ABSTRACT

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PROCESS OF FORMATION OF PIPE EXTEND 150R WITH TYPE SS400 MATERIAL IN CV. SUTECHINDO JAYA PRESISI

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A steel pipe is a cylindrical object with a hole in the center made of steel. The main function of steel pipes is as a means to drain fluids, either liquid or gas, from one place to another. Steel pipe can also be used as a building construction structure or machine construction. The advantage in using pipe-shaped steel in machine construction is that the pipe shape has a higher rigidity compared to other cross-sectional rods. The pipe is also lighter than a solid cylinder of the same diameter. In the pipe construction there are connections that function to connect one pipe to another pipe. The connection is a Pipe Extend. Pipe Extend 150R uses SS400 carbon steel material. SS400 carbon steel is a low carbon steel. SS400 is a type of carbon steel that has a low carbon content of Low Carbon Steel, which is below 0.3% already in pipe form. The 150R pipe extend forming process is, cutting, conventional lathe, and corner cutting. Where the cutting from the initial length with a size of 1000 mm to 69.7 mm. After further cutting to the turning process, the turning lathe with an initial length of 69.7 mm is then turned to 10 mm, and the initial diameter of 26.8 is turned into 24.8 mm, with a cutting speed of 21 m/min. Next, cut the angle that has been inserted into the jig and has been measured with a protractor ruler with a slope of 24.06º. Furthermore, the results of the productivity index measurement, it can be concluded that the highest productivity value for the manufacture of Pipe Extend 150R in 1 month in March 2022 is 1000 pieces and the lowest productivity index is in April 2022, which is 920 Pipe Extend 150R.

Bibliography (2011 s/d 2022)