

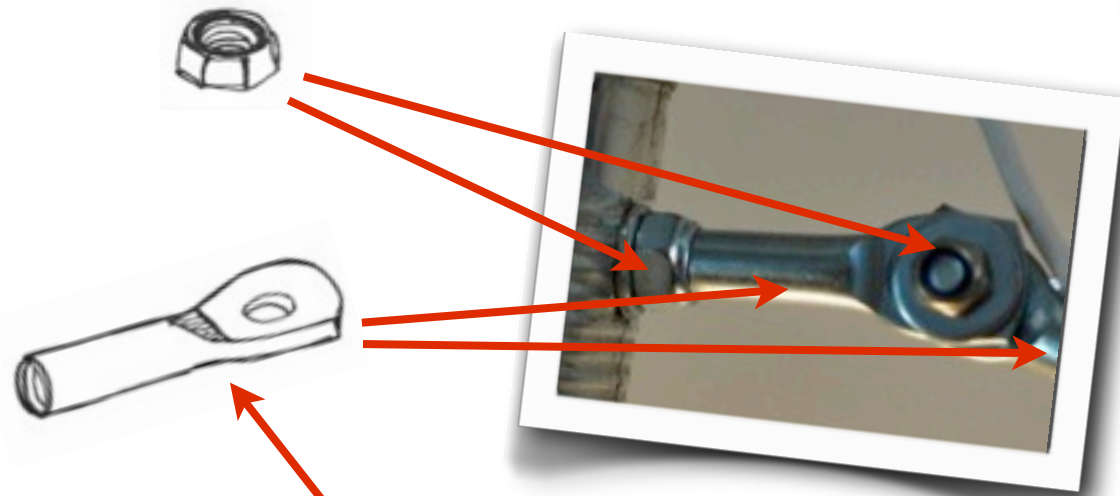


”Licht der Stiftung”- lamp

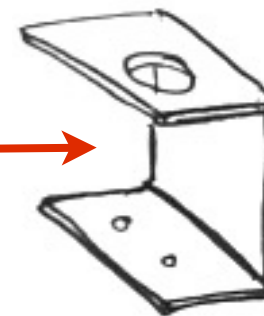
- building instructions -
”do-it-yourself”

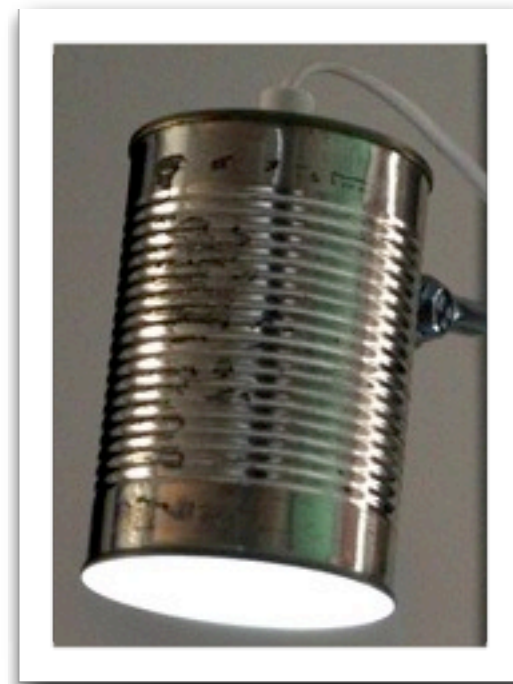
Idea, text,
drawings &
pictures
Henrik
Enbom

the idea is to be copied and multiplied for the fee of sending a picture of your own lamp to me



- An empty crushed tomato can (Nostia, Polpa di Pomodoro) from Lidl and the reason why is because this can is white on the inside, so it works very well as a reflector without any additional painting.
- 8 mm thick treaded rod, easy to obtain from any iron shop, it is used for hanging up ac pipes etc in the roof. To make the joints, use **hanger** loops as in the picture. Wing nuts or actually wing screws, 6 mm thick with a length of 18 mm is used.
- Wash the tin can properly and remove the sticker from it, the glue can be removed with turpentine or hot water.
- The holes for the electrical cord and tension reducer should be 10 mm, if you have a separate bolt to secure the first hanger loop, that hole is 8 mm
- A small support part must be made, a part in what you can attach the ceramic base for the lamp and the bolt that holds the steel rod. It is no problem to bend this small part from sheet metal or cut from any U-shape rod.



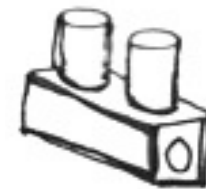


-1-



-2-

- I have drilled holes both in the bottom pic 1 (that becomes the top) as well as in the side pic 2 of the tin. Try any way, both are as good, but remember, a **tension reducer** is good to use for the electrical cord.
- I have been using ceramic lamp bases, so called halogen lamp bases (GU 5.3) they are cheap and versatile for this purpose. LED:s in strenghts from 1 W to 7 W are available on the market today.
- The base attaches to the small self made support by 3 mm bolts and to the tin can by the tension reducer, that has got a washer and a nut on the inside.
- Now it is about time to attach the bases electrical wires with the electrical cord that runs down the shaft. Use small parts as shown.
- Now we should have a tin can with a hanging support and a electrical cord attached.

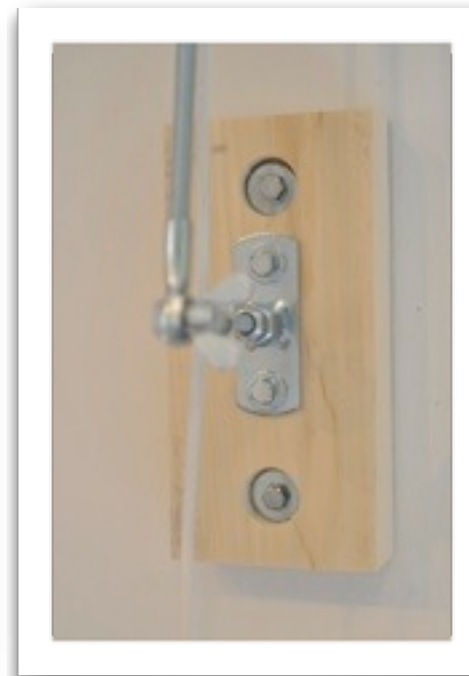




-1-



-2-



-3-



-4-

- The base of the lamp is made out of poplar (*Populus tremula*) a tree that is really considered to be of zero value here in Finland. I think it is really nice and it ages in a great way, becoming grey and smooth.
- Most of the lamps produced so far have been table lamps. They are easy to build, you don't need that long rods and they are solid and stable. I made some wall mounted lamps, with bases of poplar, but as well with sheets of aluminium.
- The transformers for the lamps are in most cases hidden in the base of the lamps, which means that the upper part of the lamp is completely a 12V system, this again means that building such a lamp is legal in every sense. If you build the lamp as a 220V lamp with a full currency LED, the situation is not as clear. In fact, here in Finland you would need an electrician to do all the connections to have it made by the book.

Pictures of different LdS lamp stands and supports

1. 60° North, Helsinki to the left and X 350° to the right
2. X 350° with a restrictor that hinders the shaft to revolve a full revolution. These parts are made out of old dry clean coat hangers, a very versatile and free material
3. Wall fixture
4. 60° North, Helsinki

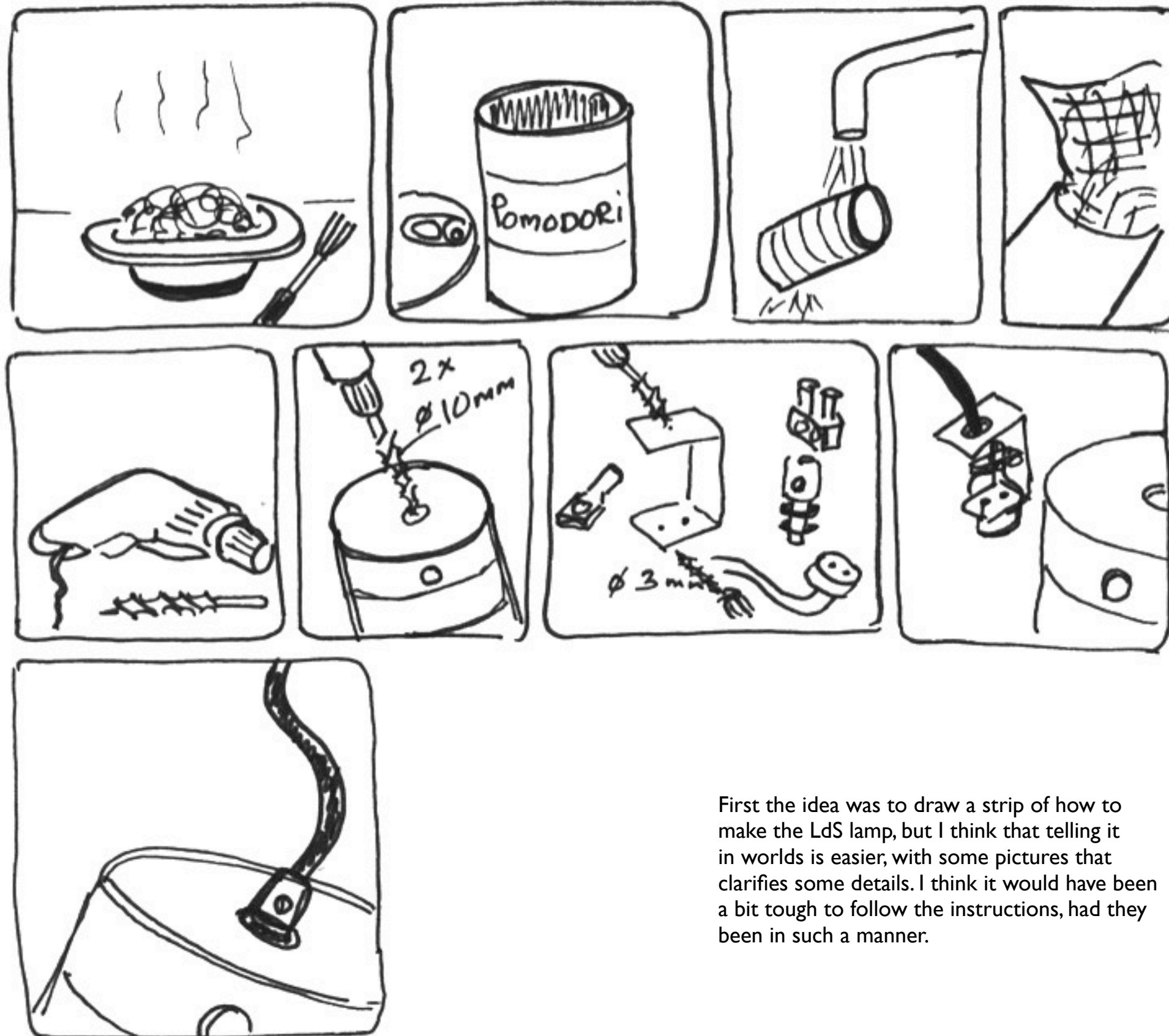
- Parts needed for the LdS lamp are as follows
- An empty tin can, in this case a Nostia Polpo di Pomodoro from Lidl, treaded rod roughly 1 meter, electrical cord 3 meter, a switch, a ceramic lamp holder, a 12V 350 mA DC-transformer or stronger. For the 7W LED you would actually need a 900 mA transformer, a LED lamp and some wing nuts and hanger loops.
- Tools required are very few, a drill with a 10, 8 and 3 mm bores, a small screw driver and a wrench of some kind. To shape the wooden parts you need a saw and some sand paper to finish the surface.
- Try to be precise in measuring, it is so much easier than to fit un-precise parts together. This is an easy project to handle, far from rocket science and if anything goes wrong, eat some more tomato soup or pasta pomodori and you have new raw material to start with,
- Enjoy what you are doing





- Since the start, I have built more than just LdS lamps. Above are samples of lamps that are made, either for the fun of making them or made to order.
- If you have problems with LdS lamps, do not hesitate to be in contact Henrik Enbom, henrik@dodo.fi is the easiest way to get in touch. I try to answer as soon as possible, if you don't hear anything within a couple of days, re-mail your question.
- When you are ready with your own project, try to send a picture of it to me, I would love to have it. Pictures sent will be added to my home pages dodo.fi
- For those not interested to build personally, I can inform that I do build to order. Prices vary a bit, from 150 € to about 220 € depending on many factors. The thing influencing the price the most is the LED chosen. Philips 7 W LED Master bulb costs some 60 + € alone, this explains the 220 € price.





First the idea was to draw a strip of how to make the LdS lamp, but I think that telling it in worlds is easier, with some pictures that clarifies some details. I think it would have been a bit tough to follow the instructions, had they been in such a manner.



Diploma award at
Habitare Eco Design Light
Helsinki September 1st

to
Samuli Naamanka,
Ingo Maurer
Henrik Enbom

Enjoy building your own, energy and garbage recycling lamp.
Let's hope you enjoy the process as much as I have enjoyed it,
it is not only the good feeling of doing something for the best
of us all, but as much enjoying the food you make, in order to
get a new tin.

Have fun, enjoy.
HE