WISIT KANTARATTANAKUL : CALCULATION FOR SHEET METAL COIL CUTTING IN THE STEEL PIPE INDUSTRY . THESIS ADVISOR : DR. SOMCHAI PUAJINDANETR , 124 PP. ISBN 974-635-370-5

THE OBJECTIVE OF THIS STUDY WAS TO FIND OUT THE CUTTING COIL STEEL METHOD AND REDUCE SCRAP FROM COIL STEEL CUTTING IN PIPE MANUFACTURING INDUSTRY. THE STUDY WAS DEVIDED INTO TWO PARTS AS FOLLOWING :

1. THE STRIP WIDTH CALCULATION OF PIPE FORMING, THE METHOD OF STRIP WIDTH CALCULATION WAS STUDIED AND IMPLEMENT INTO THE PIPE PRODUCTION LINE IN ORDER TO FIND OUT THE SUITABLE BENDING ALLOWANCE FOR THE PIPE WHICH IS THE 3" OF NORMINAL SIZE AND 4 MM. OF WALL THICKNESS. THE RESULT OF THIS STUDY SHOWED THAT THE THE STRIP WIDTH FOR PRODUCING PIPE WAS 272 MM. WHEREAS THE EXISTING STRIP WIDTH WAS 273 MM. THEREFORE , THE STRIP WIDTH OF THE PIPE NORMINAL SIZE OF 3" COULD BE DECREASED 1 MM. OR THE WEIGHT COULD BE REDUCED 0.032 KG PER METER.

2. THE CALCULATION OF STRIP SIZE LAYOUT OF STEEL COIL THE COMPUTER PROGRAM OF THE CALCULATION OF THE STRIP SIZE LAYOUT USING THE TRIAL AND ERROR TECHNIQUE WAS PERFORMED TO OPTIMIZE THE NUMBER OF STEEL COILS BEFORE PRODUCING THE PIPES.

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