equipment Co., Ltd. is located in NO. 166 North Rd, West Outer Ring Road, Lubei District, Tangshan, Hebei P.R, China, covers more than 20 acres. There are 116 existing employees, 36 managers, including 9 senior Engineers and engineers, 2 Dr. and 25 employees with university or higher degree. Our company is a professional and modern manufacturer for solid control equipments with research, production and sales. Our products are drill fluid Shale Shaker, Vacuum Degasser, Hydrocyclone, Desander and Desilter Assembly, Gas-liquid Separator, Agitator, Sand Pump, Shear Pump, Centrifuge, Electronic Ignition Device, Mixed-hopper, Jet Mixer Device, Mud Tank, series solid control equipment and the drilling fluid circulation system for oil drilling, the products are widely used in petroleum oil and gas exploration industry, no-dig engineering, geotechnical engineering, mine, metallurgy, coal, hydropower and many other industries.

At present, the company has introduced advanced ERP management system and numerical control equipment of machinery industry. We control the process strictly from signing orders, production preparation, procurement plans, inventory management, production, quality inspection, to product out of the warehouse. We save the human resources and materials, increase productivity, improve product quality, and ultimately to maximize cost savings, at last our productivity is
improved substantially, sales of upgrades is promoted, and optimization of resources is realized.

We have established strategic cooperative partnership with many universities and national research institutions. We have formed a modernized and high-tech enterprise, developing very quickly is based on design, manufacturing, sales and services. The company has excellent management system, advanced equipments, advanced management concepts and a high-quality service team. So we have passed the ISO9001 international management system certification. Our company has engaged in Tangshan Quality Technology Surveillance to inspect solid control equipments for quality and performance testing which are produced by the company, then was identified as "Qualified products in quality." We strictly follow the ISO9001 quality specification to plan from materials to products out of the factory, the whole process is provided reliable quality assurance. Then the satisfied products can be supplied timely according to the customer requirements.

Now the high-quality products designed and manufactured by our company has broken into the international market, we have established a cooperative relationship with Schlumberger Oilfield Company of the United States and Century Int'l Oilfield Equip. LLC of the United Arab Emirates, and so on. At present, we increased plenty of investment in manufacture space and equipment, our effective production capacity of the drilling fluid circulation system is more than 120 sets.

“Committed to the solid-control equipment and the circulation system manufacturer Pioneer of China, Benefits the country, the people and ourselves own responsibility "is our managing principle. We base on
the market of China and break into the market of international. Our company will base on the continued management and the deep technical background as usual to provide professional separation and filtration equipments, promote the development of the drilling fluid circulation system and the horizontal directional drilling fluid recovery system. We will always keep the marketing strategy. Our products have been used in large-scale national projects —— West-East Gas Pipeline and exported to Venezuela, Indonesia, Russia, the United Arab Emirates and Morocco and many other countries they are rich in oil and gas resources. According to the survey, customers have responded well and been satisfied with their use.

Management concepts: Produce the first-class products for customer. Provide customers with satisfactory service. Create the value for customers.

Welcome to our company to visit and discuss the project at home and abroad. We would like to work together with you and service sincerely.
2、Products Introduction

2.1、Shale Shaker

ZS series Shale Shaker is the first class solid-control equipment which is the latest development in our company to treat the drilling mud. The equipments is similar to draw domestic and foreign experience in product design and advanced technology. It is installed the imported vibration motor power and is currently the most advanced shaker in our country. Our company can manufacture the double or triple units according to customer demand and provide the corresponding connection pipe. At the same time the product also can be used as Underflow Screen of Desander and Desilter Assembly. The products have many advantages, which are high vibrating strength, wide screen size, screen angle adjustment, compact, highperformance, cost-effective.
### Main Technical Parameters:

<table>
<thead>
<tr>
<th>Model</th>
<th>ZS83×108-3</th>
<th>ZS70×105-3/4</th>
<th>ZS63×125-3/4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vibrating mode</td>
<td>linear</td>
<td>linear</td>
<td>linear</td>
</tr>
<tr>
<td>Motor power</td>
<td>2×1.72kW</td>
<td>2×1.5kW/2×1.94kW</td>
<td>2×1.5kW/2×1.94kW</td>
</tr>
<tr>
<td>Vibrating strength</td>
<td>≤7.4G</td>
<td>≤7.4G</td>
<td>≤7.4G</td>
</tr>
<tr>
<td>Amplitude</td>
<td>2.5~3.5mm</td>
<td>2.5~3.5mm</td>
<td>2.5~3.5mm</td>
</tr>
<tr>
<td>Single-screen capacity</td>
<td>35 l/s</td>
<td>30 l/s/40 l/s</td>
<td>30 l/s/45 l/s</td>
</tr>
<tr>
<td>Frequency</td>
<td></td>
<td>380V/50Hz,460V/60Hz</td>
<td></td>
</tr>
<tr>
<td>Voltage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screen area</td>
<td>2.7 m²</td>
<td>2.2 m²/2.94 m²</td>
<td>2.4 m²/3.15 m²</td>
</tr>
<tr>
<td>Specifications</td>
<td>830×1080</td>
<td>700×1050</td>
<td>630×1250</td>
</tr>
<tr>
<td></td>
<td>(40-250mesh)</td>
<td>(40-250mesh)</td>
<td>(40-250mesh)</td>
</tr>
<tr>
<td>Single weight</td>
<td>1980kg</td>
<td>1800kg/2100kg</td>
<td>1860kg/2200kg</td>
</tr>
</tbody>
</table>

Remarks: Single-screen capacity is 40l/s when the proportion of mud is 1.2g/cm³ and the viscosity is 45s⁻¹.

**2.2、Degasser**
ZCQ series Vacuum Degasser is a special-purpose device and a new type one for the treatment of gas-cut drilling fluid. It can get rid of the various gas of invasive drilling quickly. It is very important for returning mud gravity, stabilizing mud viscosity and reducing drilling cost. Also, at the same time it can be used as a heavy-power agitator and supported applicable to all types of mud circulation purification system. The type of equipments belong to vaccum degasser, design of the structure is scientific and rational. So we are able to achieve an effective gas-liquid separation, filter out impurities and to ensure that the exhaust pipe has always been smooth.

Main Technical Parameters:

<table>
<thead>
<tr>
<th>Model</th>
<th>ZCQ240</th>
<th>ZCQ270</th>
<th>ZCQ300</th>
<th>ZCQ360</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main diameter</td>
<td>700mm</td>
<td>800mm</td>
<td>900mm</td>
<td>1000mm</td>
</tr>
<tr>
<td>Capacity</td>
<td>≤240 m³/h</td>
<td>≤270 m³/h</td>
<td>≤300 m³/h</td>
<td>≤360 m³/h</td>
</tr>
</tbody>
</table>
### 2.3、Desander and Desilter Assembly

ZQJ250×2/100×10 Desander and Desilter Assembly is the second class and the third class solid control equipment which is the newest type to treat the drilling fluid. Groups of Desander, Desilter and an Underflow Screen are combined together in one, at the same time it has the higher cleaning function with desander and desilter. In addition to the reasonable design process, it equals another shale shaker. Its structure is compact, it occupy the small space and the function is powerful. It is the ideal device of the second class and the third class solid control to treat the drilling fluid.
Main Technical Parameters:

<table>
<thead>
<tr>
<th></th>
<th>desander</th>
<th>desilter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyclone diameter</td>
<td>10” (250mm)</td>
<td>4” (100mm)</td>
</tr>
<tr>
<td>Cyclone number</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>Capacity</td>
<td>≤240 m³/h</td>
<td>≤240 m³/h</td>
</tr>
<tr>
<td>Pressure</td>
<td>0.21~0.4Mpa</td>
<td>0.25~0.4Mpa</td>
</tr>
<tr>
<td>Separation size</td>
<td>≥47μm</td>
<td>≥15μm</td>
</tr>
<tr>
<td>Inlet pipe</td>
<td>Φ150</td>
<td>Φ150</td>
</tr>
<tr>
<td>Output pipe</td>
<td>Φ200</td>
<td>Φ200</td>
</tr>
<tr>
<td>Matching pump</td>
<td>SB8×6-13 (55kW)</td>
<td>SB8×6-13 (55kW)</td>
</tr>
<tr>
<td>Screen model</td>
<td>GNS830-3 (≥200/20 目)</td>
<td></td>
</tr>
<tr>
<td>Screen motor</td>
<td>2×1.72kW</td>
<td></td>
</tr>
<tr>
<td>Screen size</td>
<td>2.67 m³</td>
<td></td>
</tr>
<tr>
<td>Dimension</td>
<td>3200×1800×2200mm</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>3000kg</td>
<td></td>
</tr>
</tbody>
</table>

2.4、Cyclone Separator

ZQJ series Cyclone Separator is the second class and the third class solid control equipment to treat the drilling fluid. According to the size of
the cyclone diameter, it is divided into Desander and Desilter. Usually the cyclone the diameter is more than 6" is called Desander, and used as the second-control equipment in drilling operation. We commonly used 10 "and 12" cyclone to separate solid-phase particle size 47-76μm in the drilling fluid. Usually the cyclone the diameter is less than 6" is called Desilter, and used as the third-control equipment in drilling operation. We commonly used 5 "and 4" cyclone to separate solid-phase particle size 15-47μm in the drilling fluid. Based on customer requirements and capacity, we can select groups of cyclone into Desander.
**Main Technical Parameters:**

<table>
<thead>
<tr>
<th></th>
<th>ZQJ250×2/1.8×0.6 desander</th>
<th>ZQJ100×10/1.8×0.6 desilter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyclone diameter</td>
<td>10”（250mm）</td>
<td>4”（100mm）</td>
</tr>
<tr>
<td>Cyclone number</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>Capacity</td>
<td>≤240 m³/h</td>
<td>≤240 m³/h</td>
</tr>
<tr>
<td>Pressure</td>
<td>0.21～0.4Mpa</td>
<td>0.25～0.4Mpa</td>
</tr>
<tr>
<td>Separation size</td>
<td>≥47μm</td>
<td>≥15μm</td>
</tr>
<tr>
<td>matching pump</td>
<td>SB8×6-13(55kW)</td>
<td>SB8×6-13(55kW)</td>
</tr>
<tr>
<td>Screen area</td>
<td>1800×600mm</td>
<td>1800×600mm</td>
</tr>
<tr>
<td>Screen meshes</td>
<td>200/20mesh</td>
<td>250/20mesh</td>
</tr>
<tr>
<td>Screen motor power</td>
<td>0.8kW</td>
<td>0.8kW</td>
</tr>
<tr>
<td>Dimension</td>
<td>1465×1160×1950mm</td>
<td>1465×1160×1750mm</td>
</tr>
<tr>
<td>Weight</td>
<td>1200kg</td>
<td>1100kg</td>
</tr>
</tbody>
</table>

2.5. **Centrifuge**

LWF series of Decanting Centrifuge separate the suspending liquid using the principle of centrifugal action, the suspending liquid is pushed into the rotor drum through the inlet pipe and the fluid hole of the spiral feeder. Under the influence of centrifugal force, solid phase particles are pushed to the internal wall of the drum, then to the nud export of the small end of the drum and excreted. But the liquid is excreted from the overflow hole of the large end. Such cycle is in order to achieve the purpose of continuous separation.
Main Technical Parameters:

<table>
<thead>
<tr>
<th>Model</th>
<th>LWF450×842N</th>
<th>LWF450×1000N</th>
<th>LWF600×945N</th>
<th>LWF600×1000N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drum diameter</td>
<td>450mm</td>
<td>450mm</td>
<td>600mm</td>
<td>600mm</td>
</tr>
<tr>
<td>Extruder</td>
<td>1.8: 1</td>
<td>2.1: 1</td>
<td>1.5: 1</td>
<td>1.6: 1</td>
</tr>
<tr>
<td>Rotary speed</td>
<td>1800/r/min</td>
<td>1800-2500/r/min</td>
<td>1500/r/min</td>
<td>1500-1800/r/min</td>
</tr>
<tr>
<td>Separation factor</td>
<td>815</td>
<td>815-1570</td>
<td>760</td>
<td>760-815</td>
</tr>
<tr>
<td>Separation point</td>
<td>5〜7μm</td>
<td>2〜5μm</td>
<td>5〜7μm</td>
<td>2〜5μm</td>
</tr>
<tr>
<td>Main power</td>
<td>22kW-4p</td>
<td>30kW-4p</td>
<td>45kW-4p</td>
<td>45kW-4p</td>
</tr>
<tr>
<td>Assistant power</td>
<td>5.5kW-4p</td>
<td>7.5kW-4p</td>
<td>7.5kW-4p</td>
<td>7.5kW-4p</td>
</tr>
<tr>
<td>Max capacity</td>
<td>≤40 m³/h</td>
<td>≤60 m³/h</td>
<td>≤60 m³/h</td>
<td>≤80 m³/h</td>
</tr>
</tbody>
</table>

2.6、Jet Mixing Device

SLH series Jet Mixing Device is special equipment matched with the solid control system for petroleum drilling. It is important to configure and increase the drilling fluid, change the fluid density,
change the fluid density, viscosity, and dehydration. The effect is more prominent matching with Shear Pump. The unit includes one sand pump, one jet mixing funnel and one jet mixer that are installed in a base with pipe valves. It is safe and stable and can be moved conveniently. At the same time, we can make Twin-Jet Mud Mixer according to the user requirements.

### Main Technical Parameters:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>SLH150-50</td>
</tr>
<tr>
<td>Matching pump</td>
<td>SB8×6-13</td>
</tr>
<tr>
<td>Capacity</td>
<td>240m³/h</td>
</tr>
<tr>
<td>Pressure</td>
<td>0.25~0.4MPa</td>
</tr>
<tr>
<td>Inlet</td>
<td>150mm</td>
</tr>
<tr>
<td>Nozzle caliber</td>
<td>50mm</td>
</tr>
<tr>
<td>Burden speed</td>
<td>≤100kg/min</td>
</tr>
<tr>
<td>Density</td>
<td>≤2.8g/cm³</td>
</tr>
<tr>
<td>Viscosity</td>
<td>≤120s</td>
</tr>
<tr>
<td>Dimension</td>
<td>2500×1750×1150mm</td>
</tr>
<tr>
<td>Weight</td>
<td>2150kg</td>
</tr>
</tbody>
</table>
2.7. Sand Pump

SB series Sand Pump is the ideal equipment to provide impetus for Desander、Desilter and Jet Mixing Device. It can also be used as Charge Pump auxiliary perfusion for mud pump and Trip Pump for drilling well head. We considered completely the set equipment can work in excellent condition in the process of designing parameters. Most parts can be exchanged, with convenient operation and maintenance、less seal leakage、reliability、long life and other advantages.

Main Technical Parameters:

<table>
<thead>
<tr>
<th>Model</th>
<th>Flow</th>
<th>Lift</th>
<th>Power</th>
<th>Speed</th>
<th>Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB8×6-14</td>
<td>320 m³/h</td>
<td>40m</td>
<td>75kW</td>
<td>1480/r/min</td>
<td>65%</td>
</tr>
<tr>
<td>SB8×6-13</td>
<td>290 m³/h</td>
<td>35m</td>
<td>55kW</td>
<td>1480/r/min</td>
<td>64%</td>
</tr>
<tr>
<td>SB8×6-12</td>
<td>270 m³/h</td>
<td>28m</td>
<td>45kW</td>
<td>1470/r/min</td>
<td>64%</td>
</tr>
<tr>
<td>SB6×5-14</td>
<td>200 m³/h</td>
<td>40m</td>
<td>55kW</td>
<td>1480/r/min</td>
<td>62%</td>
</tr>
<tr>
<td>SB6×5-13</td>
<td>180 m³/h</td>
<td>35m</td>
<td>45kW</td>
<td>1470/r/min</td>
<td>60%</td>
</tr>
<tr>
<td>SB6×5-12</td>
<td>200 m³/h</td>
<td>30m</td>
<td>37kW</td>
<td>1460/r/min</td>
<td>62%</td>
</tr>
<tr>
<td>SB5×4-14</td>
<td>120 m³/h</td>
<td>40m</td>
<td>37kW</td>
<td>1460/r/min</td>
<td>56%</td>
</tr>
</tbody>
</table>
2.8、Shear Pump

JQB series Shear Pump is new tape equipment which provides the fast configuration and treatment mud for the user, the user satisfy with configuration high performance mud. This series Shear Pump can mix effectively and hydrate completely the material added in the drilling fluid, save the mud material, reduce the time of configuration, and provide the high performance mud for the well drilling.
<table>
<thead>
<tr>
<th>Model</th>
<th>Flow (m³/h)</th>
<th>Lift (m)</th>
<th>Power (kW)</th>
<th>Dimensions (mm)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JQB4330</td>
<td>60</td>
<td>20</td>
<td>15</td>
<td>800×800×750</td>
<td>350</td>
</tr>
<tr>
<td>JQB4325</td>
<td>40</td>
<td>25</td>
<td>11</td>
<td>860×800×750</td>
<td>320</td>
</tr>
<tr>
<td>JQB3228</td>
<td>20</td>
<td>28</td>
<td>7.5</td>
<td>860×800×790</td>
<td>280</td>
</tr>
</tbody>
</table>

2.9. Under-fluid recremental slurry pump

Type YZS Under-fluid recremental slurry pump is structured of upright single stage and single sucking with cantilever centrifugal pump. And pump impeller is of semi-unshrouded impeller with stirring vane equipped at the extended location of impeller vane. The main characteristics of the pump are that the pump shaft under water has enough rigidity, with bearing not equipped between impeller and pump body. And with bearing encapsulation not adopted, it can convey medium containing solid particle with bigger concentration. It isn’t maintained and can bear the higher temperature. The length for the pump to insert under water is between 800mm and 1900mm, with suction pipe to be equipped if necessary. The drive will be finished by the vertical type motor installed on the motor pedestal, connecting with the pump through coupling. And looking from the motor, the pump is rotating clockwise.
Main Technical Parameters:

<table>
<thead>
<tr>
<th>Model</th>
<th>Flow m³/h</th>
<th>Lift L/S</th>
<th>Speed (r/min)</th>
<th>Efficiency (%)</th>
<th>Match motor (KW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50YZS25-12</td>
<td>25</td>
<td>6.9</td>
<td>12</td>
<td>1430</td>
<td>39.5</td>
</tr>
<tr>
<td>50YZS36-50</td>
<td>36</td>
<td>10</td>
<td>50</td>
<td>1470</td>
<td>34</td>
</tr>
<tr>
<td>80YZ40-10</td>
<td>24</td>
<td>6.7</td>
<td>11</td>
<td>960</td>
<td>39</td>
</tr>
<tr>
<td>80YZ50-10</td>
<td>30</td>
<td>8.3</td>
<td>16</td>
<td>970</td>
<td>24</td>
</tr>
<tr>
<td>100YZ100-30</td>
<td>60</td>
<td>16.7</td>
<td>36</td>
<td>1470</td>
<td>41</td>
</tr>
<tr>
<td>100YZ120-60</td>
<td>72</td>
<td>20</td>
<td>61</td>
<td>1480</td>
<td>38</td>
</tr>
<tr>
<td>150YZ280-20</td>
<td>168</td>
<td>46.7</td>
<td>21</td>
<td>980</td>
<td>47</td>
</tr>
</tbody>
</table>

2.10 Agitator

JBQ series Agitator, Less than 5.5 kW Agitator adopts the blender cycloid speed reducer, applied to the drug liquid mixing tank. It is compact structure of advantages and it occupies small area. More than 7.5
kW Agitator uses the turbo and worm gear speed reducer, with the large torque transmission, the revolution steady, the work reliable and so on the merit. Common the model of agitator is JBQ5.5kW, JBQ7.5kW, JBQ11kW and JBQ15kW.

### Main Technical Parameters:

<table>
<thead>
<tr>
<th>Model</th>
<th>JBQ5.5</th>
<th>JBQ7.5</th>
<th>JBQ11</th>
<th>JBQ15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor power</td>
<td>5.5kW</td>
<td>7.5kW</td>
<td>11kW</td>
<td>15kW</td>
</tr>
<tr>
<td>Impeller speed</td>
<td>72/r/min</td>
<td>72/r/min</td>
<td>73/r/min</td>
<td>73/r/min</td>
</tr>
<tr>
<td>Impeller diameter(single)</td>
<td>600mm</td>
<td>850mm</td>
<td>950mm</td>
<td>1050mm</td>
</tr>
<tr>
<td>Impeller diameter(double)</td>
<td>(up) 750mm (down) 650mm</td>
<td>(up) 850mm (down) 700mm</td>
<td>(up) 950mm (down) 750mm</td>
<td></td>
</tr>
<tr>
<td>Ratio</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Dimension</td>
<td>960×520×600mm</td>
<td>1050×600×600mm</td>
<td>1200×650×675mm</td>
<td>1290×710×685mm</td>
</tr>
<tr>
<td>Weight</td>
<td>360kg</td>
<td>450kg</td>
<td>600kg</td>
<td>750kg</td>
</tr>
</tbody>
</table>

### 2.11 Gas-liquid Separator

ZYQ series Gas-liquid separator is professional equipment to treat the gas
invade mud. When the drilling mud result gas invade, the proportion of its weight and viscosity have a greater deviation not to meet the requirements of drilling. The serious situation is that would cause Chung well, and even blowout accident occurred, if not to treat it timely. ZYQ series Gas-liquid Separator combined with the Ignition Device can be used to ensure the drilling process smooth. It is devided into the normal pressure gas-liquid separator and pressure auto-control gas-liquid separator according to the pressure.

**Main Technical Parameters:**

<table>
<thead>
<tr>
<th>Model</th>
<th>ZYQ800</th>
<th>ZYQ1000</th>
<th>ZYQ1200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main body</td>
<td>φ800mm</td>
<td>φ1000mm</td>
<td>φ1200mm</td>
</tr>
<tr>
<td>Capacity</td>
<td>180~220m³/h</td>
<td>200~280m³/h</td>
<td>220~300m³/h</td>
</tr>
<tr>
<td>Inlet pipe</td>
<td>5”</td>
<td>5”</td>
<td>5”</td>
</tr>
<tr>
<td>Output pipe</td>
<td>6”</td>
<td>8”</td>
<td>10”</td>
</tr>
<tr>
<td>Gas discharge pipe</td>
<td>8”</td>
<td>8”</td>
<td>8”</td>
</tr>
<tr>
<td>Weight</td>
<td>1600kg</td>
<td>2000kg</td>
<td>2500kg</td>
</tr>
<tr>
<td>Dimension</td>
<td>1900×1900×5700</td>
<td>2000×2000×5860</td>
<td>2200×2200×66</td>
</tr>
</tbody>
</table>
2.12 Electric Ignition Device

Electric Ignition Device of blown down fuel gas designed and manufactured by our company is a kind of handling arrangement used in blown down natural gas, the tail gas from collecting and distributing station of natural gas and from refinery. And being a kind of security and environmental protection equipment, the equipment may be used to have the blown down harmful gas ignited and burned to prevent the environment and security from being endangered. The equipment, apart from being used in the refinery and gas distribution station, may be matched with Gas-liquid separator of drilling liquid. And now, as a matured product it has been extensively used in petroleum drilling engineering.
Main Technical Parameters:

<table>
<thead>
<tr>
<th>Model</th>
<th>GPD-Y-15/2.5</th>
<th>YPD-20/3</th>
</tr>
</thead>
<tbody>
<tr>
<td>nameplate diameter of burner (torch)</td>
<td>DN150mm</td>
<td>DN200mm</td>
</tr>
<tr>
<td>burner height</td>
<td>2.5m</td>
<td>3m</td>
</tr>
<tr>
<td>Ignition voltage of electric igniter GDH-2</td>
<td>17KV</td>
<td>16KV</td>
</tr>
<tr>
<td>Ignition frequency of electric igniter GDH-2</td>
<td>100~1000t/m</td>
<td>100~1000t/m</td>
</tr>
</tbody>
</table>

2.13 Mud Gun

DN50 Mud Gun is designed for solid control system of ZJ Drilling Rig. It is one kind of special tool which mainly uses in the drilling mud in the circulatory system and prevents the mud precipitates. The structure of equipment is simple, flexible Operation and easy using. It is the ideal equipment to guard against the precipite in solid control system.

Main Technical Parameters:
### 2.14 Mud Tank

Type FG and ZG Mud Tank designed and manufactured by our company is divided into Square tank and Cone-shaped tank according to the shape of tank bottom. The body of the tank is made of welding the steel plate and section, using the flat cone-shape structure or the corrugated structure. The tank surface and the passage are made of the slipping resistant steel plate and linearity netted steel plate which is produced by the professional factory, they are made of the side steel pipe, all of the structure can be folded without barrier and pegged reliably. The surface of tank is equipped with water pipeline for cleaning the surface and equipment on the tank, we use soaked zinc processing for the netted steel plate. The ladder is made of the channel steel to take responsibility the body, the footboard is made of the linearity netted steel plate. The two-sided guard rail are installed the safe suspension hook. The mud tank

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Parameters</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Model</td>
<td>NJQ50-2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Diameter</td>
<td>2&quot; (φ50)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Valve</td>
<td>DN50, 6.4 MPa</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Interface size</td>
<td>3&quot;</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Pressure</td>
<td>≤4.0 MPa</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Nozzle number</td>
<td>2/4</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Rotation angle</td>
<td>120° (With manual rotation)</td>
<td></td>
</tr>
</tbody>
</table>
is designed the standard shanty to prevent the sand and the rain. The pipeline is installed in the tank to preserve the warm air heat.

2.15、Drilling Fluid Circulation System or Horizontal Directional Drilling Mud Recovery System

Our company can design and produce drilling fluid circulation purification system for different drilling rigs and horizontal directional drilling rigs according to customer requirements and work environment, and provide regular maintenance, system reform, installation and other related services, we would like to save drilling costs and improve customer economic benefits as more as possible.
3、Picture of Parts

3.1、Batterfly Valve
3.2 Bearing

3.3 Cyclone
3.4、Grand Packing

3.5、Screen