

Reviewer's form for thesis evaluation

1. Identification of the student

Student:	Tesfamariam Arha
Thesis:	Shear resistance of steel tubular columns filled with fibre reinforced concrete at elevated temperature
Institution:	Czech Technical University in Prague
Academic year:	2017/2018

2. Identification of the reviewer

Name:	Ing. Radek Pošta, Ph.D.
Institution:	Allcons Industry s.r.o.
Position:	Structural engineer

3. Fulfillment of thesis goals

excellent	above aver.	average	below aver.	weak
<p>Comments: I have not found anything to the goal "Statical studies for the shear and moment distribution and their interaction".</p>				

4. Academic/scientific/technical quality

excellent	above aver.	average	below aver.	weak
<p>Comments: The master thesis is of average quality. It is not surprising that the column has lower load capacity when the load eccentricity or temperature is increasing. Or that the load capacity is higher when the quality of concrete is increase. The work is not about "shear resistance of steel tubular columns filled with fibre reinforced concrete at elevated temperature" but about modeling concrete columns in compression or tension in software ATENA according to given parameters.</p> <p>I appreciate the extent of state of art.</p>				

5. Formal arrangement of the thesis and level of language

excellent	above aver.	average	below aver.	weak
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Comments: No comments.

6. Further comments

In the conclusions is written: "The compressive strength of cube (150x150x150 mm) is about 20% higher than the compressive strength of the cuboid (150x150x300 mm) made from the same material. The student calls it size effect. What is meaning of the size effect? What has real influence on the reduction of strength?"

Page 49 - I miss the comparison of experiment and model in figure 4. Prepare the graph for committee.

7. Grade: C (good)

Use the following scale

A (excellent)	B (very good)	C (good)	D (satisfactory)	E (sufficient)	F (fail)
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Place Prague

21 Jan 2018

The Reviewer

Ing. Radek Pošta, Ph.D.


