

- Drilling bits:
Journal bearing bits
- Down hole drilling equipment:
Fishing tools, Drill collars, Handling tools, etc.
- Down hole production equipment:
Packers, Hydraulically activated connectors, etc.
- Blow-out preventors

7. SUMMARY OF ONGC'S EQUIPMENT NEEDS DURING 1990-95

(All figures in millions of Canadian dollars)

| Equipment Category | Value |
|--|-------|
| Oil field services and production equipment required for oilfield operations inclusive of workover rigs, drill pipes, blow-out preventors etc. | 3285 |
| Drilling equipment | 1429 |
| Oilfield chemicals | 377 |
| Exploration requirements including digital seismic units, open hole logging units, CDP seismic cables | 106 |
| | 5277 |

Major items in each of the above categories for which foreign know-how is required in the form of technology inputs or imports are:

Details of Production Equipment

(All figures in millions of Canadian dollars)

| Sr. No. | Description | Planned Quantity | Planned Value |
|---------|---|------------------|---------------|
| 1. | Well Platform Pumps: | | |
| | Salt Water Pumps | 75 | 15.0 |
| | Crude Injection Pumps | 60 | 0.6 |
| | Sump Caissons | 60 | 0.6 |
| 2. | Production Testing & Utility Gas Systems: | | |
| | Test Separators | 60 | 12.0 |
| | Inlet Manifold Skids | 16 | 8.5 |
| | Instrument & Utility Gas Systems | 60 | 3.0 |
| | Ball Valves | 20000 | 4.8 |
| | Shutdown valves | 400 | 3.0 |
| | Self Actuated Pressure Control Valves | 600 | 2.1 |

Continued....