

Title: Bio MMH model

Type: Copyright

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Details:

A computer program was developed to estimate the back compressive force at L5-S1. The input parameters to the biomechanical models are mode of load carrying, bag materials, age in years, stature in mm, mass of the workers in kg, torso flexion in degree, shoulder flexion in degree, mass of load carried in kg, thickness of bag in mm and included angle at the hip in degree. The output values of the models are moment at L5-S1 in Nm, abdominal pressure in mm of Hg, abdominal force in N, force exerted by muscle in N, BCF at L5-S1 in N, and spinal compressive tolerance limit in N.

Figure 1 (A-B) presents a screenshot input and output screen of the program.

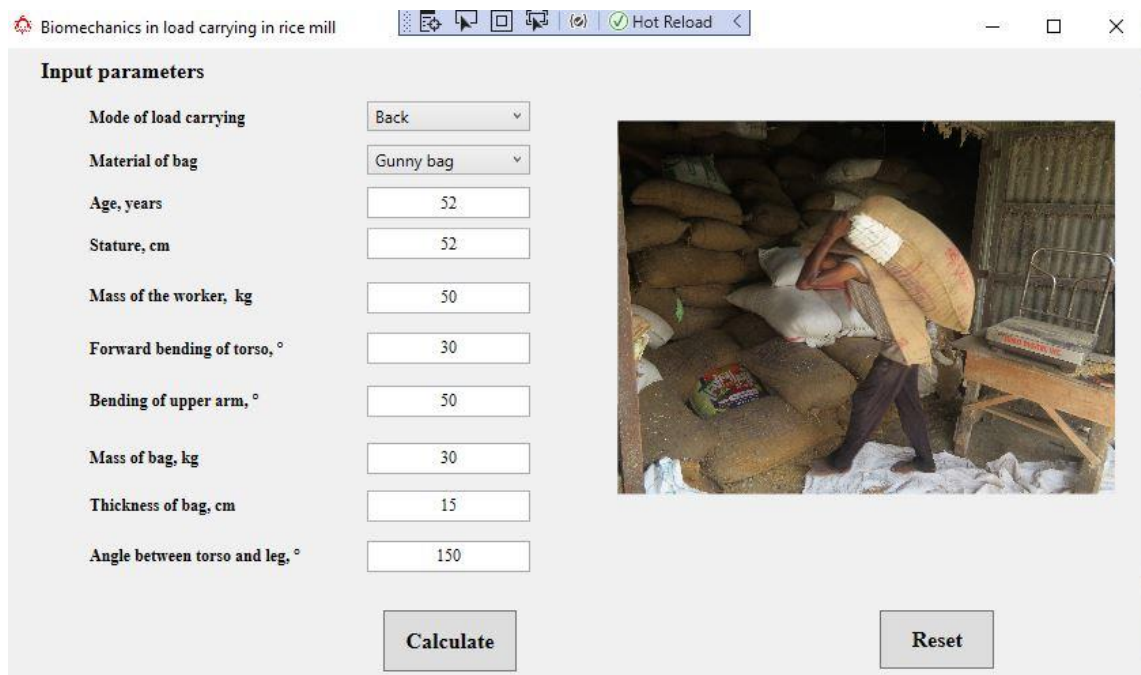


Fig. 1 (a): Input screen of the model

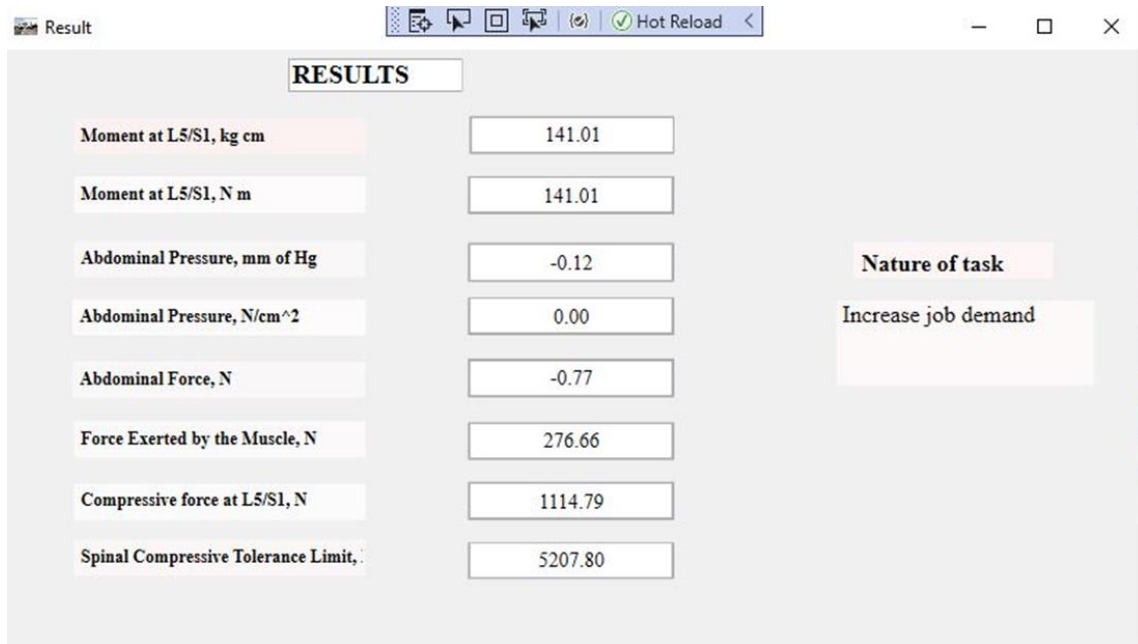


Fig. 1 (B): output screen of the model