

Ostrów Wielkopolski, 15.12.2012

### **Strength Analysis of the Mobile Stage ME-1 (5x6x5,1m)**

It has been confirmed by calculations that the total load capacity (load limit) of the mobile stage ME-1 (dimensions: width-6m, length-5m, height-5,1m), with the modifications taken into account according to Appendix 4 of the Report No. 2012/12/02:

- **500 kg/m<sup>2</sup>** – uniform vertical load applied to the mobile stage platform,
- **350 kg** – uniform vertical load applied to the front and back part of the roof structure,
- **1000 kg** – uniform vertical load applied to the middle part of the roof structure,
- **50 kg** – load applied to each of the pillars (the quadrosystem 250) supporting the roof,

#### **The Weather Conditions:**

Is allowed to utilize the mobile stage under the following weather conditions:

- **Wind** – the allowable wind velocity limit during utilization of the mobile stage is **70 km/h**.
- **Snow** – the thickness of the snow layer on the roof of the mobile stage should not exceed 8 cm, otherwise it is necessary to provide the systematic snow removal action;

The calculations have been carried out according to the following standards:

DIN 4113-1, DIN 4113-2, DIN 18800-1, DIN EN 13782 .

The detailed information concerning the calculations has been included into the Technical Report No. 2012/12/02.