

Powder coating oven

A scrap heap powder coating oven, total cost about £20. Ok. I know it looks a bit rough but it works! By using an insulated shelf the internal area can be halved making it more efficient when the full height isn't needed.

I stripped the 2 oven elements, the grill element and controls from an old cooker. Collected two small industrial lockers and one bigger locker from skips, the big locker had 6 galvanised shelves which were used for the door inner skins and the insulated shelf. I also found a sack barrow in a skip which I used for the chassis, I changed the wheels for swivel wheels so now I can move it around the garage when it's in the way.



The donor cooker



2 of these smaller lockers



The larger locker



The sack barrow



The 2 lockers cut down to their internal shelf height, trying for size.



Overdid the insulation here, ended up using half this thickness all round



The remains of the 2 lockers welded in place with the infill



The galvanised shelves used as the Inner door skin, insulation packed in between



The doors insulated and skinned



I left the skin wide on one door so the doors had a bigger overlap in the middle



The finished oven with brass door handles. Below these in the right door is the thermometer.



A steel industrial soap dispenser (from a skip) as my control box



A chain link and tapered metal tube as the door closer, I know..... but it works!



Inside, the three elements, the shelf is double skinned and insulated. When in place it cuts the oven area in half for better efficiency when all the height isn't needed, not perfect but it helps.



An oven thermometer shows the temp. I know the welding's crap, my mig's playing up.

The 2 oven elements are thermostatically controlled while the grill element is on a rheostat, I might fit a thermostat control to it in the future. It needs all three elements with the full sized oven being used. When the shelf is in place just the oven elements are needed, although it heats up quicker using all three then turning the third one off when it's at temp. The internal dimensions are; 36" wide, 54" high (26" with the shelf in place) and 17" deep
I have fitted some fibreglass rope for door seals now (included in the £20 cost) which seem to be working well, and added a top latch to the doors.

The first job in the new oven, my son's been waiting for it to be finished to do some bike parts.



The handlebars hanging from the dual rack, this way up for hanging, the other way for placing items on,



Powder coated and ready for the oven



Before



After



Finished in satin black, the camera flash is creating the light shadows, now just the rest of the bike to do!