

# CAD+FEM+BHN

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011\_01v (AutoForm USER, 16 Sep 2006)





#### **WORKING STRUCTURE**

![](_page_5_Picture_1.jpeg)

![](_page_5_Picture_2.jpeg)

**AutoForm** 

![](_page_5_Figure_3.jpeg)

![](_page_5_Figure_4.jpeg)

![](_page_5_Picture_5.jpeg)

![](_page_5_Figure_6.jpeg)

#### **RESULT OF THE PROCESS**

![](_page_6_Figure_1.jpeg)

#### BHN MEASURING METHOD <sup>(2)</sup>

![](_page_7_Figure_1.jpeg)

#### **INDUSTRIAL APPLICATION**

![](_page_8_Picture_2.jpeg)

#### **APPLICATION IN STRESS ANALYSIS**

![](_page_9_Picture_2.jpeg)

#### SOFTWARE REQUIREMENTS

- Dynamic instrument control and signal display
- Automated measurement sequences
- Data storage, presentation
- Noise measure evaluation and comparison

#### **DYNAMIC DATA DISPLAY**

![](_page_11_Figure_2.jpeg)

#### **AUTOMATED MEASUREMENT**

![](_page_12_Figure_2.jpeg)

#### DATA STORAGE AND PRESENTATION

![](_page_13_Figure_2.jpeg)

#### NOISE MEASURE EVALUATION AND COMPARISON

![](_page_14_Figure_2.jpeg)

#### **CURRENT WORK**

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S-LK 7039

#### **NEW PART IN TOOL DESIGNING PROCEDURE**

![](_page_16_Figure_2.jpeg)

### CONCLUSION

![](_page_17_Picture_1.jpeg)

#### **BREAK THROUGH THINKING**

- ✓ PARALEL WORKING WITH CAD/CAM/BHN
  - ✓ REDUCE WORK TIME & EFICCIENT WORK
  - ✓ NO DATA OR INFORMATION LOSS
- ✓ REAL DATAS & REMAINING STRESS ANALYSIS
- ✓ COMPARE CALCULATED AND REAL, MEASURED VALUES

## ✓ FUTURE APPLICATIONS

#### References

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NATIONAL INSTRUMENTS

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- 2. Dr. István A. Szabó, Lajos Harasztosi, Dr. András Bükki Deme University of Debrecen Department of Solid State Physics, Computer controlled Instrumentation for non-destructive testing of materials with Barkhausen noise