ONE-POINT LESSONS (OPL) *)

What is O P L :

- is a 5 to 10 minutes (normally take less than 15 minutes) lesson one topic on one sheet -means only One Point illustrated on a sheet of paper-, as many senses as possible should be addressed
- It must be written As Simple As Possible
- The Point or Topic Can Be the Function of Equipment, Installation of Jigs, Cleaning Method, Types of Lubrication and Methods of Inspection etc.
- It Is Generally Prepared by Supervisors or Group Leaders and Sometimes By Operators.

Types of OPL:

- *Basic information sheet*: essential basic information – practical know-how and know-how of methods
  - Maintenance activities as e.g. filter changing
  - Small repair works
  - Setting of machine functions
  - Cleaning and checking
  - Lubricating
- *Problem case study sheet*: teaches how to prevent recurrence of an actual equipment problem
- *Improvement / Kaizen lessons study case*: describes the approach and key measures in a successful improvement case study

Why we need OPL?

- To pass on better knowledge
- Stregthen the understanding for functions of machines and lines
- Improve knowledge about maintenance defect prevention

Which method used to deliver OPL?

Use all sense of people: tasting, feeling, smelling, hearing, seeing; the gathering of information occurs in

- 83% by seeing: pictures, sketches, graphs, drawings
- 11% by hearing: whistling, rattling, squeaking
- 3.5% by smelling: chemicals, smell of fire
- 1.5% by feeling: surfaces, roughness, heat
- 1% by tasting: sweet, bitter, salty, sour (food industry)

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Effect of OPL, man keeps in mind

- 20% by hearing
- 30% by seing
- 50% by hearing and seing
- 70% of that what he speeks about
- 90% of that what he does by himself

Where should OPL happen

- At the Gemba / shopfloor / on the machine when possible
- In the training center near the shopfloor

When deliver OPL?

- before the shift
- after the shift
- during the shift
- during unplanned downtimes

Who should conduct OPL?

- Employees on the shop floor Foreman, Supervisor
- Employees from the maintenance Electricians, Mechanics
- Employees from the technical office Engineers, Technicians

Reference

- Productivity Development Team, *One-Point Lessons*, Productivity Press, 2000

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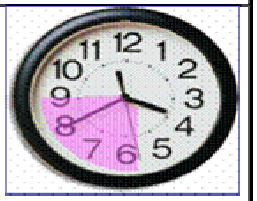
ONE POINT LESSON	Dept : _____ Team : _____	Date Prepared : _____ Prepared by : _____

	Type : Basic Pneumatic Device	OPL Sheet No.:

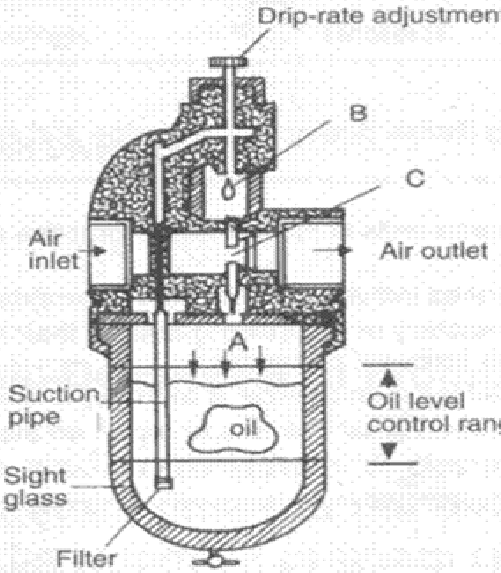


Why are lubricators necessary?

The lubricator works on the atomization principle. The oil mist produced by the lubricator prevents the interiors of pneumatic piping and equipment from rusting and helps pneumatic devices to operate smoothly by lubricating cylinder walls.

Principles

- The surface of the oil inside the sight glass (A) remains constantly under the pressure of the air on the inlet side.
- When the pneumatic device actuates, the inlet-side pressure exceeds the outlet-side pressure. Oil is drawn up the suction pipe and forms a droplet (B).
- This droplet falls down and mixes with the incoming air (C).
- The oil is atomized and passes out with the outgoing air.



Drip-rate Adjustment

- Adjust the drip rate so that a drip is formed while the piston of the hydraulic device is still moving.
- If the oil drop forms after the piston has completed a full stroke, the cylinder walls will not be lubricated.
- Do not allow the oil level to fall below the suction pipe intake

Training Completed	Date :								
	Trainee :								
	Checked :								

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