ABSTRAK

ANALISIS PERBANDINGAN ANTARA DUA JENIS *WEIGHING CONTROL* BERDASARKAN KEAKURATAN DAN KEANDALAN DI UNIT *PHOSPHORIC ACID,* PABRIK III, PT.PETROKIMIA GRESIK

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Untuk mengetahui tingkat keakuratan dan kinerja instrument *weigher* di Pabrik III Unit *Phosphoric Acid* (PA) 1, PT.Petrokimia Gresik, maka dilakukan perbandingan antara nilai *actual load*, nilai yang ditunjukkan pada kontroler dan nilai standar yang ditetapkan oleh operator. Nilai beban hasil perhitungan yang disebut *Actual Load* dapat dicari dengan proses perhitungan. Dan nilai pada kontroler dan nilai standar didapat melalui proses pengamatan. Dengan hasil perhitungan dan pengamatan, dilakukan perbandingan nilai *error* pada masing-masing *weigher*. Dari nilai *error* itulah nantinya akan diidentifikasi *weigher* yang paling akurat dan memiliki tingkat keandalan yang lrbih tinggi.

Hasil yang diperoleh dari analisa menunjukkan bahwa persentase *error* nilai CFC-100 terhadap nilai *actual load* yaitu 0,02% - 1,84% sedangkan persentase *error* nilai Genetix terhadap nilai *actual load* yaitu 0,31% - 1,26%. Besar persentase *error* nilai *actual load* terhadap nilai standar pada *weigher* 03M-2306A yaitu 0,10% - 2,43% sedangkan persentase pada *weigher* 03M-2306B yaitu 0,57% - 4,01%. Dan besar persentase *error* nilai CFC-100 terhadap nilai standar yaitu 0,00% - 1,57% sedangkan persentase *error* nilai Genetix terhadap nilai standar yaitu 1,83% - 3,66%. *Weigher* 03M-2306A dapat mengalirkan *phosphate rock* lebih tepat dibandingkan dengan *weigher* 03M-2306B sesuai dengan nilai standar yang ditetapkan oleh operator.

Kata Kunci : ***actual load, CFC-100, Genetix, weigher***

ABSTRACT

COMPARISON ANALYSIS BETWEEN TWO KINDS OF WEIGHING CONTROL BASED ON ACCURACY AND RELIABILITY IN PHOSPHORIC ACID UNIT, FACTORY III, PT.PETROKIMIA GRESIK

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To determine the level of accuracy and performance of the instrument weigher at Factory III Phosphoric Acid (PA) 1 Unit, PT. Petrokimia Gresik, a comparison is made between the actual load value, the value indicated on the controller and the standard value set by the operator. The load value calculated using Actual Load can be searched by the calculation process. And the values on the controller and standard values are obtained through the observation process. With the results of calculations and observations, a comparison of the error values is performed on each weigher. From this error value, the weigher will be identified which is the most accurate and has a higher level of reliability.

The results obtained from the analysis show that the percentage error of the CFC-100 value against the actual load value is 0.02% - 1.84% while the error percentage of the Genetix value for the actual load value is 0.31% - 1.26%. The error percentage of the actual load value against the standard value on the 03M-2306A weigher is 0.10% - 2.43% while the percentage on the 03M-2306B weigher is 0.57% - 4.01%. And the large percentage of CFC-100 error values against the standard value is 0.00% - 1.57% while the Genetix value error percentage against the standard value is 1.83% - 3.66%. The 03M-2306A weigher can stream phosphate rock more precisely than the 03M-2306B weigher according to the standard value set by the operator.

Keywords : actual load, CFC, Genetix, weigher