

Oil Field Bearing

Oil Field Bearing Applications:

A **drilling rig** is a machine that creates holes in the earth subsurface. Drilling rigs can be massive structures housing equipment used to drill water wells, oil wells, or natural gas extraction wells, or they can be small enough to be moved manually by one person and such are called augers. Drilling rigs can sample subsurface mineral deposits, test rock, soil and groundwater physical properties, and also can be used to install sub-surface fabrications, such as underground utilities, instrumentation, tunnels or wells. Drilling rigs can be mobile equipment mounted on trucks, tracks or trailers, or more permanent land or marine-based structures (such as oil platforms, commonly called 'offshore oil rigs' even if they don't contain a drilling rig). The term "rig" therefore generally refers to the complex equipment that is used to penetrate the surface of the Earth's crust.

Small to medium-sized drilling rigs are mobile, such as those used in mineral exploration drilling, blast-hole, water wells and environmental investigations. Larger rigs are capable of drilling through thousands of metres of the Earth's crust, using large "mud pumps" to circulate drilling mud (slurry) through the drill bit and up the casing annulus, for cooling and removing the "cuttings" while a well is drilled. Hoists in the rig can lift hundreds of tons of pipe. Other equipment can force acid or sand into reservoirs to facilitate extraction of the oil or natural gas; and in remote locations there can be permanent living accommodation and catering for crews (which may be more than a hundred). Marine rigs may operate thousands of miles distant from the supply base with infrequent crew rotation or cycle.

A **mud pump** (sometimes referred to as a mud drilling pump or drilling mud pump), is a reciprocating piston/plunger pump designed to circulate drilling fluid under high pressure (up to 7,500 psi (52,000 kPa)) down the drill string and back up the annulus. A mud pump is an important part of the equipment used for oil well drilling.

Mud pumps come in a variety of sizes and configurations but for the typical petroleum drilling

rig, the triplex (three piston/plunger) mud pump is the pump of choice. Duplex mud pumps (two piston/plungers) have generally been replaced by the triplex pump, but are still common in developing countries. Two later developments are the hex pump with six vertical pistons/plungers, and various quintuplex's with five horizontal piston/plungers. The advantages that these new pumps have over convention triplex pumps is a lower mud noise which assists with better Measurement while drilling (MWD) and Logging while drilling (LWD) decoding.

The construction department should have a special maintenance worker that is responsible for the maintenance and repair of the machine. mud pumps and other mechanical equipment should be inspected and maintained on a scheduled and timely basis to find and address problems ahead of time, in order to avoid unscheduled shutdown. The worker should attend to the size of the sediment particles; when finding large particles, the mud pump wearing parts should frequently be checked for repairing needs or replacement. The wearing parts for mud pumps include pump casing, bearings, impeller, piston, liner, etc. Advanced antiwear measures should be adopted to increase the service life of the wearing parts, which can reduce the investment cost of the project, and improve production efficiency. At the same time, wearing parts and other mud pump parts should be repaired rather than replaced when possible.

An **oil platform**, offshore platform, or offshore drilling is a mechanical process where a wellbore is drilled below the seabed using a large structure with facilities for well drilling to explore, extract, store, process petroleum and natural gas which lies in rock formations beneath the seabed. In many cases, the platform contains facilities to house the workforce as well.

Oil Field Bearing List:

Mud Pump Type	Bearing No.
8-P-80	24036 CA/C3W33
	HM256849/HM256810/C9
	NFP 6/596.9/C9
	NNAL 6/174.625/C9W33YA
9-P-100	24040/C3W33
	3506/333.375/C9
	NFP 6/647.7/P69
	NNAL 6/180.975/P69W33XYA
10-P-130	23144 CA/P63W33
	3506/368.249/P69
	NFP 38/666.75X3/P69
	NNAL 6/187.325/P69W33YA
12-P-160	24052 CA/C3W33
	3506/381/C9
	NFP 6/723.795/C9
	NNAL 6/209.55/C9W33X
14-P-220	23156/P63W33
	3506/409.575/P69
	NUP 6/812.8/P69
	NNAL 6/228.6/P69W33X
F-500	NU 3228X2/C9
	23138 CA/C3W33
	NUP 464779/C9YA
	NNAL 6/101.6/C5W33XYA
F-800	NU 3036X2/C4
	23148/C3W33
	NUP 464775/C9YA
	NNAL 6/177.8/C5W33XYA
F-1000	NU 3040X3/C4
	24056 CA/C3W33
	NUP 464744/C9
	NNAL 6/177.8/C5W33XYA
F-1300	NU 3044X3/C4
	24060 CA/C3W33
	NUP 464776/C9YA
	NNAL 6/206.375/W33XYA

	NU 3044X3/C4
	23160/C3W33
	NUP 464777/C9YA
F-1600	NNAL 6/206.375/W33XYA
Rotary Table Type	Bearing No.
ZP175	QJF 6/506.43 HC
	22322 CA/W33 C3
ZP205	5692/650X1
	5691/600
	22326 CA/W33 C3
	22232 C/W33 C3
ZP275	5692/800
	5611/800
	22330 CA/W33 C3
	NU 2332 EM
ZP375	2327/1049
	NU 2330 EM
	22330 CA/W33 C3
Frac Pump Type	Type (Max Brake Power)
Triplex Plunger Plump	600
	1000
	2000
	2250
	2500
Quintaplex Plunger Pump	1000
	2500
	2800
	4000
Frac Pump Bearing	Bearing no.
	744-742
	K-LM739749-710
	850-832
	NU 6-292.1
	NUP6-292.1
	NJ 6-203.2
	NJ 6/203.2 M/C9W33
	NFP 6/292.1 M/C9-1W33
	NU 6/292.1 M/C9-1W33
	306/196.85-2
	23936 C/P63W33
	NNU 6/25.4-2LSV

