

REFERENCE OF DIPLOMA THESIS SUPERVISOR

TITLE: APPLICATION OF PERPENDICULARLY LAID NONWOVENS IN AUTOMOTIVE INDUSTRY

AUTHOR: KARTHIK KOLAPPAN

DIPLOMA THESIS SUPERVISOR: Ing. Tomáš Drbohlav

The main objectives of the work have been fulfilled. Theoretical part is logically structured and is followed by the list of references. The thesis itself is well written, using an appropriate language. The level of diploma thesis for textile engineering studies has been reached.

As shown in the experimental part of the study through actual implementation of unconventional lamination substrates and, more important, through evaluation of their performance.

The experimental chapter of the thesis does not provide full solid theoretical grounds of the selected test methods. But the methodology used is considered sufficient to compare different lamination substrates according the new functionality of seat covers for climate seats.

The results of the thesis are relevant to current needs and trends of automotive industry and are important for the further development of vehicle seat upholstery.

Several comments and questions:

- 1) Explain the reason for compression comparisson and current needs in automotive seating (example Skoda comfort pad foam structure with Z-structure).
- 2) Explain the hysteresis of compresion test charts.
- 3) Explain the avantage/difference of climate comfort of nonwoven structures compared to PUR foam layer.

Depending on the above evaluation I recommend the diploma thesis for defense. I evaluate the thesis with classification grade:

Excellent

Strakonice 15.5.2019

Signature: Drbohlav

