### ANSYS MULTI-PHYSICS / LS-DYNA SOLUTION

# WESTERN DIGITAL (THAILAND) CO., LTD.

**COMPONENTS OPTIMIZATION WITH LS-DYNA SOLVER** 

### Thailand



## **WD's Overview**

Western Digital Corporation (WD) designs, develops, manufactures and sells hard drives. It sells its products worldwide to original equipment manufacturers (OEMs) and original design manufactures (ODMs) for use in computer systems, subsystems or consumer electronics (CE) devices, and to distributors, resellers and retailers. The Company's hard drives are used in desktop computers, notebook compu-ters and enterprise applications, such as servers, work-stations, network attached storage, storage area networks and video surveillance equipment. Additionally, its hard drives are used in CE applications, such as digital video recorders, and satellite and cable set-top boxes. It markets its hard drives under brand names, including WD Caviar, WD Raptor, WD VelociRaptor, WD Scorpio, WD Elements, My Passport, My Book, My DVR Expander and GreenPower.



"As the product performance has been concerned, we have considered the components and the process configuration since they were in the paper design phase to maximize the performance of the end-product. The ANSYS software has assisted AME-HSA department for the performance of Head Stack Assembly achievement."

Boripat Therdthai Thienthong Sakol Punglae Naknual FEA Engineer Manager FEA Engineer

#### Challenges

- To achieve the target of HSA performance since the paper design phase
- To benchmark the Head Stack Assembly performance
- To set the configuration for wellmatch with each program

### **Solution**

- Deploy ANSYS Multi-physics with LS-DYNA solver:
- Reducing the investment in term of prototype and evaluation cost
- Characterizing the process behavior at the paper design phase

### **Benefits**

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• With the ANSYS software, the evaluation phase has been shorter that the previous practice

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- This practice is capable of obtaining the machine configuration since the first implementation
- Less or none design changes in the prototype phase





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