Variasi Waktu Tinggal Limbah Cair terhadap Penurunan Kadar Total Suspended Solid (TTS) dan Chemical Oxygen Demand (COD) Limbah Cair Painting di PT Astra Otoparts TBK. Divisi Adiwira Plastik Tahun 2017

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Abstrak

Penelitian ini membahas tentang pengaruh variasi waktu tinggal limbah cair yang dihasilkan dari proses painting atau pegecatan terhadap penurunan kadar TSS dan COD pada instalasi pengolahan limbah cair di PT Astra Otoparts Tbk. Divisi Adiwira Plastik. Penelitian ini merupakan penelitian eksperimen. Metode analisis yang digunakan untuk mengetahui nilai COD dengan metode sprektrometri dan metode analisa TSS secara grafimetri. Hasil penelitian menunjukkan bahwa variasi waktu tinggal yang diberikan yaitu 1 jam, 2 jam, dan 4 jam, dapat menurunkan kadar TSS dan COD pada instalasi pengolahan limbah cair di PT Astra Otoparts Tbk. Divisi Adiwira Plastik. Efektifitas penurunan kadar TSS dan COD dengan presentase tertinggi pad waktu tinggal 4 jam sebesar 89,86% (TSS) dan sebesar 61,32% (COD). Kata kunci : Instalasi Pengolahan Limbah Cair (IPLC), Waktu Tinggal, Koagulasi, Flokulasi, Filtrasi This study discusses the influence of variation of liquid waste residence time resulting from the painting process or discharge to the decrease of TSS and COD levels in the waste water treatment plant at PT Astra Otoparts Tbk. Division of Plastic Adiwira. This research is an experimental research. The analytical method used to find out the value of COD by sprektrometri method and TSS analysis method by grafimetri. The results showed that the variation of residence time given is 1 hour, 2 hours, and 4 hours, can decrease the level of TSS and COD on the waste water treatment plant at PT Astra Otoparts Tbk. Division of Plastic Adiwira. The effectiveness of the decrease of TSS and COD content with the highest percentage of 4 hours residence time time was 89,86% (TSS) and 61,32% (COD). Keywords : Installation of Waste Water Processing (IPLC), Retention Time, Coagulation, Flocculation, Filtration