



**ORGENERGOSTROY**

Dorf V. A., Deputy General Director on scientific work

# High-strength steel fiber reinforced concrete for permanent formwork



# Types of steel fibres

Harex 32×1.2



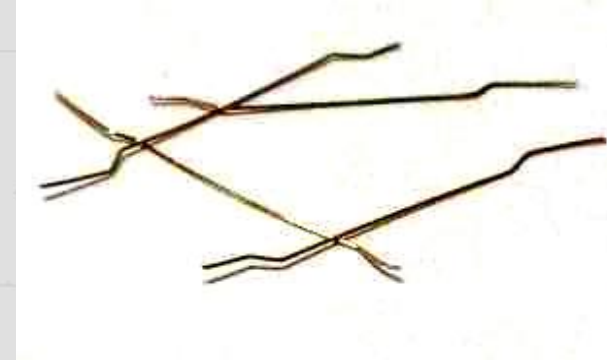
FSP-Lux 15×0.3



FSL 40×0.8



FSP-A-30×0.3

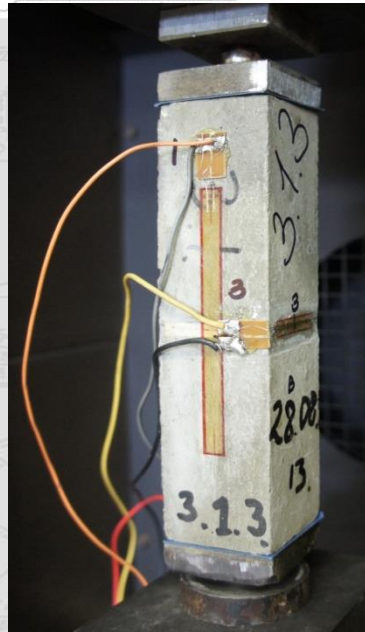


FSP-B 30×0.8

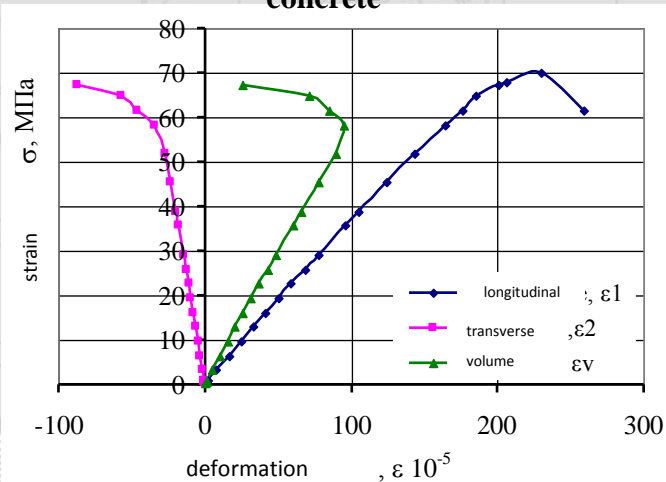


# Effect of steel fibers on strength and compressive deformability

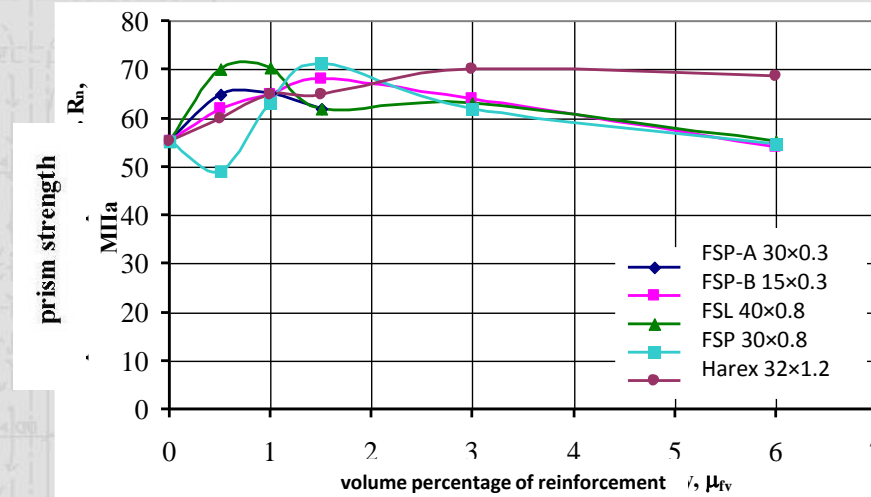
The test sample



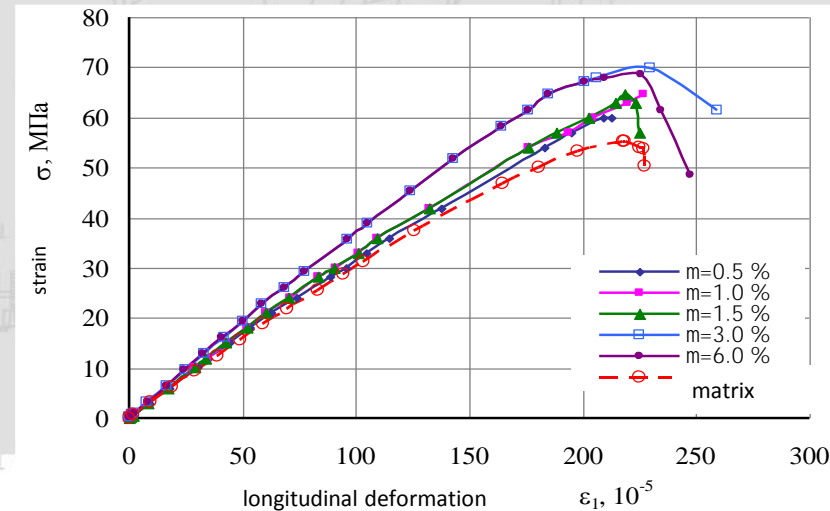
Deformation diagram of steel fiber-reinforced concrete



Influence of reinforcement parameters on prismatic strength



Full diagrams of deformation of steel-fiber-reinforced concrete at different percentages of reinforcement for FSP-B fiber 0.3x15





# Effect of steel fibers on tensile strength and deformability

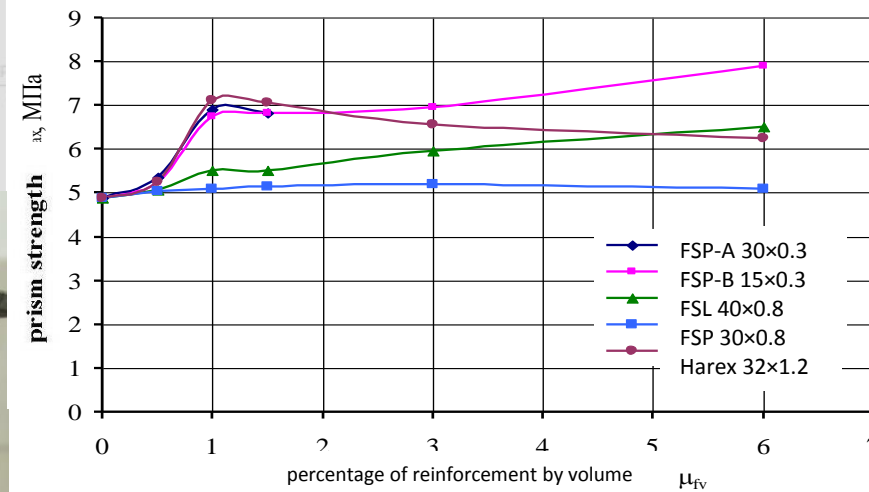
Fracture mode



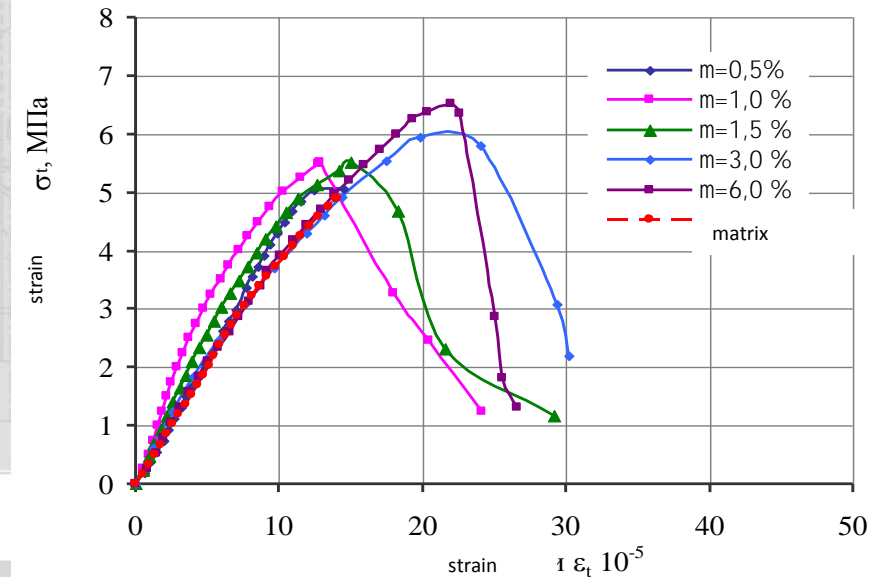
Experimental specimen in grips



Influence of reinforcement parameters on strength under axial tension

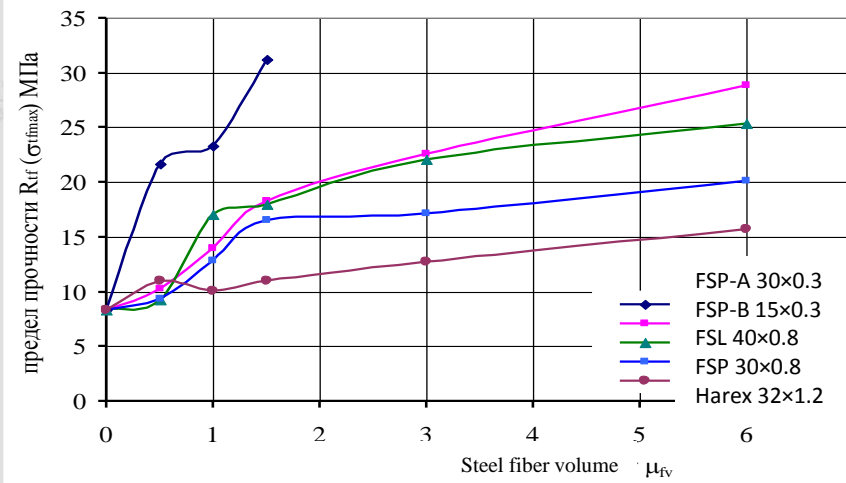
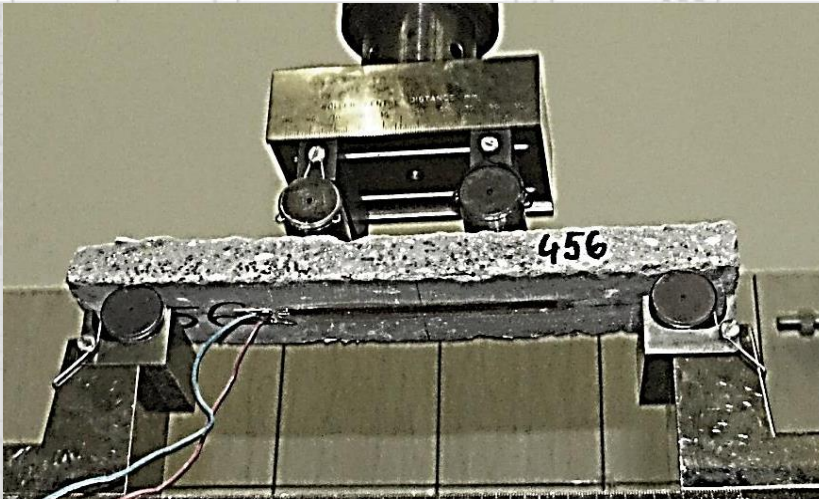


Full diagrams of deformation of steel fiber-reinforced concrete at different percentages of reinforcement for fiber FSP-B 0.3x15

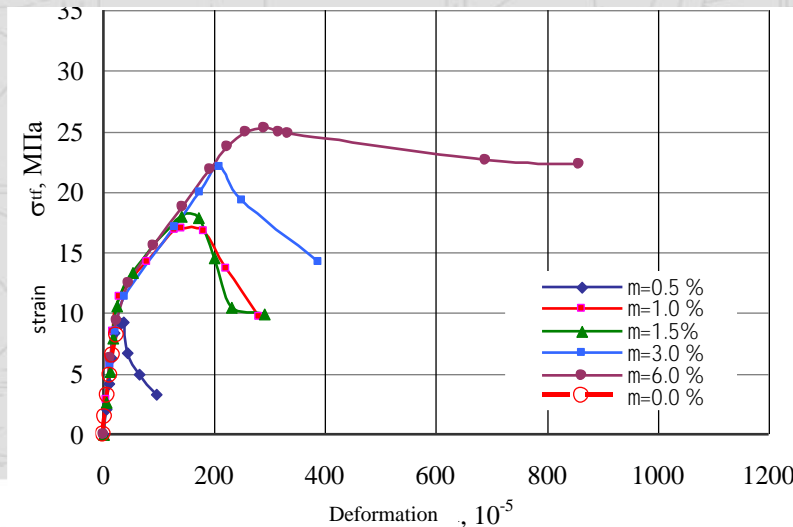


# Effect of steel fiber on strength and deformation in bending

Effect of steel fiber volume on bending strength



Full diagrams of deformation of steel fiber-reinforced concrete at different percentages of reinforcement for fiber FSP-B 0.3x15



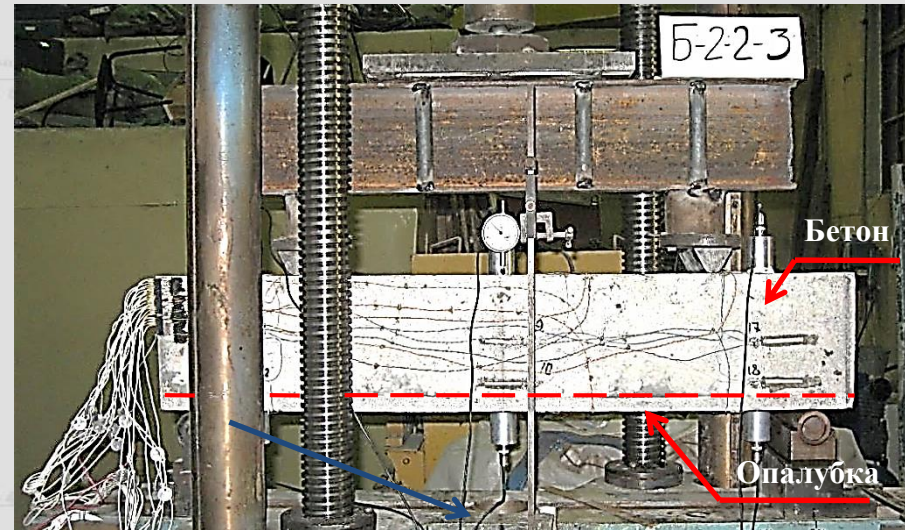


# Study of the combined work of formwork and monolithic concrete



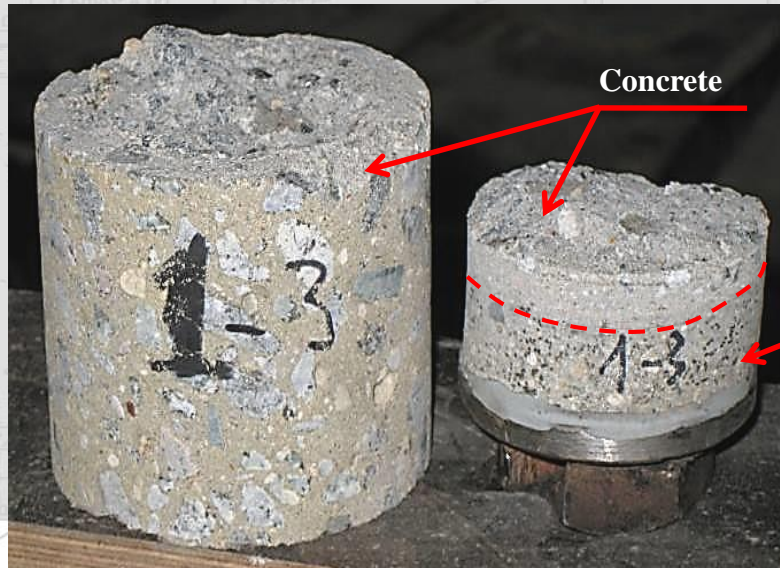
Forms

Concrete



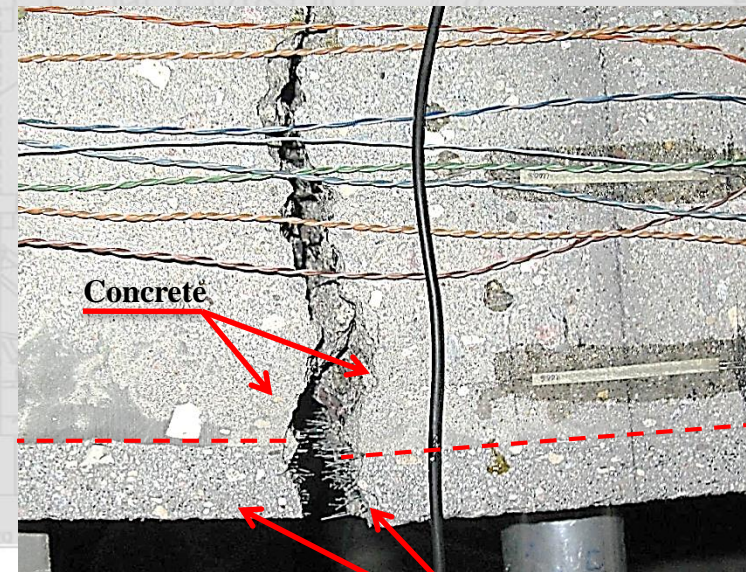
Бетон

Опалубка



Concrete

Forms



Concrete

Forms

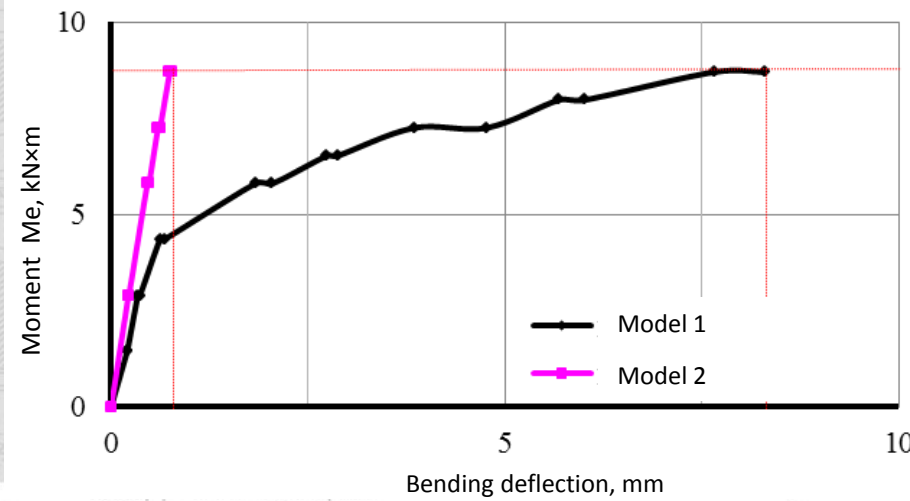




# Comparison of the behavior of a bent element with traditional reinforcement and steel-fiber-reinforced concrete formwork

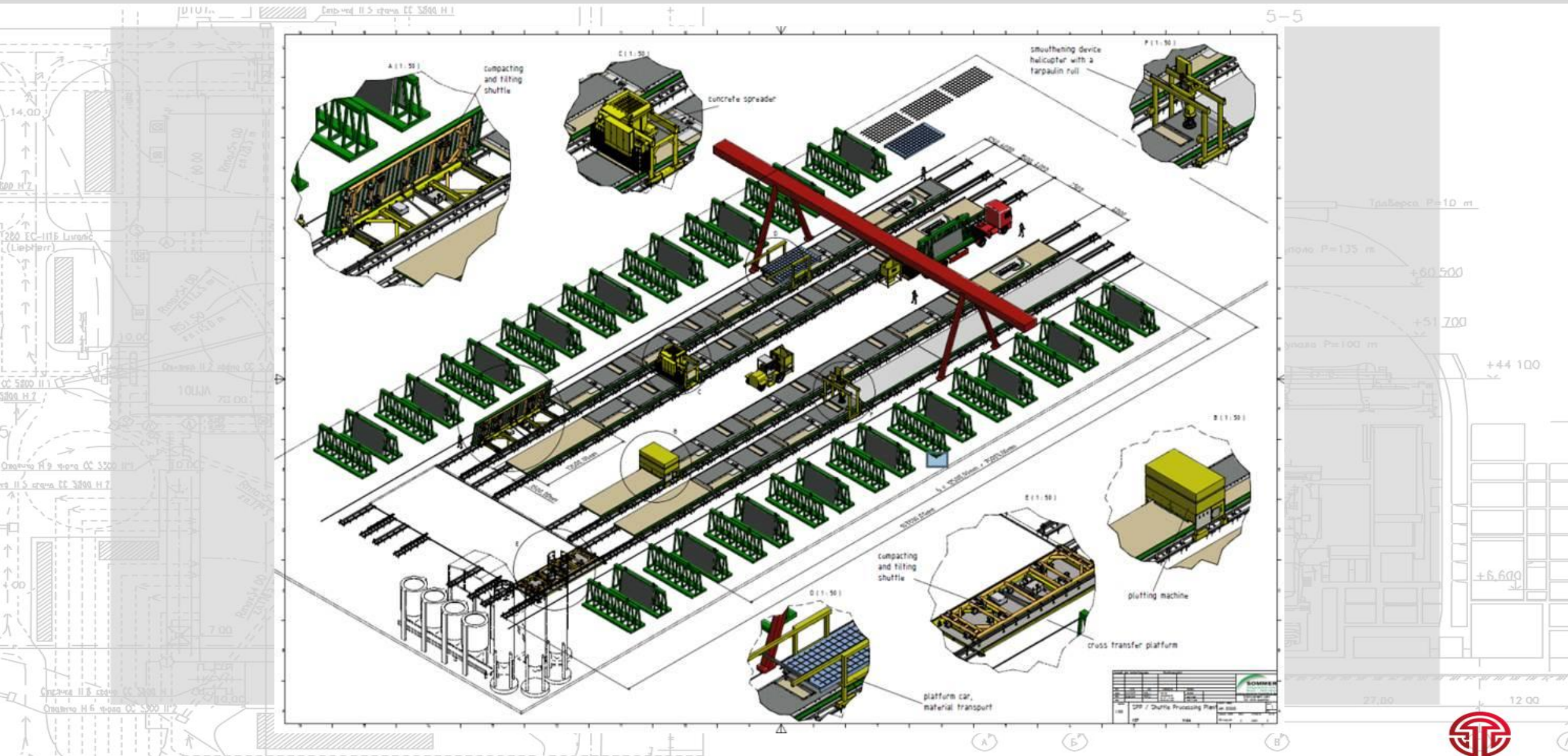


**Dependence of deflection on the bending moment for models**





# Technological scheme of the plant for the production of formwork



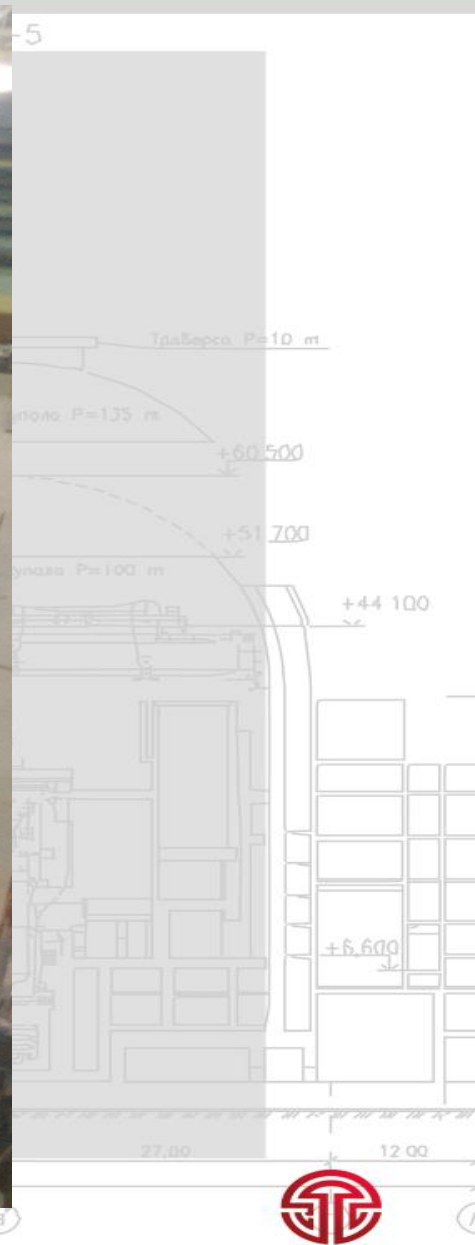
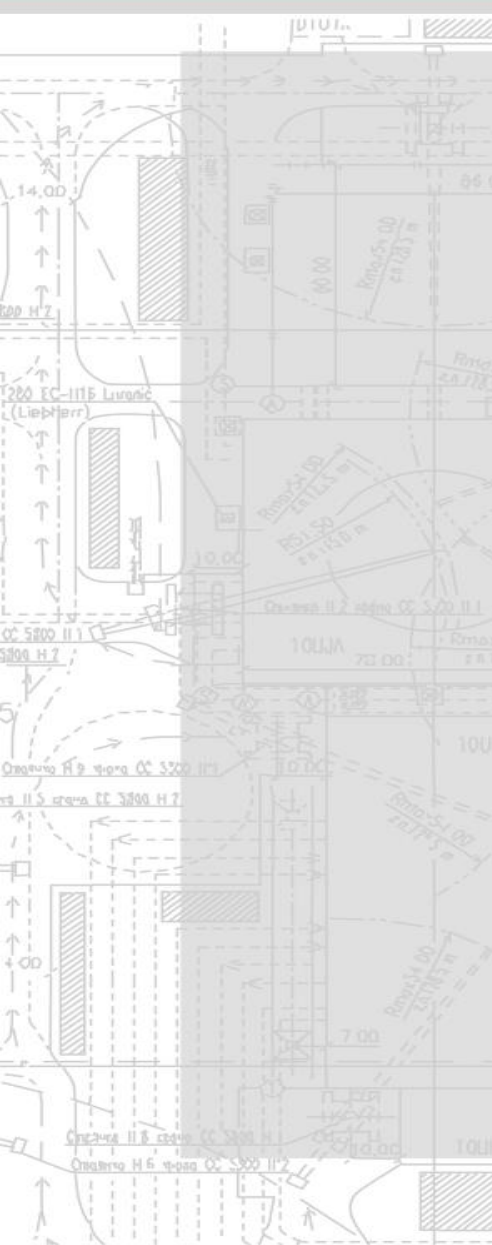


# Robot – placer of steel-fiber-reinforced concrete at the stage of installation





# Experimental fragment of room cast in SFRC permanent form





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**THANK YOU FOR ATTENTION!**

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