

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 ergonomic in-accordance with the BALITA body structure together with have broughted-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 $\zeta = 5,26 \%$. 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): $0,75 < \underline{1,36} < 1,5 \rightarrow$ very good. Calculation for bearing life is: 42.883,06 h. The sprocket wheel speed is 0,00009 (m/s). Calculation spring is: $\tau = 54,15 \text{ N/mm}^2 < \tau_d = \underline{429,00 \text{ N/mm}^2}$, \rightarrow very good. Calculation-Cashing Fiberglassis: $\tau_{\max} = 4,57 \text{ N/mm}^2 < \tau_d = \underline{64,35 - 83,16 \text{ N/mm}^2}$, \rightarrow 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 \rightarrow 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 \rightarrow Good. Calculating frequency in the vibratory-closet for BALITA is 0,0036 Hz. \rightarrow 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. Adapa- 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: $\zeta = 5,26 \%$. Hasil yang baik untuk optimal dari perhitungan adalah: Laju kecepatan Kloset- Getar BALITA = $0,014 \text{ (m/s)}$. Laju kecepatan Sabuk $V = 0,7 \text{ (m/s)}$. Perhitungan- Pasak: Harga $L_k / ds \text{ (mm)}$: $0,75 < 1,36 < 1,5 \rightarrow$ Baik. Umur- bantalan bola = $42.883,06 \text{ h}$. Laju kecepatan rantai rol = $0,00009 \text{ (m/s)}$. Perhitungan Pegas : $\tau = 54,15 \text{ N/mm}^2 < \tau_d = 429,00 \text{ N/mm}^2, \rightarrow$ Baik. Perhitungan Cashing- Fiberglass: $\tau_{\max} = 4,57 \text{ N/mm}^2 < \tau_d = 64,35 - 83,16 \text{ N/mm}^2, \rightarrow$ 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 \rightarrow Baik. Perhitungan frekuensi- Kloset Getar BALITA : 0,0036 Hz. \rightarrow Sesuai untuk kenyamanan- BALITA.

