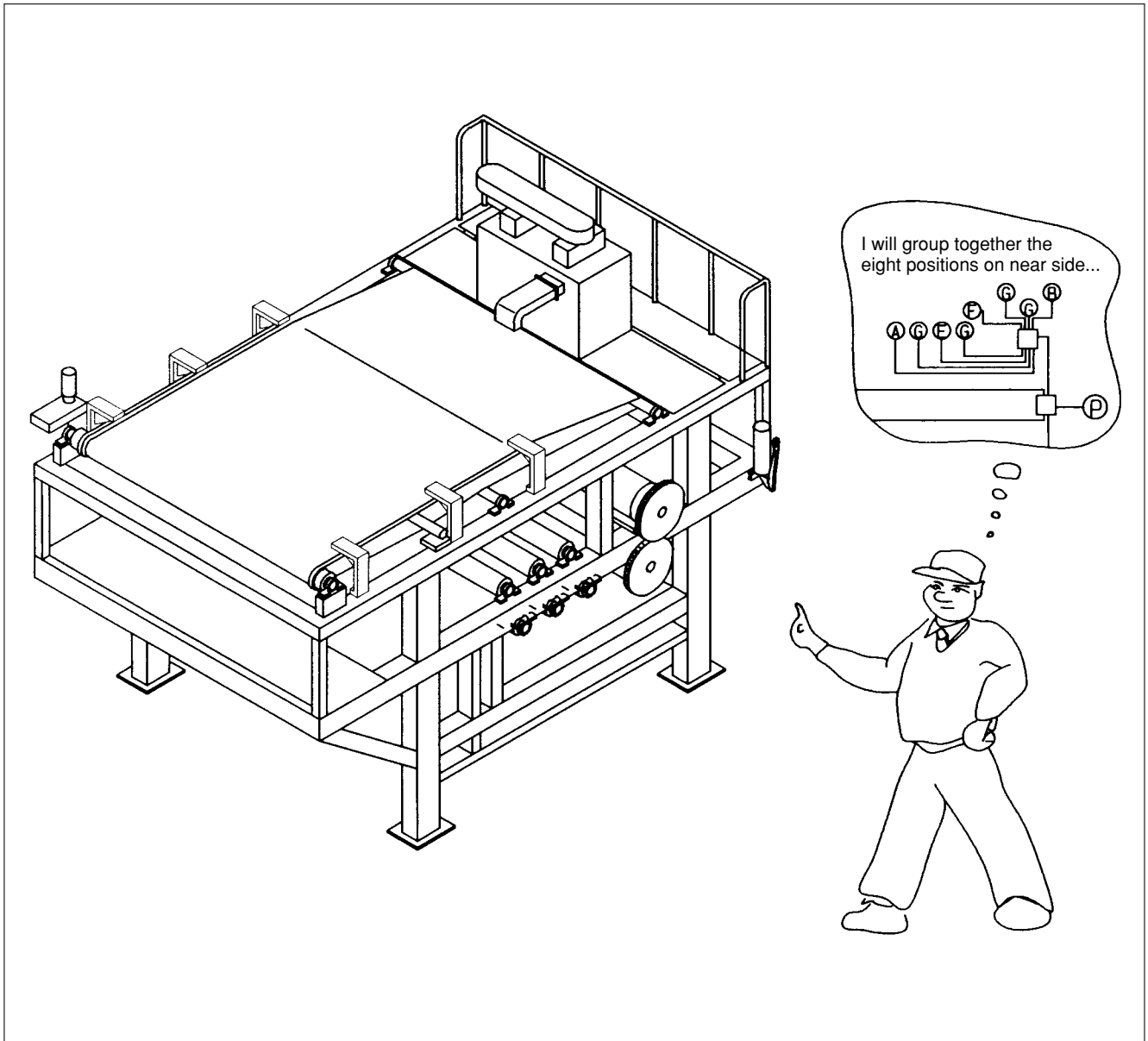


SYSTEM PLANNING

■ Check of specification, quantity, and layout of objective bearing being lubricated

It is a basic element for configuring a system to comprehend the layout of objective bearings for determining distributing valve connection system and the bearing specification for determining grease quantity.



■ Determination of lubricating quantity

Lubricating quantity depends on the specification of bearing (type, load, clearance, sealing condition, etc), environmental condition and so on.

When bearing specification of lubricating objective machine is made clear, contact us or our sales agency.

(Note) When actual operation is started, observe the lubricating condition carefully, and adjust the lubricating interval.

SYSTEM PLANNING

■ Selection of distributing valve

● Grouping of bearing

Look at the centralized lubricating objective bearing (hereinafter referred to as lubricating point) in general, and group those lubricating point which are relatively close to each other.

● Selection of distributing valve

For equal proportion lubricating, select a distributing valve having the number of discharging ports matching with the number of grouped lubricating point.

For non-equal proportion lubricating, it may be necessary to collect the discharging ports of distributing valve port or select a distributing valve having discharge points of 6 times, therefore contact us.

Example of connecting distributing valve when there are 12 lubricating points

The first distributing valve	LV312	LV3A6	LV302	LV303	LV304	LV3A4	LV302	LV302
The second distributing valve	—	LV306 × 1	LV306 × 2	LV304 × 3	LV303 × 4	LV308 × 1	LV305 × 1	LV302 × 1 LV310 × 1
Distributing valve assembling view								
Position of lubricating point	12 points are placed together.	6 points are distributed to two places.		4 points are distributed to three places.	3 points are distributed to four places.	Distributed by 4 and 8 points .	Distributed by 5 and 7 points .	Distributed by 2 and 10 points, and 2 points discharge quantity five times of other valves.
Lubricating quantity (Ratio)	Equal proportion distribution					Semi-equal proportion distribution		Non-equal proportion distribution

Note) Refer to P.12 "Distribution valve combination list classified by the number of lubricating points" for the definition of lubricating ratio.

■ Selection of pump

- When lubricating frequency of a system is rather small (once a week or less) and system requires small quantity (total discharge quantity of 12-port distributing valve 1.56cm³ /cycle, use a manually operated pump in general, but choose an motor driven pump when main unit is automated, or when system requires large quantity and applies high frequency of lubricating.
- Cartridge type pump is recommended in grease lubricating, but if it is hard to obtain cartridge of current using grease, use a follower plate type pump.

SYSTEM PLANNING

Control method

• Cycle control by indicator

1-cycle lubricating system.....System for detecting 1-cycle operation of indicator with a detection switch (sold separately) and controlling a motor driven pump

Multi-cycle lubricating systemSystem for measuring the cycle count of indicator with a counter and controlling a motor driven pump with any number of cycles.

• Time control by timer

Pump operation time lubricating system to control pump operation time with a timer in order to provide discharge quantity required by the system (= total lubricating quantity).

When lubricating points are small in number and lubricating quantity per point is small, 1-cycle lubricating system is applied in general. When lubricating points are large in number and lubricating quantity per point is large, or when a special grease-seal bearing structure is employed although the number of point is small, or when large quantity of lubricating is required because environmental condition is poor, multi-cycle lubricating system is applied.

When controller of multi-cycle lubricating system or pump operation time lubricating system is required, contact us.

Example of application

• Example of application to 10t dump truck

• Piping system view of 10t dump truck

