ABSTRACT

Since that time, from a full spectacular design. Something which is-impossible and will happen to exist in details of machines era to make-prosperous humanity, especially found in some BALITA child body which-unfamiliar behavior with their sight of goose closet or squat closet. That-BALITA child mentioned as though to become an unpleasant feeling emerged,-because of the shape of the closet. Finally, when the BALITA child want to-defecate on closet. The BALITA child mentioned above only is standing beside-closet as far as to exclude their feces from anus. Surely the closet room was in a-mess after the BALITA child defecate. More over to anticipate his every wants-to be defecate, the BALITA child mentioned above always position to dive-straight down because constipation and the BALITA child mentioned above-often get to help with little finger by their parent or baby sister to cungkil.

The designing of the vibratory closet for BALITA to analyze and relevance-while ergometric, Islam religion, medical and technical engineering, then-designed the vibratory closet for BALITA in term paper will be applied between-science and exposition.

The vibratory closet for BALITA to observated from ergonometric in-accordance with the BALITA body structure together with have brought-instruction and the brochure contains ways of operating the vibratory closet for-BALITA. The brochure contains ways an incorrect or true to sitting position on-a closet has the shape of artificial horse. The following matter: The don't of an-electric circuit to switch on the vibratory closet for BALITA if their not true to-sitting position on a closet has the shape of artificial horse.We know that the-efficiency of the Vibratory Closet for BALITA is ζ = 5,26 %. A good effect-to the optimum from the calculation there was The Vibratory closet for BALITA-speed is 0,014 (m/s). The pulley-V speed is 0,7 (m/s). Calculation for pin is: L_k / ds (mm): 0 ,75 < 1,36 < 1,5 → very good. Calculation for bearing life is: 42.883,06 h. The sprocket wheel speed is 0,00009 (m/s). Calculation spring is: τ = 54,15 N/mm^2 < τ_d = 429,00 N/mm^2 , → very good. Calculation-Cashing Fiberglassis: τ_{max} = 4,57 N/mm^2 < τ_d = 64,35 – 83,16 N/mm^2, → very good. Since the measurement of between the left and right os Ischiadica of-BALITA is 19,5 cm, therefore the design is take the radius of roll block 15 cm → Good. Calculation the amount of nail in joint of between the horselike head and-a horselike body as sit closet for BALITA is 1 piece while the design places-4 position and 4 pieces of nail → Good. Calculating frequency in the vibratory-closet for BALITA is 0,0036 Hz. → Conform to the freshness of BALITA.

ABSTRAK

Semenjak saat itu, dari sebuah rancangan yang penuh spektakuler. Suatu-yang tidak mungkin dan akan terjadi di era permesinan untuk kesejahteraan umat-manusia, terlebih didapatkan pada beberapa sosok tubuh anak BALITA yang-berperilaku tidak familiar dengan mereka melihat kloset duduk atau kloset-jongkok di kamar mandi. Anak BALITA tersebut seakan menjadi timbul rasa-takut karena bentuknya, sehingga diwaktu Anak BALITA ingin pup, BALITA-tersebut hanya berdiri disamping kloset sampai akhirnya keluar pup (tinja)-dari lubang duburnya (anus), yang tentu saja tinja tersebar berantakan. Ada-pula yang setiap ingin pup, selalu dalam posisi nungging karena susah keluar-dan terbiasa dibantu di congkel dengan jari kelingking orang tua mereka atau-baby sister.

Perancangpun menganalisa dan mengkaji ulang peristiwa yang sangat-relevan antara Ergometrik, Agama Islam, Medis dan Teknik Mesin, maka-dirancanglah Kloset Getar Balita di Tugas Akhir dalam perkuliahan yang akan-diterapkan antara ilmu yang didapat dipaparkan di Tugas Akhir ini.

Kloset Getar BALITA ditinjau dari Ergometrik sesuai dengan struktur-body BALITA serta diberikan instruksi dan brosur yang berisi cara-pengoperasian Kloset Getar BALITA. Brosur berisi cara posisi duduk yang-salah dan yang benar di kloset yang berbentuk kuda-kudaan. Masalah-selanjutnya, jangan menghidupkan saklar sirkuit listrik, jika belum benar posisi-duduk mereka di kloset yang berbentuk kuda-kudaan. Kitapun mengetahui-bahwa nilai Efisiensi untuk Kloset Getar BALITA ini adalah: ζ = 5,26 %. Hasil yang baik untuk optimal dari perhitungan adalah: Laju kecepatan Kloset-Getar BALITA = 0,014 (m/s). Laju kecepatan Sabuk V = 0,7 (m/s). Perhitungan-Pasak: Harga L_k / ds (mm): 0 ,75 < 1,36 < 1,5 → Baik. Umur- bantalan bola= 42.883,06 h. Laju kecepatan rantai rol = 0,00009 (m/s). Perhitungan Pegas : τ = 54,15 N/mm^2 < τ_d = 429,00 N/mm^2, → Baik. Perhitungan Cashing-Fiberglass: τ_{max} = 4,57 N/mm^2 < τ_d = 64,35 – 83,16 N/mm^2, → Baik. Sejak pengukuran antara tulang Ischiadica pada- BALITA kanan dan kiri adalah-19,5 cm, karena itu perancang mengambil jari-jari balok gelondongan 15 cm. Perhitungan jumlah paku yang dibutuhkan pada sambungan antara bagian kepala-kuda-kudaan dengan badan kuda-kudaan sebagai dudukkan kloset cukup: 1 buah, sedangkan perancang menempatkan: 4 buah → Baik. Perhitungan frekuensi-Kloset Getar BALITA : 0,0036 Hz. → Sesuai untuk kenyamanan- BALITA.