Application Overview
Automatically grease bearing on the caster.

Why Automatic Lubrication?
The environment is too harsh to manually lubricate and the bearing requires constant greasing to purge ingress of contaminants.

Advantages
- Lubrication system greases every point while the caster is running
- The automatic lubrication system frees up maintenance personnel to focus on other issues in the mill
- Grease flow from the pump all the way to the DD50 valve can be monitored
- Cost effective system
- Lower costs for repair parts
- Local distribution and support
- High level of reliability
- All system components from one source

BDI Products
- DC42 Pump Station
- DD Valve

Please contact factory for additional information on this or any other application.
Products Utilized for Caster in Steel Mills

**DC42 Pump Station**

- **Description:** Three Phase 230/460 VAC (50/60 Hz), 200 lb steel reservoir, Motor, with a low & high level switch, DR45 reversing valve with grease strainers

DC42 stations can supply either oil or grease to such installations as bar mills, billet mills, blast furnaces, and sintering machines. On DC42 systems, pressure is controlled by the reversing valve (DR45). The valve opens a micro switch, which stops the pump motor when system pressure rises to its setting. Timer controls for each type tailored to meet its specific requirements are available.

**DD Valve**

- **Description:** DD50 Valve without connectors, with micro switches, 8-12 lubrication points

DD Valves are completely hydraulic in operation and will deliver either oil or grease. These Dualine valves are also fully and individually adjustable in regard to discharge quantity and are equipped with operational indicators. Each DD Valve serves two bearings; however, by a simple method of cross-porting, it will serve one. Therefore, a four valve block, as an example, can actually serve anywhere between four and eight bearings. DD Valves can be supplied in several basic discharge capacities and are available in blocks consisting of one, two, three or four valves.

**Typical System Layout**

Due to the harsh environment and the importance of grease monitoring the BDI distributor provided a value added service by assembling the DD50 Valves in a NEMA 4 enclosure with grease strainers and micro switches installed and wired to a terminal strip inside the enclosure. This allows the mill to minimize time and labor to wire the switches to the mills PLC thereby expediting the installation process. In this system there are over 100 lubrication points.

**Background**

The mills old lubrication system had no means to monitor grease flow to the bearing point. The cycle switches mounted on each Dualine valve assures the user that grease has made it 100’s of feet from the pump to the Dualine valves located near the bearings.

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