

ABSTRACT

Demand for the automotive components is higher than the production following by resulting higher cost production result. It forces automotive producers to figure out a way to production cost reducing and accessance is acquired maximum profit. PT Inti Ganda Perdana plant Karawang which uses Toyota Production System always eliminates high cost production such as Flywheel D98 E, for Xenia cars part. In reducing production costs Flywheel D98 E namely by means of replace coolant type HOCUT B 50S be coolant type RAZOR C279. The other have a price economic and keep quality products.

the RAZOR C279 was tested seven days on march 2017. Coolant type RAZOR C279 requires 158 liter of coolant and water 210 liter for making 3.794 Flywheel D98 E. Then it need change again, because the ability of coolant is decrease than before.

*The RAZOR C279 contains ethylene glycol (75 %), phosphate (6 %), borate (8 %), deionized water (11 %). Toxicity of Ethylene Glycol which have higher risk than Propylene Glycol. Therefore, the sewage treatment (B3) RAZOR C279 more expensive than HOCUT B 50S. It needs cost **Rp.467.500/Barrel**. However, although sewage treatment of RAZOR C279 more expensive than HOCUT B 50S. The cost of production part Flywheel D98 E much cheaper than HOCUT B 50S. It needs cost **Rp.1.208,272 / Part**. After calculate of sewage treatment and cost of production part, coolant type RAZOR C279 can save on the cost of production **Rp.7.745.192,934 / Barrel** used. (data was taken at October 2017)*

Key Words : Cost, Flywheel D98 E, Coolant, HOCUT B 50S, RAZOR C279

INTISARI

Permintaan komponen otomotif mobil yang semakin tinggi, mengakibatkan biaya produksi semakin tinggi. Hal ini memaksa produsen otomotif untuk mencari solusi untuk mengurangi biaya produksi agar mendapatkan keuntungan maksimal. Pada PT Inti Ganda Perdana *plant* Karawang yang menggunakan *Toyota Production System* selalu dilakukan eliminasi biaya produksi yang tinggi salah satunya produk *Flywheel D98 E* (roda gila), untuk memenuhi kebutuhan *part* mobil Daihatsu XENIA. Dalam mengurangi biaya produksi *Flywheel D98 E*, yaitu dengan cara mengganti *coolant* tipe *HOCUT B 50S* menjadi *coolant* tipe *RAZOR C279*, yang memiliki harga ekonomis dan tetap menjaga kualitas produk.

Pengujian *coolant* tipe *RAZOR C279* dilakukan pada bulan Maret 2017 selama tujuh hari. Kebutuhan *coolant* tipe *RAZOR C279* sebesar 158 liter dan air 210 liter dapat menghasilkan 3.794 *part* (roda gila). Setelah itu dilakukan pengisian ulang, karena sifat *coolant* tipe *RAZOR C279* mulai berkurang.

Setelah dilakukan analisa tentang *coolant* tipe *RAZOR C279* kandungan unsurnya adalah *Ethylene Glycol* (75%), *Fosfat* (6%), *Borat* (8%), *Deionized Water* (11%). *Ethylene Glycol* memiliki toksisitas lebih tinggi dibandingkan *Propylene Glycol*. Sehingga, biaya pengolahan limbah (B3) *RAZOR C279* lebih mahal dari *HOCUT B 50S* yaitu sebesar **Rp.467.500/Barel** dan biaya produksi *Flywheel D98 E* sebesar **Rp.1.208,272/Part**. Hal ini mampu menghemat biaya produksi sebesar **Rp.7.745.192,934 /Barel**. (data diambil pada Oktober 2017)

Kata Kunci : Biaya, *Flywheel D98 E*, *Coolant*, *HOCUT B 50S*, *RAZOR C279*