CHOosing THE LAW OF ENERGY deposition WHEN DESIGNING ITIS CYLINDRICAL TARGETS

G.V. Dolgoleva

Keldysh Institute of Applied Mathematics, Russian Academy of Sciences, Moscow, Russia,   
 [dolgg@list.ru](mailto:dolgg@list.ru)

One of the main tasks when designing targets for UTS consists in the selection of the energy input-and consequently to get the burning working DT area. The exit of energy as a result of thermonuclear reactions should be greater than the invested energy. (gain greater than unity). And important issue is the amount of input energy.

Usually to compress the target uses the momentum to worsening [1]. Given that the worsening of the pulse in modern installations is very difficult to do, it seems preferable additional energy input in the form of a short pulse ("ignition" pulse).

In this paper we consider the task of choosing the law of input energy: the use of an igniting impulse and its influence on the parameters of the target.

Shown:

- the presence of an ignition pulse activates the "burning" of target;

- the use of an igniting pulse reduces the threshold narovliany for ignition targets.

The work is executed at support of RFBR grant №. 14-01-00251

References

1. Dolgoleva G. V., Zabrodin A.V. Computational construction of microtargets for shockless compression. Proceedings of Institute of mathematics and mechanics Ural branch of the Russian Academy of Sciences, 2008,c. 31-40.