

A circular burners oil consumption and luminous intensity:

Lines	Consumption per hour	HK (=1,11cd)	"Light watts"	"Heat watts"
6"	27ml	6	8,5	250
8"	34ml	8	11	325
10"	39ml	9	12	375
12"	45ml	10	14	430
14"	53ml	12	17	508
15"	53ml	12	17	508
20" Ideal	73ml	17	23	700
Incandescent lamp (40W bulb)		29	40	38

The quantities are approximate and based on given data of a 14" circular burner in "Das moderne Beleuchtungswesen" from 1914.

The size of a circular burner is still expressed in "lines".

1 foot = 1' (= 12 inches)

1 inch = 1" (= 12 lines)

1 line = 1'" (= 2,1 mm).

Candela is the unit for light intensity. Originally candela was defined as the light intensity from a small candle. In Germany they used a Hefnerkerze which gave 11% more light.

1 candela = 1 cp (candle power).

1 candela = 0,9 HK (Hefnerkerze).

Lamp oil, kerosene or paraffin (oil)? We recommend odorless kerosene, this will give you an odorless combustion and make your wick last longer. Most important, make sure it's a pure mineral oil.

Odorless kerosene density: 0,75.

An oil lamp with a 14" circular burner consumes around 40g of lamp oil per hour, equivalent to 53ml per hour. This corresponds to an energy consumption of 508 watts. This energy is transformed to 102 watts of radiant heat, 405 watts to convection heat and only 1,26 watts are transformed to light! Only 0,25% of the input energy is converted to light. The oil lamp is therefore also a great heater!

Safety distance

Minimum distance from top of chimney to ceiling:

Minimum 600 mm. Preferably 800 mm.

Use a smoke bell if this cannot be achieved.

Odd bits and ends from the archives:

PARAFFIN/KEROSENE BURNERS

Before one pours paraffin into a lamp, the wick should be dried overnight on a heater or radiator. In this way you rid the air of its humidity, thus enabling the wick to soak up the paraffin. Once the wick has been introduced into the burner, it should be cut down to an even edge. Do be very careful about this trimming, as an even flame depends on an even edge of the wick.

As far as 15" and 20" burners are concerned, the flame-spreader should not be pressed right home. The lower line of air holes ought to be just above the wick in order to nourish the flame properly.

To put out the burner simply blow down the chimney glass. Do not touch the flame control, which is meant only for adjusting. When first lit, the flame will throw only a dim light in the beginning, however, having gained its heat, it will burn with an even intensity, to which you once and for all adjusted it after trimming the wick.

Source: Mogens Rosenkilde ApS (1978-1999).

Yet another advantage of letting the burner start off with only a dim light is that the lamp chimney will be heated up slowly. Hence the risk of it cracking on account of too quick change of temperature will be reduced. Using the original Delite/E.S.Sørensen chimney made from borosilicate glass which is heat-resistant glass reduces the risk of it cracking to a minimum.

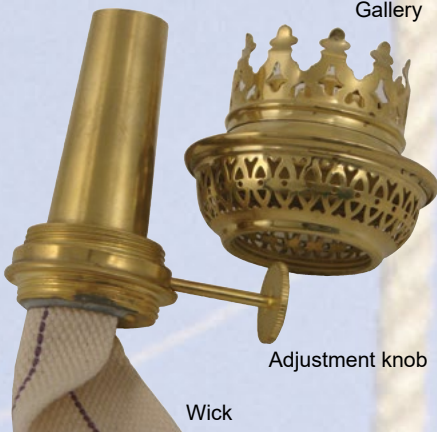
Before you light an oil lamp with a new wick, let the wick suck the oil for at least 3 hours.

Circular burner and gallery unscrewed

Burners

Circular burner

Gallery



Our oil lamps are supplied with three types of burners.

The "rope" burner is the simplest one and employs a small circular wick, like a candlewick (and isn't adjustable like the Perkeo burner).

The flat burner employs a flat wick and so yields a much greater amount of light.

The circular burner uses a wide flat wick kept in a tubular shape. It yields the greatest amount of light by far. Look for the "circular burner inside" mark!



The How of Making Your Oil Lamp Work

- 1) After a while the lamp will begin to burn at a reduced rate even though plenty of oil is left in the reservoir: Water may have found its way to the wick and been hampering the flow of oil. Solution: Change the contents with odorless kerosene and mount a new wick.
- 2) The reservoir of your oil lamp seems to be leaking: As kerosene is able to creep upwards on the inside (from various reasons according to type of lamp), it isn't necessarily leaking. Solution: Pour away some of the kerosene bringing the height in the reservoir no closer than 2 centimetres (1 inch) from the top.
- 3) The oil lamp is burning with a powerful flame (maybe even giving out soot): Possibly methylated spirit, petrol or other liquids have got into the lamp. Solution: Change the contents with odorless kerosene and mount a new wick.

Please notice that waste chemicals must be taken to a recycle centre!

IMPORTANT From the archives - how to treat your brass lamp (and lacquered brass lamp)

It's the easiest thing in the world to have flawless and beautiful lamps that last for years!

This is how:

Use a minute on every newly acquired lamp by waxing it with liquid wax like "INTERNATIONAL YACHT WAX"... a totally pure wax without silicone or abrasives. Easy as pie... shake the bottle... apply - and leave till next day. Then polish with a dry cloth, and your lamp will become brilliant in an instant. Do this twice in the season, and you are giving the best of protection against brine to your lamps, and they will remain as new.

Lamps untreated with wax: Even if your lamps may be lacquered, no lacquer on brass will be able to resist brine for long. So remove the brine as soon as possible. Wash with fresh water and a soft cloth and finish by wiping up with a dry cloth.

Should a lamp still become tarnished by brine, the lacquer will have to be removed from the damaged spot with thinner; in that case polish is called for in future cleanings! Out of the sailing season we recommend dismantling the lamps. Wash with tepid fresh water and dry. To be stored dry and clean. Before mounting in spring apply the season's first coat of wax.

Nickel plate lamps ought to receive the same kind of wax treatment to keep up their silver gloss.

Source: Chr. Møller's Eff. (1855-2002), Copenhagen.