

Joseph Clifford Post Driver



Aim of the Project

In this project I am aiming to make a post driver that will be capable of driving posts of any size by using hydraulics.

Background

We have a dairy farm at home, and this means we always have posts broken and have to be replaced around the farm. We used always be borrowing other lads post drivers which is not always ideal, and we would drive some posts with the sledgehammer or the bucket of the digger, these ways obviously was not the best process as you could injure your back or strain yourself while doing it this way. I think the post driver will also make the fencing must more efficient and safer.

Side Tilt



When I was looking and making my own post driver, I looked at a lot of different ways of sliding it. I settled for this way. My frame is a 75x75mm box and I got a 100x100 box to slide outside my frame. This meant I could weld my ram onto the frame on top and onto the 100x100 box down low and the ram would pull the slide and cause the side tilt mechanism to work. I left the 100x100 with a 8mm wall which meant the slide wouldn't be too loose but also leaving it not too tight deterring it from sliding.



Photo of: Ram onto slide mechanism

Weight

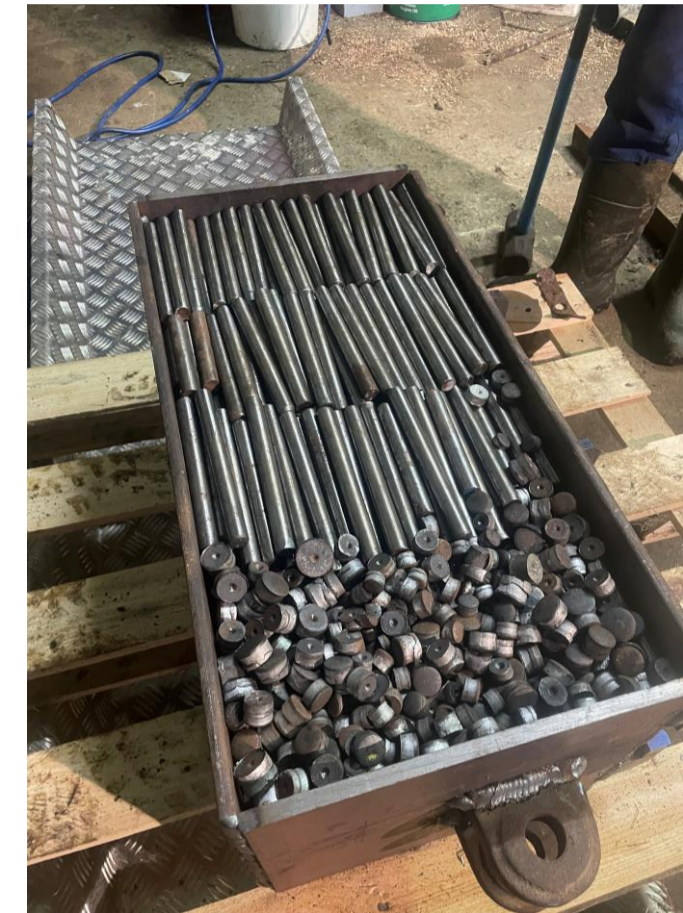


Photo of: weight filled with steel

I made my weight from a steel box made 1 foot by 1 foot and 2 foot long. I felt a square weight would hold more and a round one. My weight was filled with railway gilders with steel punches and bars put in and packed in around the gilders which helped make the weight dead and I felt with the gilder's is would support the weight. My weight was a weight weighed 350kg when I had it filled and the hole box welded up. I think this weight will be enough to drive down the posts on our farm.

Photo of: Electrical, Plumbing and HVAC systems using BIM

Conclusion

I think the post driver I have made is a well fit for purpose post driver and will be able for the job. I think from all the ones I have used and seen I think the design of Post driver I have made will be well able to compete with the rest of the ones on the market. I reckon that I have made the weight for the post driver heavy enough and think it will be well fit for purpose.

References

A one engineering
Hand engineering
IEP engineering