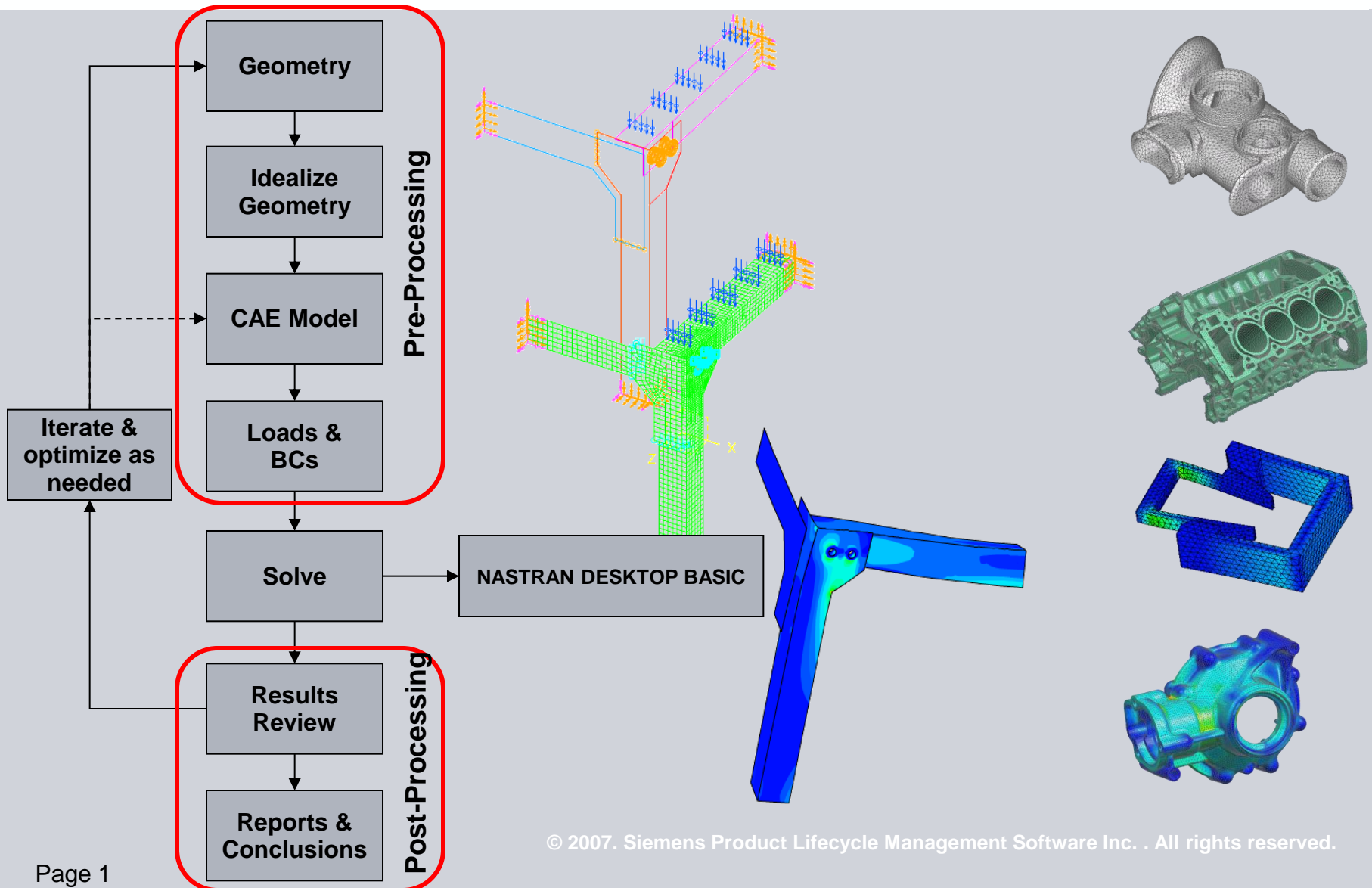
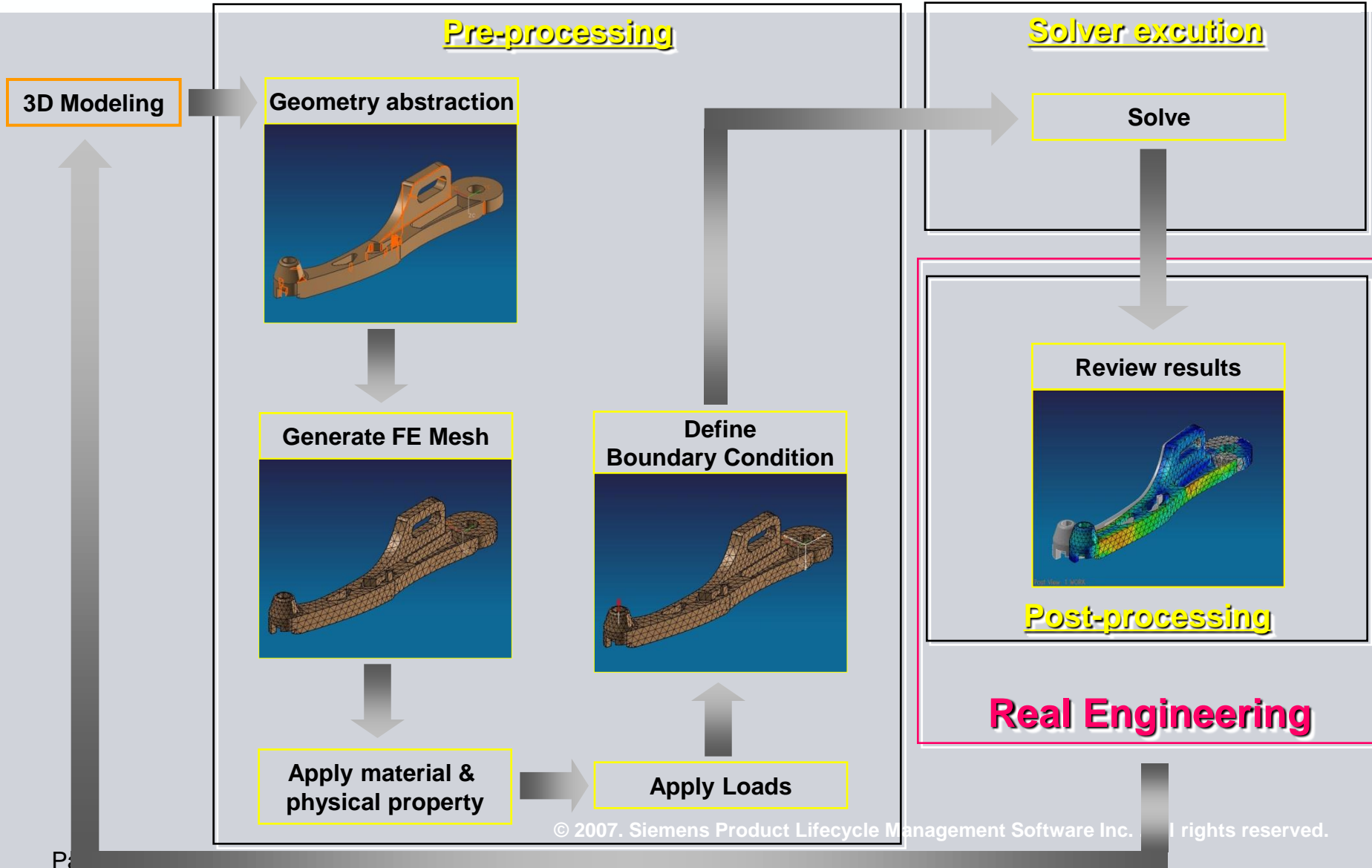


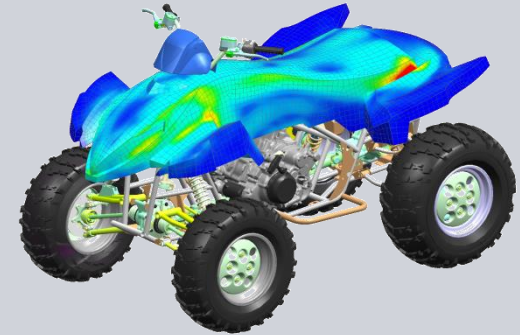
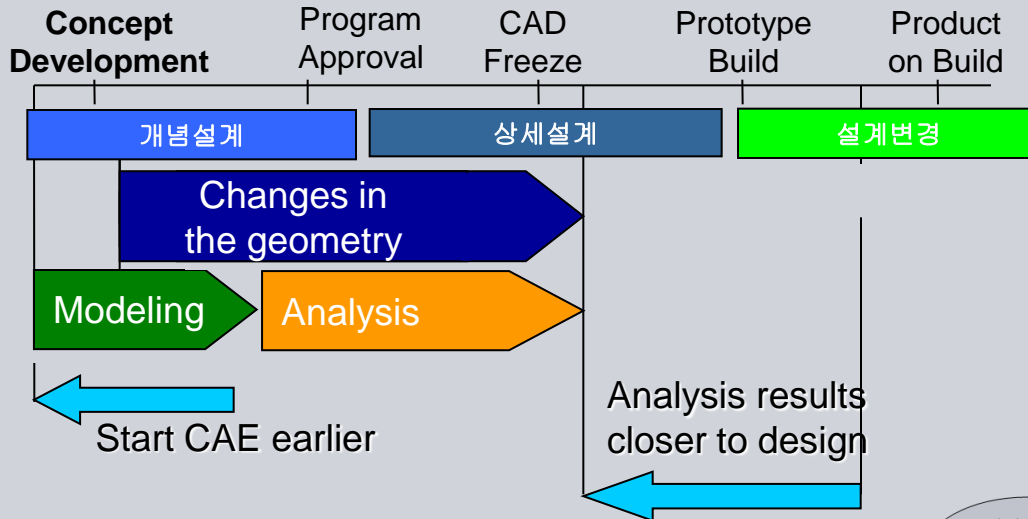
## 1. CAE PROCESS



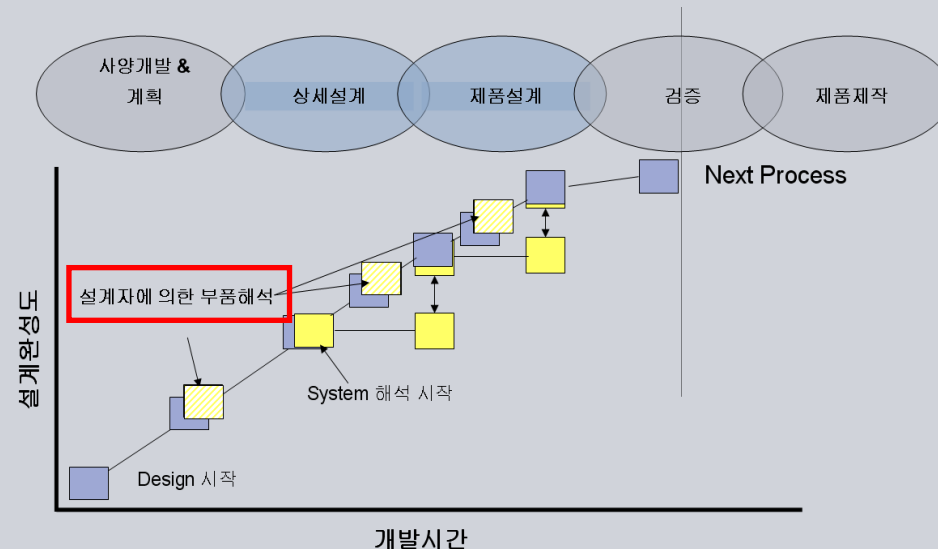
## 1. CAE PROCESS



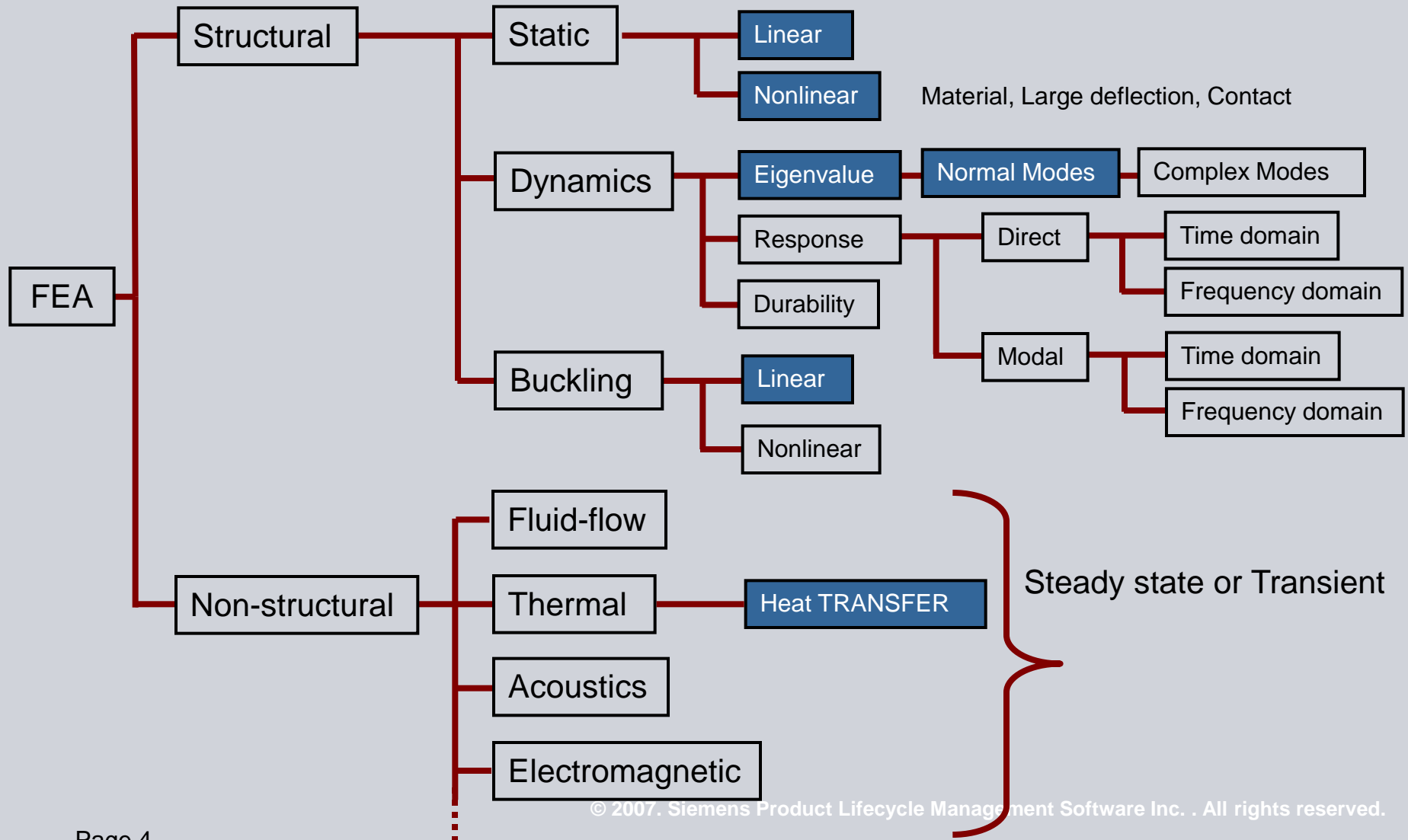
## 2. CAE 필요성



- 해석적용 시점이 빨라지고 있습니다!!!
- 상품 조기 시장 출시 !!!
- 원가절감 구현 !!!

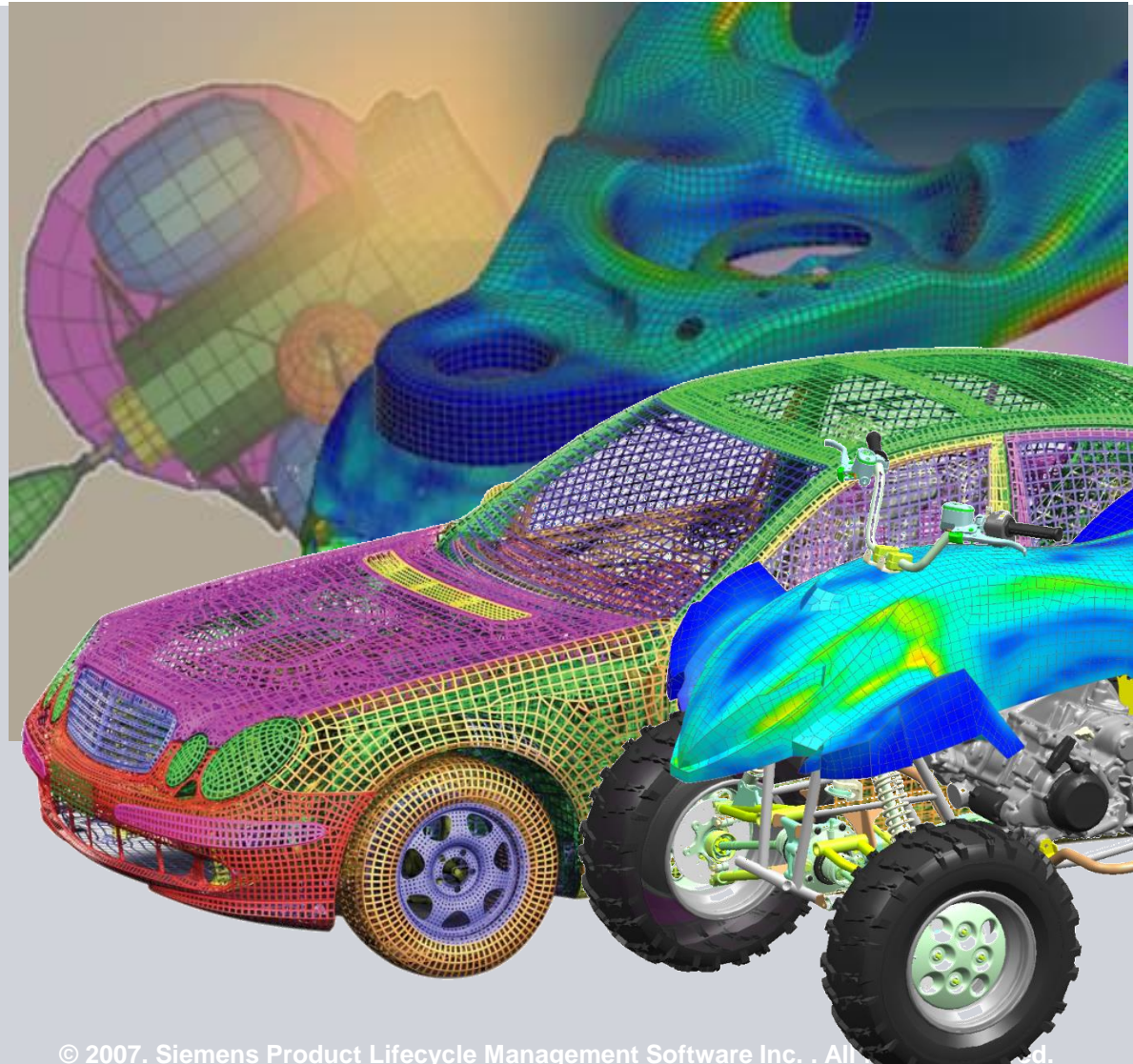


### 3. ANALYSIS TYPE : NX CAE



## 4. ANALYSIS TYPE : Structural

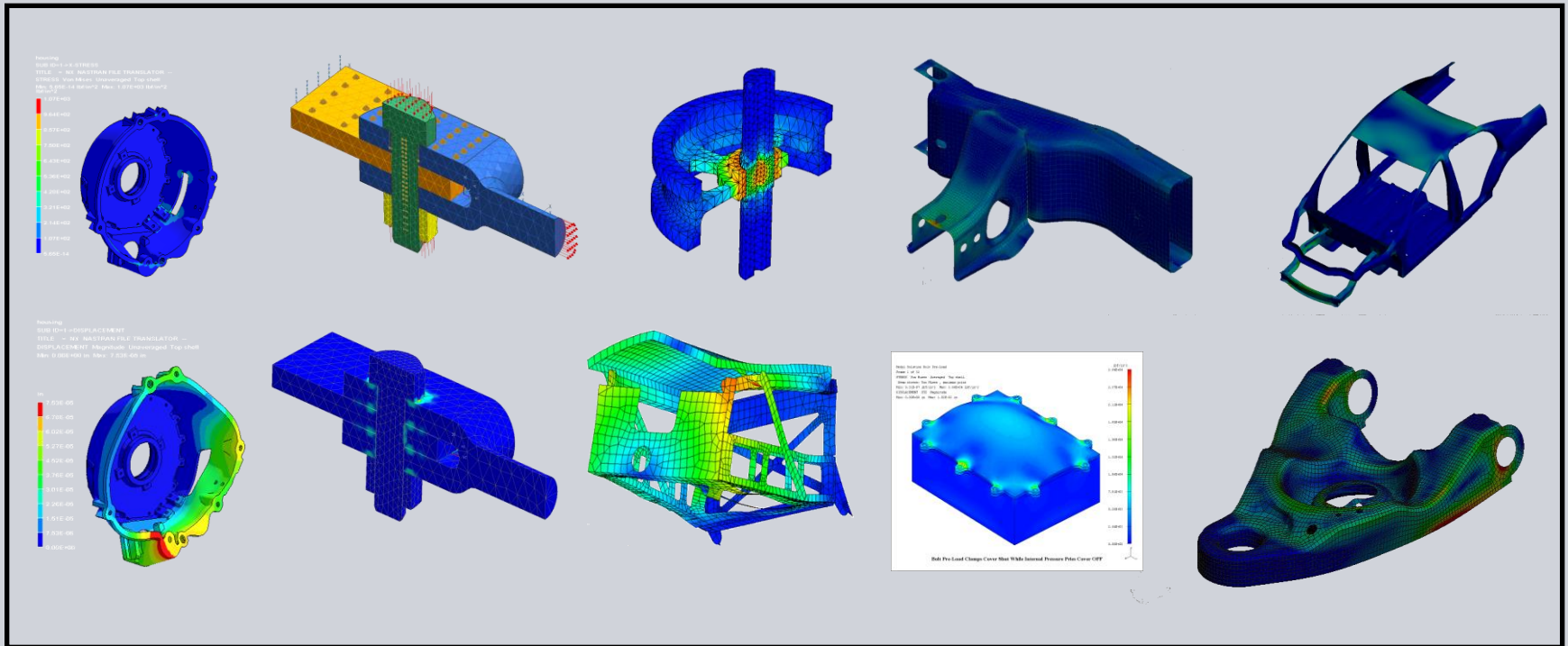
- ◆ Linear Static
- ◆ Nonlinear
- ◆ Normal Mode Dynamics
- ◆ Modal Response
- ◆ Linear Buckling
- ◆ Durability & Fatigue
- ◆ Optimization





## 5. Linear Static Analysis

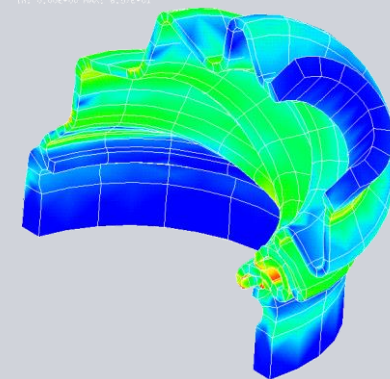
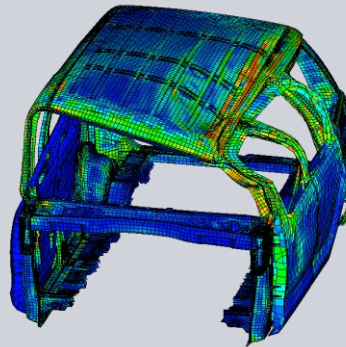
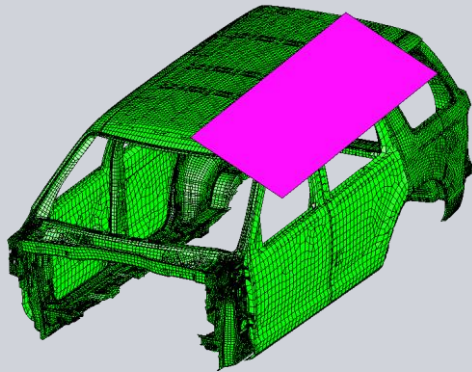
- ◆ 정적 하중 상태에서의 구조물의 강도/강성 해석 및 보강
- ◆ 교량 등의 철골 구조물 등의 좌굴 해석 및 열 응력 해석



## 6. Non Linear Analysis

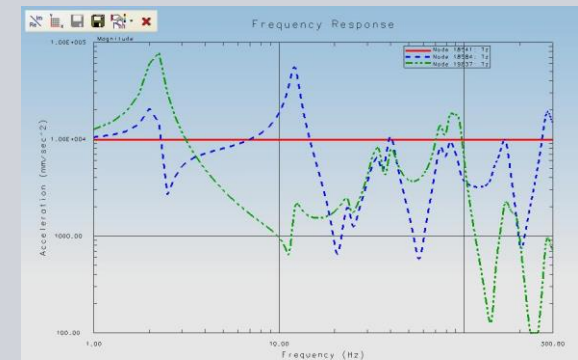
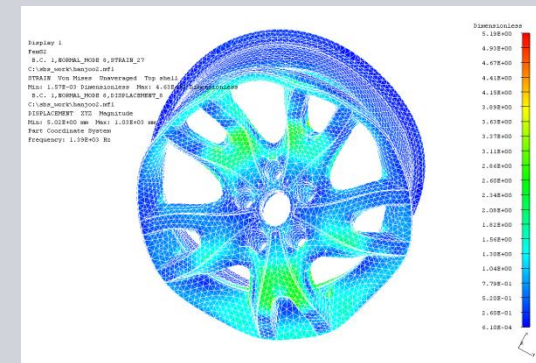
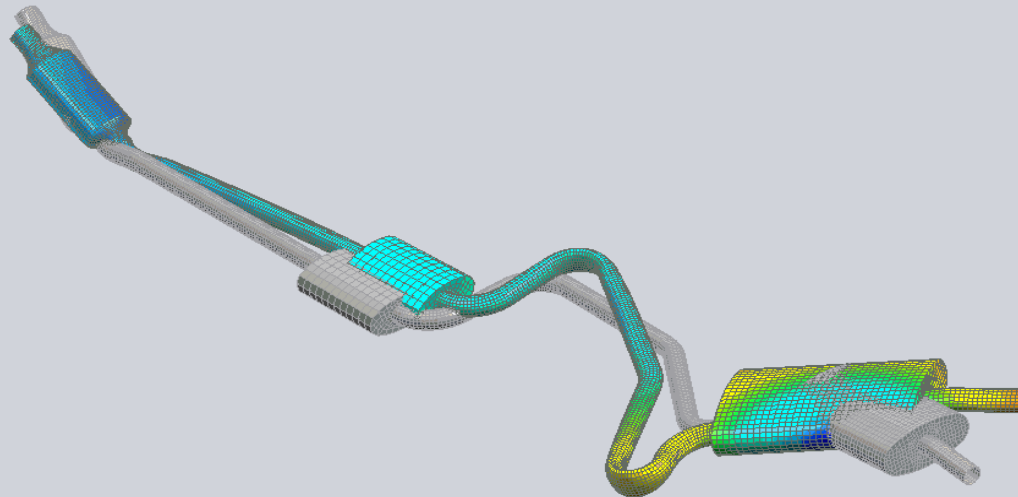
### ◆ Plastic, Geometry Non Linear

◆ Basic nonlinear 의 범위 외의 비선형특성의 대변형 이나 특수재질의 특성 등을 포함한 포괄적인 비선형 문제의 해결을 위한 module



## 7. Normal Mode Dynamic Analysis

### ◆ 고유 모드 해석을 통해 회전체 및 구조물 등의 공진 회피

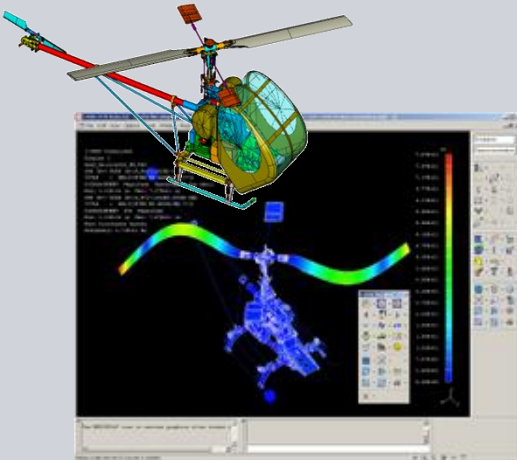




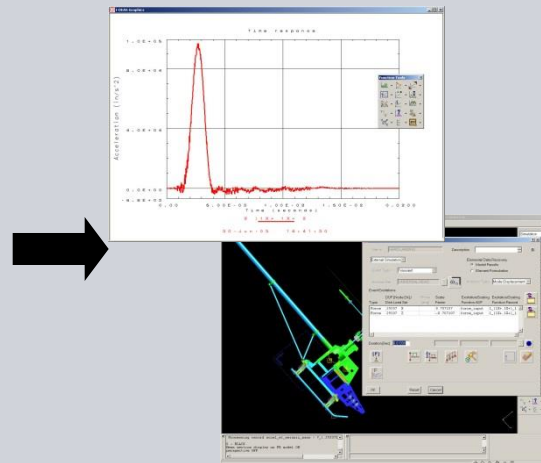
## 8. Response Analysis

### ◆ 주파수 응답 해석을 통해 외부의 가진에 의해 발생하는 진동 감소

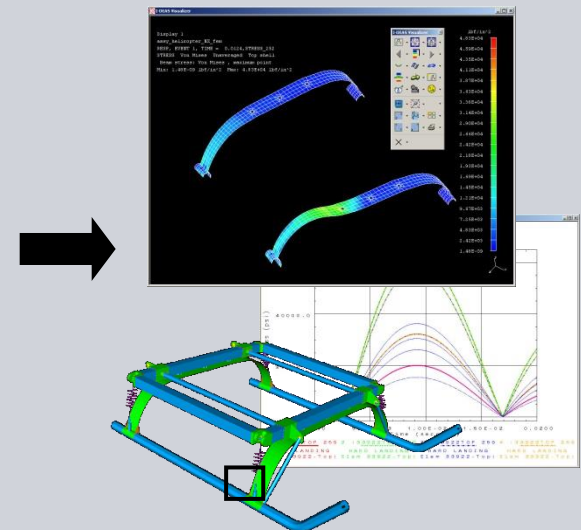
Review Modes



Create acceleration function and impact event

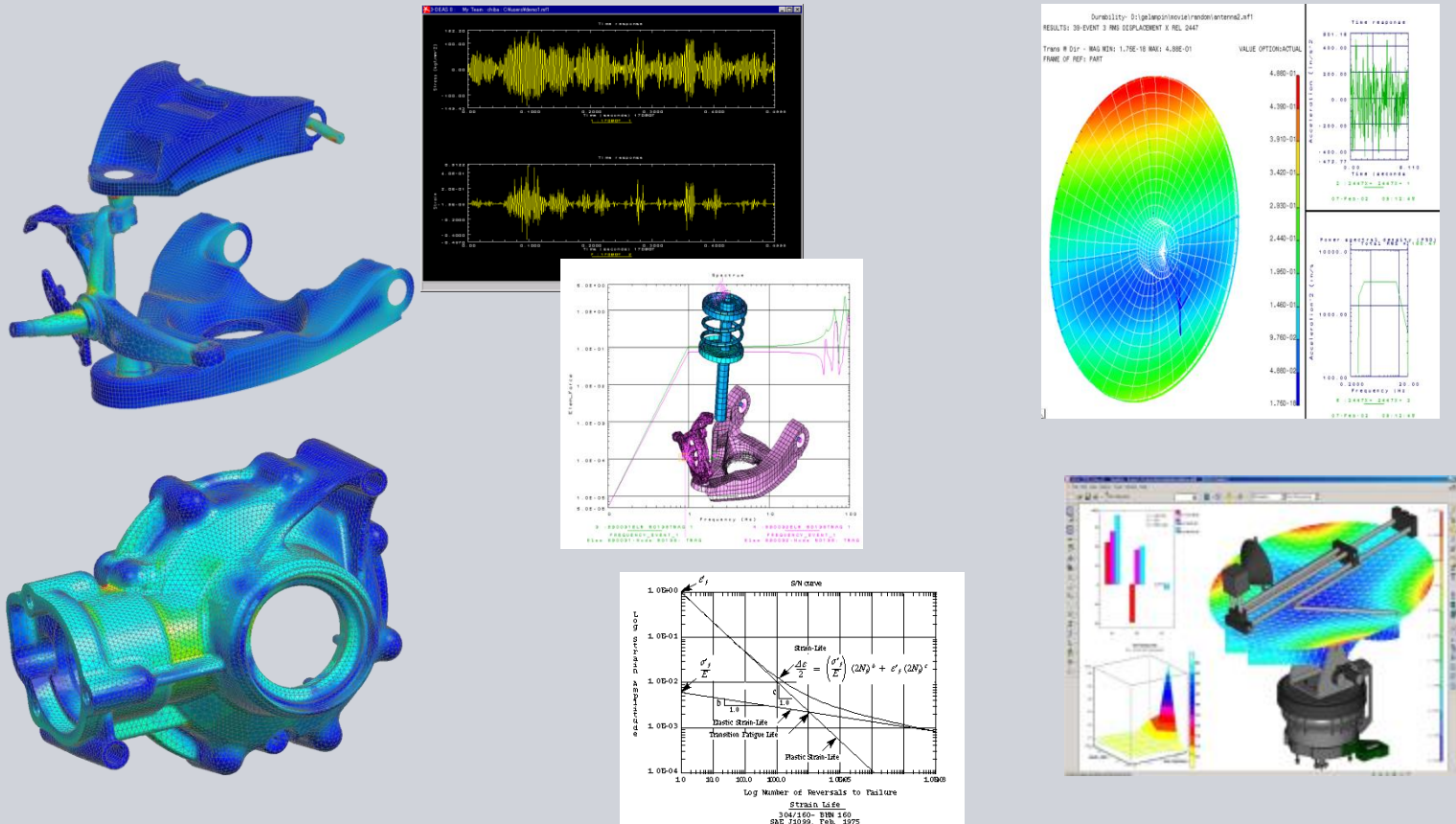


Evaluate Response  
Displacement, Stress,  
Acceleration



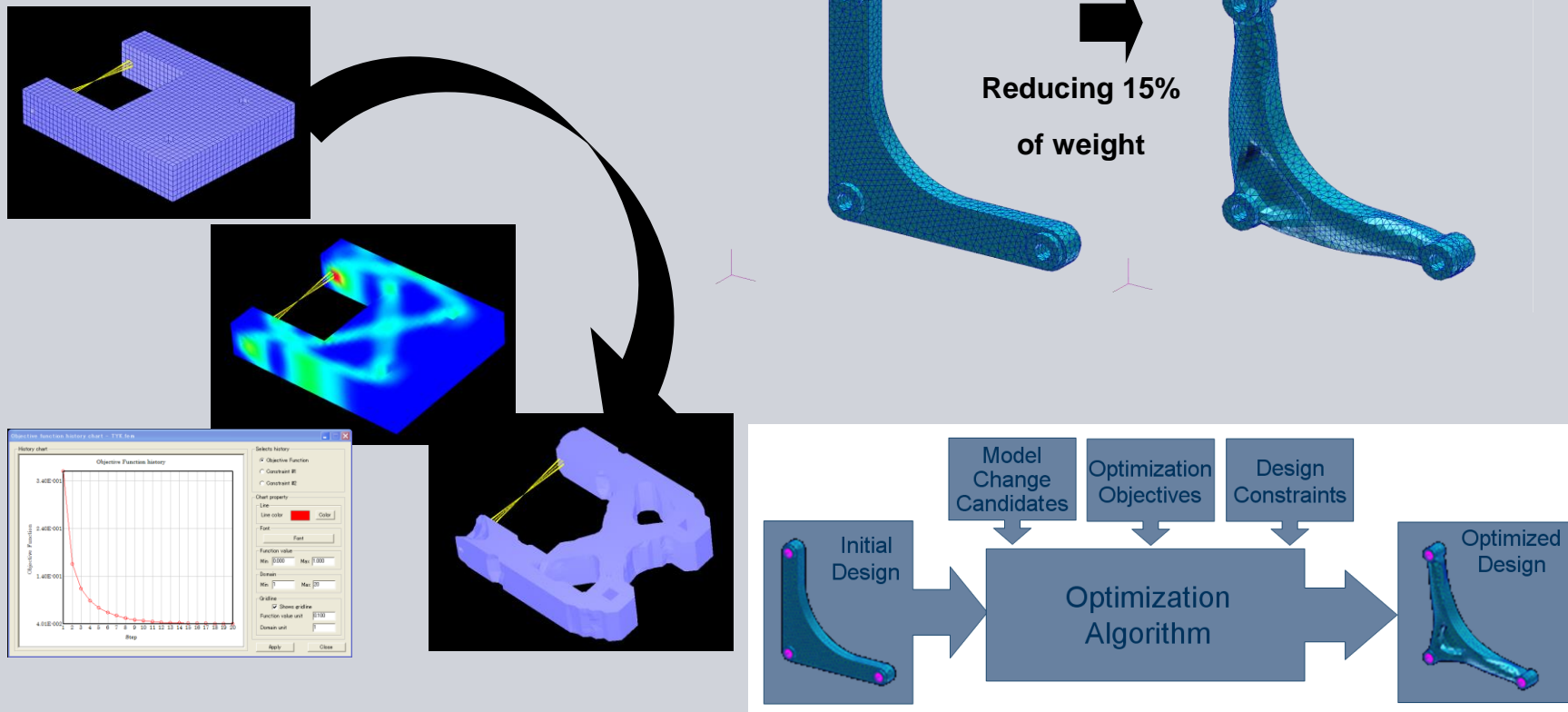
## 9. Durability & Fatigue Analysis

◆ 제품 초기 설계단계에서 내구(피로)해석을 수행, 개발비용과 시험비용(Test Costs)의 감소, 설계 최적화 추진



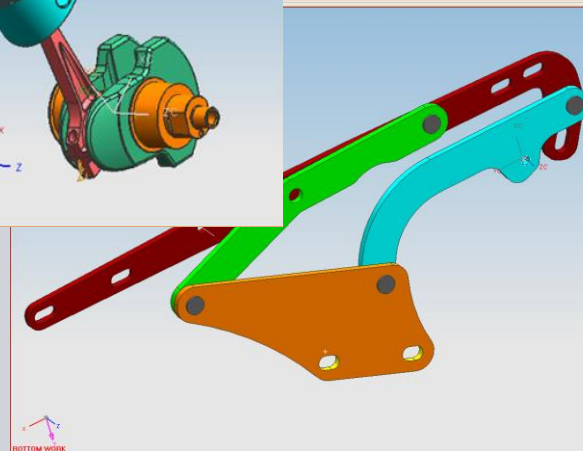
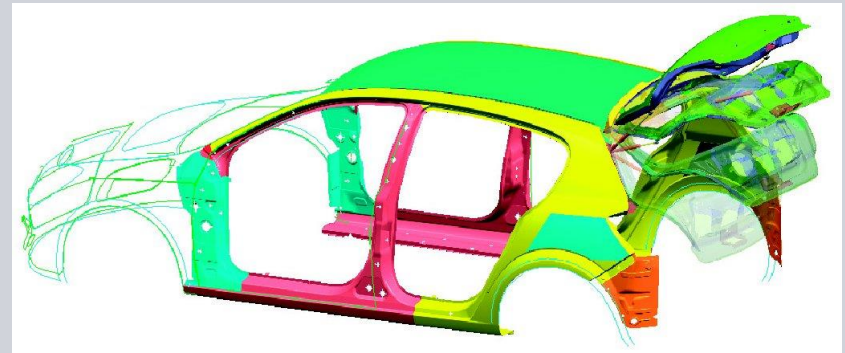
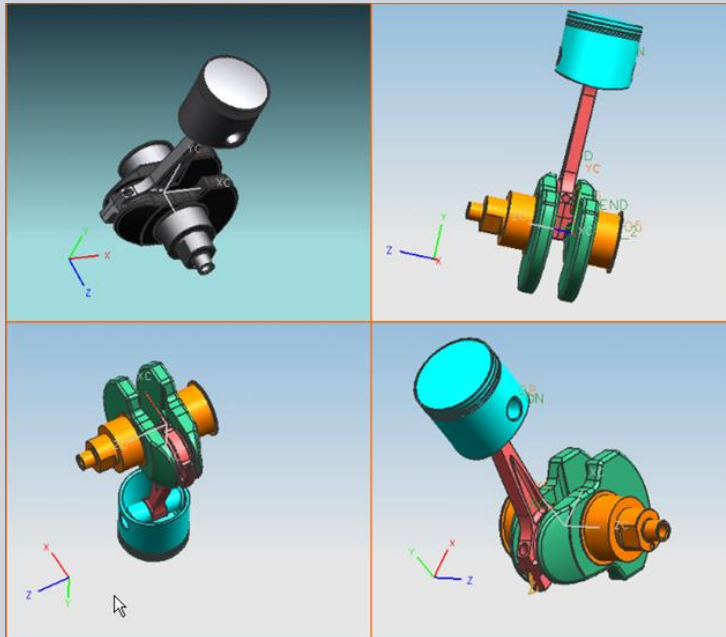
## 10. Optimization

◆ 해석을 통해 부품의 경량화, 응력을 최소화할 수 있는 최적화 형상 구현



## 11. Motion Analysis

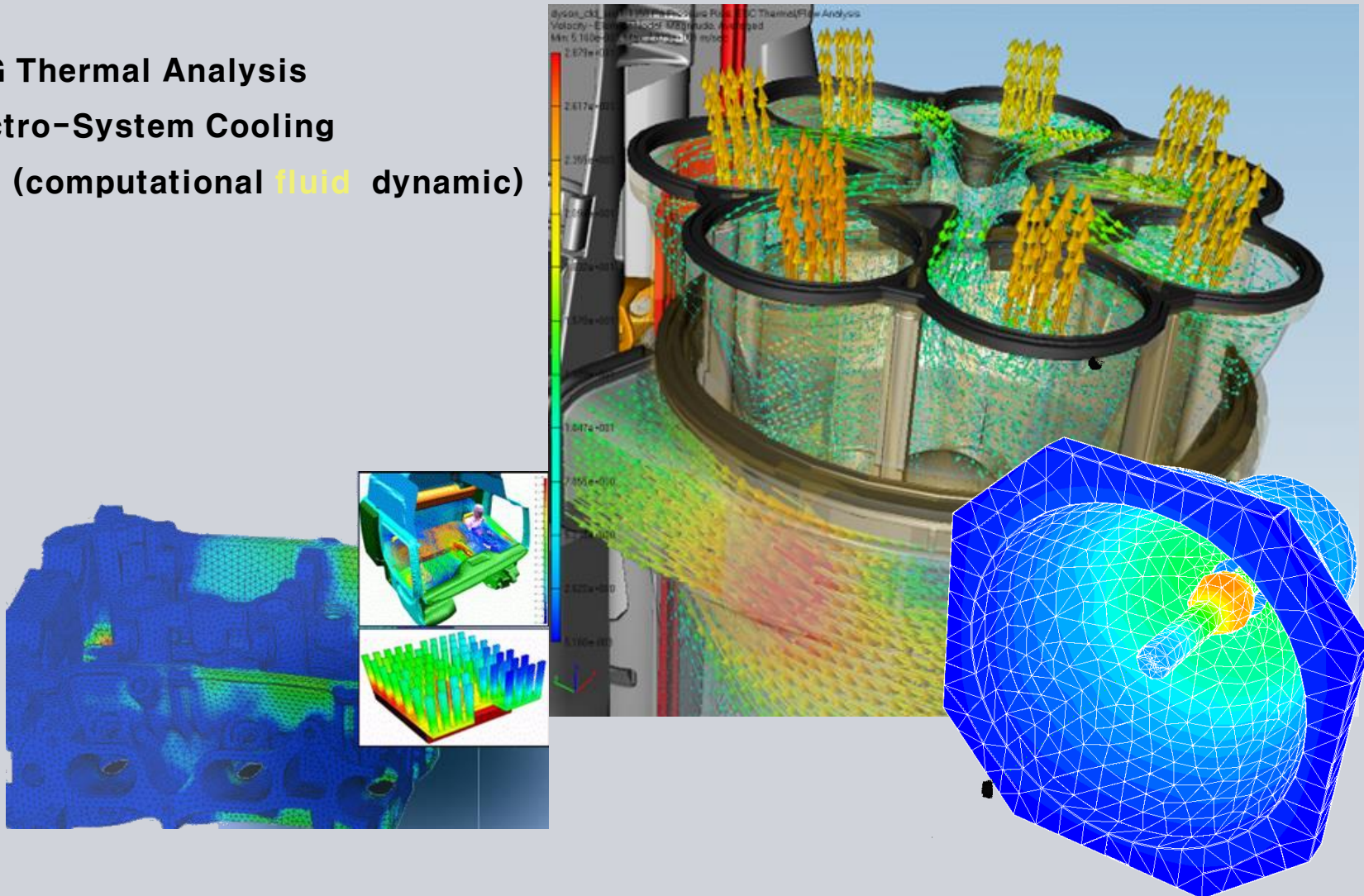
- ◆ 조립체의 동작에 의해 발생하는 기구학적 간섭 확인 및 운동 특성 분석
- ◆ 중력을 고려한 운동특성의 분석





## 12. ANALYSIS TYPE : Non-structural

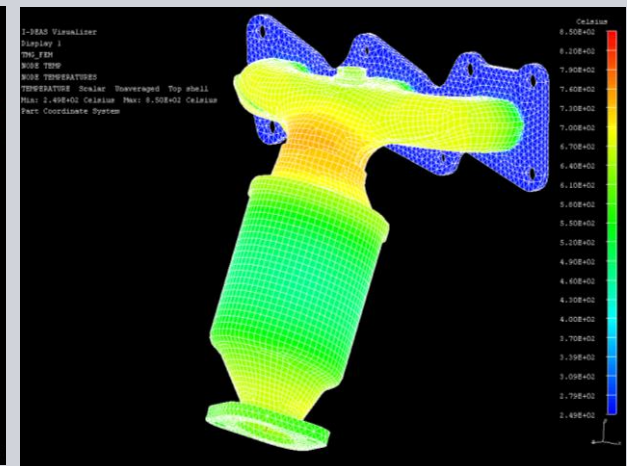
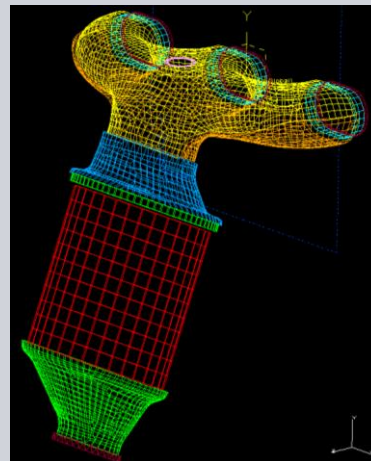
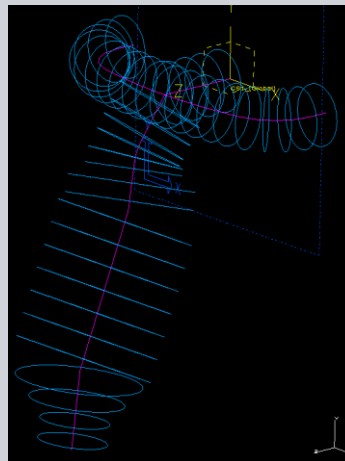
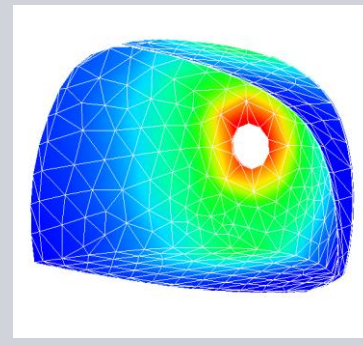
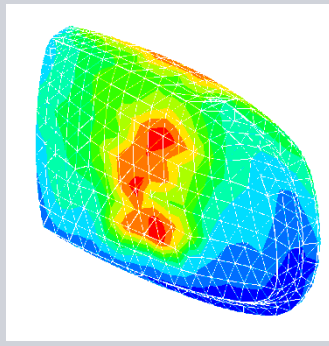
- ◆ **TMG Thermal Analysis**
- ◆ **Electro-System Cooling**
- ◆ **CFD (computational fluid dynamic)**





## 13. Thermal Analysis

### ◆ 열의 대류, 복사, 전도 의해 발생하는 열 전달 해석



## 14. Flow Analysis

- ◆ 공기 등 유체이동에 따라 발생하는 역학적 문제 해결
- ◆ 압축/비 압축유동, 강제/자연대류에 의한 열 유동 해결

