


INTER PLANT STANDARD IN STEEL INDUSTRY		
 IPSS	SPECIFICATION FOR AIRLINE LUBRICATOR	IPSS: 1-02-015-18 (First Revision)
	Corresponding IS does not exist	Formerly: IPSS: 1-02-015-84

0. **FOREWORD**

- 0.1 Interplant standardisation in steel industry has been initiated under the aegis of the Indian Standards Institution (ISI) and the Steel Authority of India Limited (SAIL). This Interplant Standards prepared by the Standard Committee on Basic Standards and Hydraulic, Pneumatic and Lubricating Equipment, IPSS 1 : 2 with the active participation of the representatives of all the steel plants and leading consultants and was first adopted in March 1984. Thereafter standard was again revised in January, 2018.
- 0.2 Interplant standardization for steel industry primarily aims at achieving rationalization and unification of parts and sub-assemblies used in steel plant equipment and accessories and provides guidance in indenting stores or equipment for existing or new installations by individual steel plants. For exercising effective control on the inventories, it is advisable to select a fewer number of sizes (or type) from among the products mentioned in this standards for the purpose of company standards of individual steel plants. It is not desirable to make deviations in technical requirements.
- 0.3 Airline lubricators function by introducing a fine mist or fog of oil into the compressed air supply and thence on the working parts of air operated equipment.
- 0.4 The airline lubricators are used in the airlines after the air filters.

1 **SCOPE**

This Inter Plant standard covers the main dimensions, operational features

of permanently installed airline lubricators used in the compressed airlines for lubricating air actuated equipment in steel plants.

2 **DIMENSIONS**

The main dimensions of the lubricators shall be as indicated in fig. 1.

3 **OPERATING PRESSURES**

The airline lubricators shall be designed to give fairly constant density lubrication at all air flows.

3.1 Rate of Supply of Oil

The rate of supply of oil shall be adjustable within the range of one drop per 566ltrs. (20 ft³) to three drops per 566 litres (20 ft³) and supply shall be occur only when the air actuated equipment works.

3.2 The airline lubricators shall be operated at 40 deg. C ambient temperature in compressed airlines air pressure lines at the pressure range of :

a) Type A – 0 to 78 x 10 N/m² (0 to 8 kg cm²) and

b) Type B – 0 to 176 x 10 N/m² (0 to 18 kg/ m²)

Any other pressure may be specified while ordering.

4. **CONSTRUCTIONAL FEATURES**

4.1 Bowl shall be of safety transparent polycarbonate shatter-proof material for 0-8 kg (Type A).cm² application and shall be of metallic construction for 0 – 18 kg / cm² (Type B). The capacity of bowl for airline lubricator suitable for 0-8 kg / cm² shall be 200 or 400 ml and it shall be 500 ml or one liter for 0 – 18 kg / cm². The bowl shall be threaded for leak proof joint and be easily removable.

4.2 Inlet and outlet shall have taper pipe threads conforming to IS: 554 – 1999 “Dimension for pipe threads where pressure tight joints are required on the threads (Fourth Revision)”. A sight-feed dome of safety clear transparent polycarbonate shatter-proof material shall be provided to allow observation of oil flow from any direction. A removable top cap shall be provided for access for refilling the reservoir without shutting off the air supply.

- 4.3 Pressure relief valve shall be provided to facilitate removal of bowl or top cap under pressure.
- 4.4 Oil feed adjusting screw suitable for all of viscosity up to 200 cst at 40 deg. C for adjustment of feed rate shall be provided.
- 4.5 Lubricator shall be provided with two mounting holes. Filter element of 60 to 200 micron shall be provided on syphon tube to prevent foreign matter from passing forward with oil.
- 4.6 Drain plug shall be of non-rusting material.

5. DESIGNATION

Airline lubricator shall be designated by the type, nominal bore and capacity of the bowl, for example:

Airline lubricator of nominal bore 15mm (NB 15), pressure range 0-8 kg / cm² (Type A) and having bowl capacity of 400 ml shall be designated as :
Airline Lubricator A 15 x 400-IPSS : 1-02-015-18

6. TEST CERTIFICATE

The manufacturer shall test the airline lubricator at 1.5 times the working pressure and furnish a test certificate with every airline lubricator for conformity to this standard.

7. GUARANTEE

The airline lubricator shall be guaranteed by the manufacturer for its satisfactory operation for a period 18 months after the date of supply or twelve months from the date of commissioning, whichever is earlier.

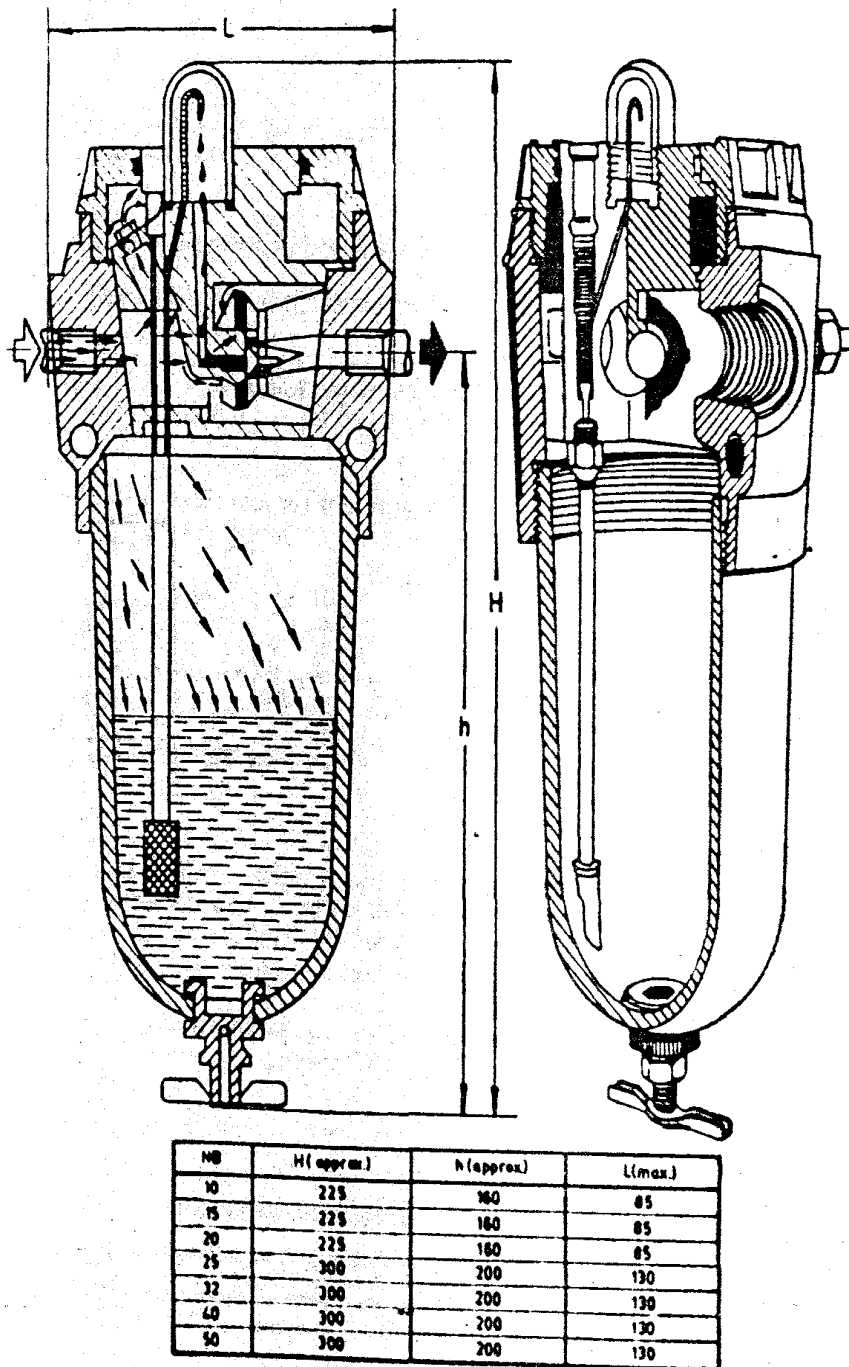
8. MARKING

The airline lubricator shall be provided with a name plate giving the following information:

- a) The manufacturer's name or trade-mark,
- b) Serial and batch number,
- c) Designation of the airline lubricator (see 5), and
- d) Capacity of the bowl on the body (see 4.1)

9. PACKING

The airline lubricator shall be packed in accordance with the best prevalent practice or as agreed to between the purchaser and the supplier.



All dimensions in millimetres
FIG. 1 DIMENSIONS OF AIR LINE LUBRICATOR