

INTISARI

Penulisan karya ini merencanakan sebuah lokomotif uap dengan bahan bakar batubara. Direncanakan sebuah ketel yang bertekanan 10 kg/cm^2 dan laju aliran uap 6 Ton/jam , kondisi air pengisian ketel pada 27°C sedangkan udara luar bertemperatur 30°C dengan kelembaban 75% .

Perancangan ini ditujukan untuk kereta api wisata tempo dulu jurusan jogja bantu, kecepatan bukanlah tujuan utama melainkan keamanan dan kenyamanan.

Melalui analisa dan perhitungan kereta ini mempunyai daya $984,5 \text{ HP}$, dengan jarak tempuh 30 km cukup dilalui dengan 1 jam perjalanan.

Dengan makin berkembangnya jaman, maka keberadaan kereta api uap yang berbahan bakar batu bara atau kayu akan semakin langka, maka akan dicoba dihidupkan kembali jalur kereta api uap jurusan Jogja Bantul dalam kemasan wisata.

ABSTRACT

This study planned a steam locomotive boiler using fuel of coal. It was planned a boiler of 10 kg/cm² of pressure and the steam flow rate of 6 ton/hr. The condition of boiler filling water was on 27° C, while the outside air temperature was at 30° C with 75% of humidity.

This locomotive was planned for a tour train of the old-fashioned packet, so that the speed was not the priority but rather the safety and comfort of it.

Based on analysis and computation, this locomotive had 984,5 HP of power. It would go through a distance of ±30 km for 1 hour.

In this modern era, the existence of a train with coals or woods of fuel is rare. Therefore, it would be revived a Jogja-Bantul line of steam train in a tour packet.