

THE EFFECT OF THE LIGHT BREAKABLE WALL ON BLAST WAVE

TUOKKO,S.

The matter was what happens to blast wave itself when it goes through the light constructed wall breaking this. That is of interest for example in very long tunnels, where may be such light structures that are not necessary. It can be expected that the peak overpressure of the blast wave could rise in this case through reflection.

The test series was carried out in the shock tube. The shock tube is 24m long and 80 cm in diameter. Blast wave was made by exploding spherical TNT-charges about 1m from the open end of the shock tube. The model of the wall was fastened at 5m from the closed end.

As the model of the wall different materials were used changing the strength of the material case by case. For example steel and plywood were used.

As a result of the test can be said that when blast wave breaks the wall by passing through, the effect of this event is very little to blast wave itself.