

# Autodesk® Nastran® In-CAD 2016

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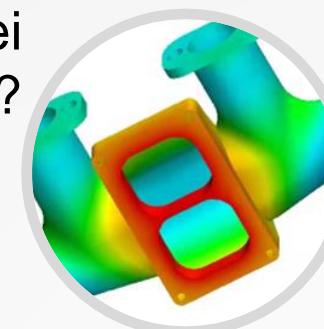
# Zusammenfassung

Autodesk Nastran InCAD bietet eine breite Palette von Simulationsmöglichkeiten.

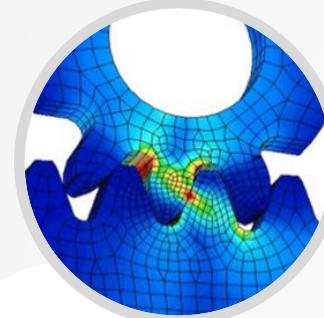
Diese Präsentation zeigt Einsatzmöglichkeiten und Anwendungsbeispiele.

# Haben Sie diese Herausforderungen?

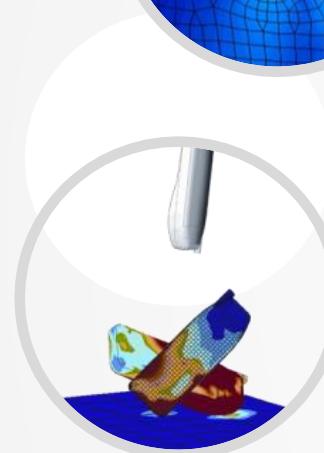
Was passiert bei Temperaturänderungen?



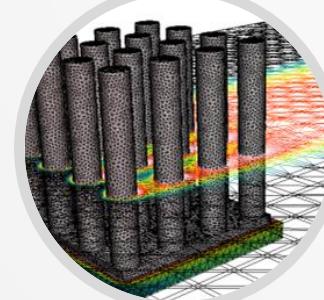
Wird es versagen?



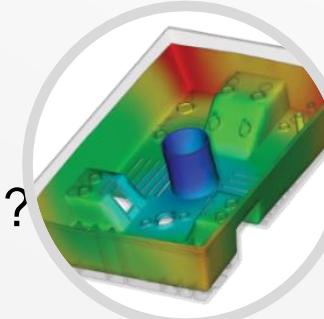
Was passiert wenn es herunterfällt?



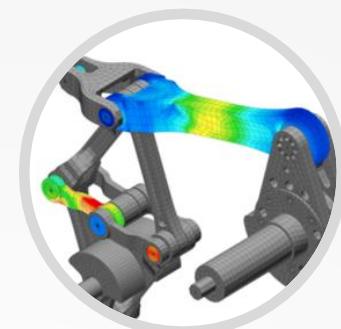
Wird es überhitzen?



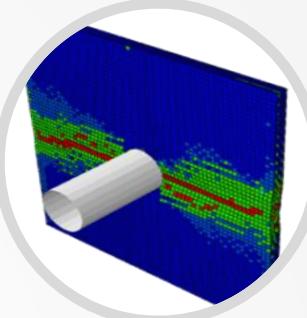
Wird es Defekte haben?



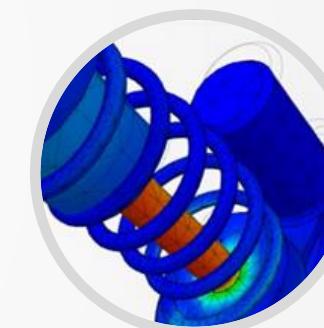
Wann tritt Versagen auf?



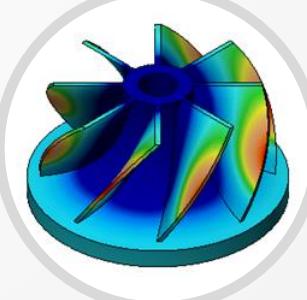
Wie macht sich Versagen bemerkbar?



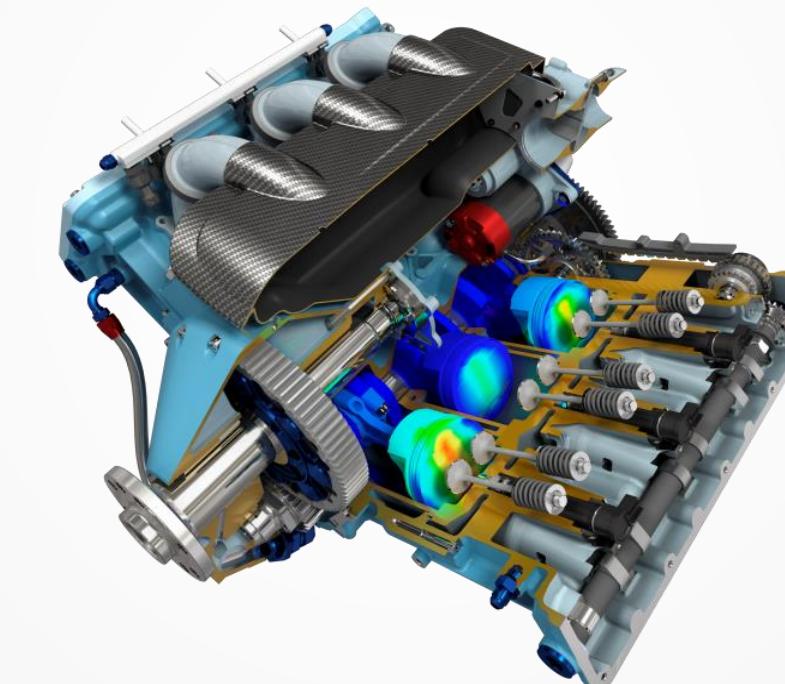
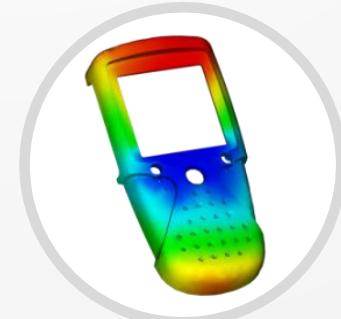
Wie interagieren Bauteile?



Wie stark muß das Bauteil sein?

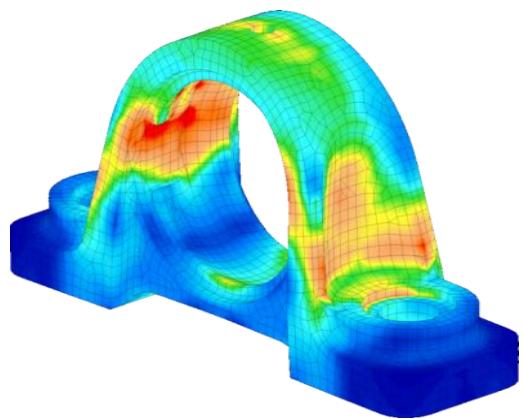


Wie leicht kann ich es machen?

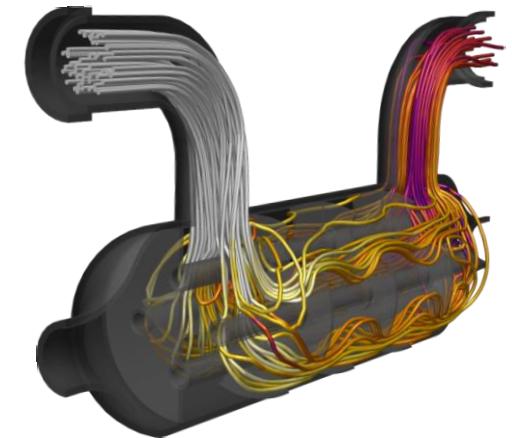


# Portfolio der Simulationsprodukte

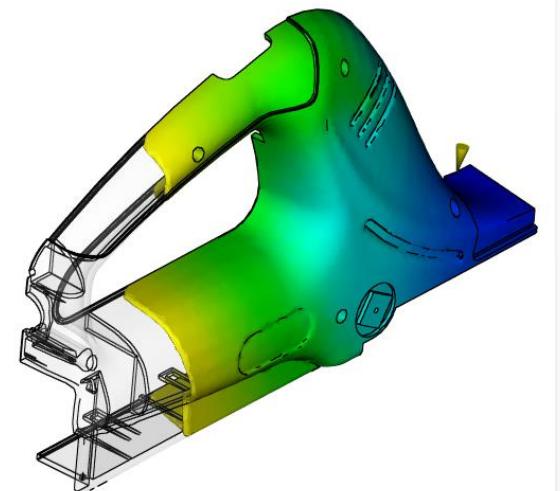
Mechanik



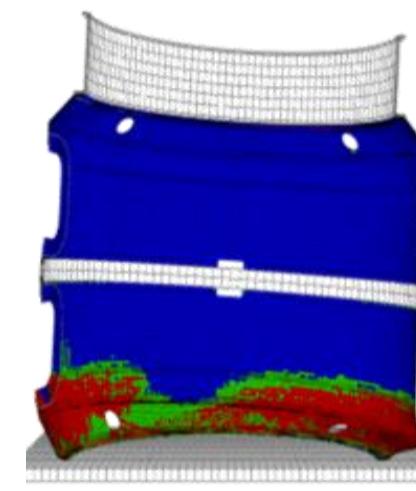
Strömung(CFD)



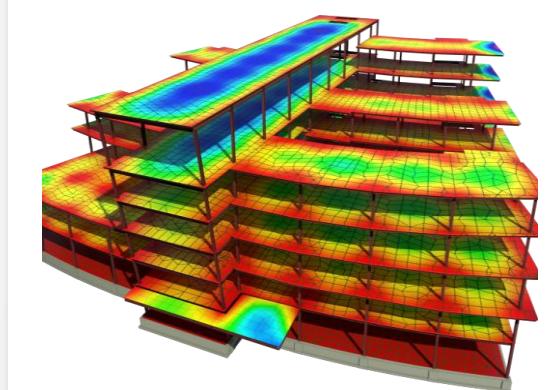
Kunststoff-spritzguß



Komposit



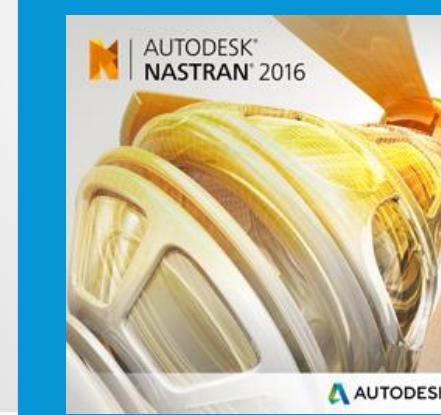
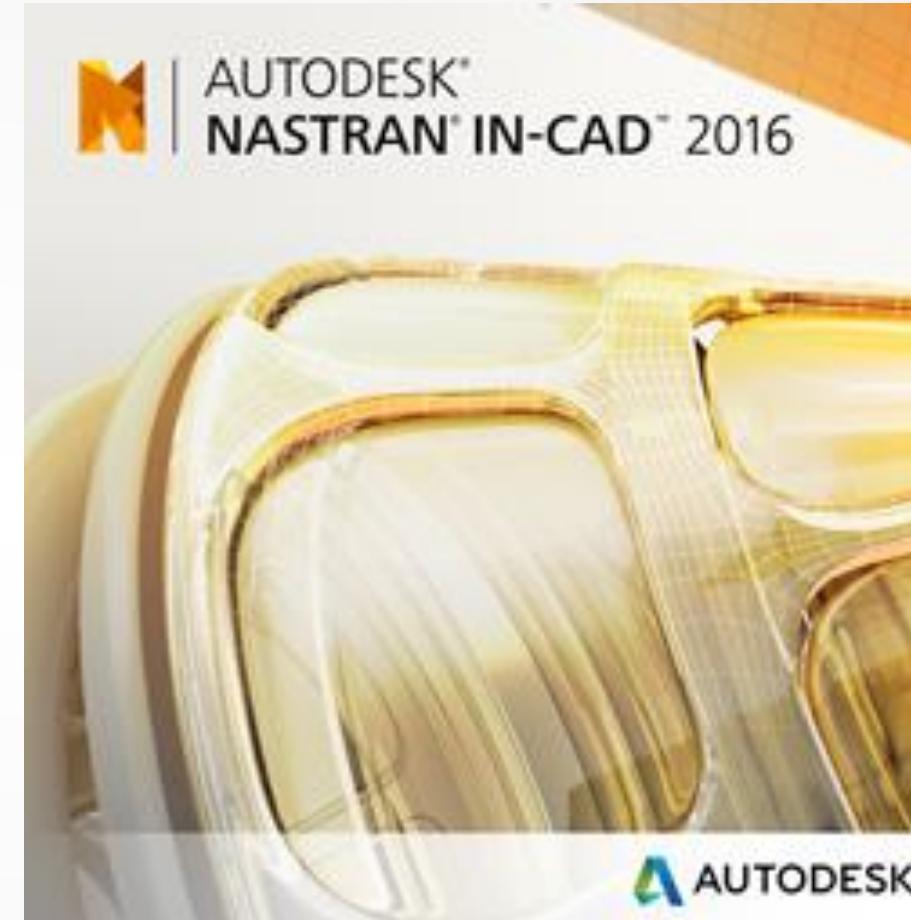
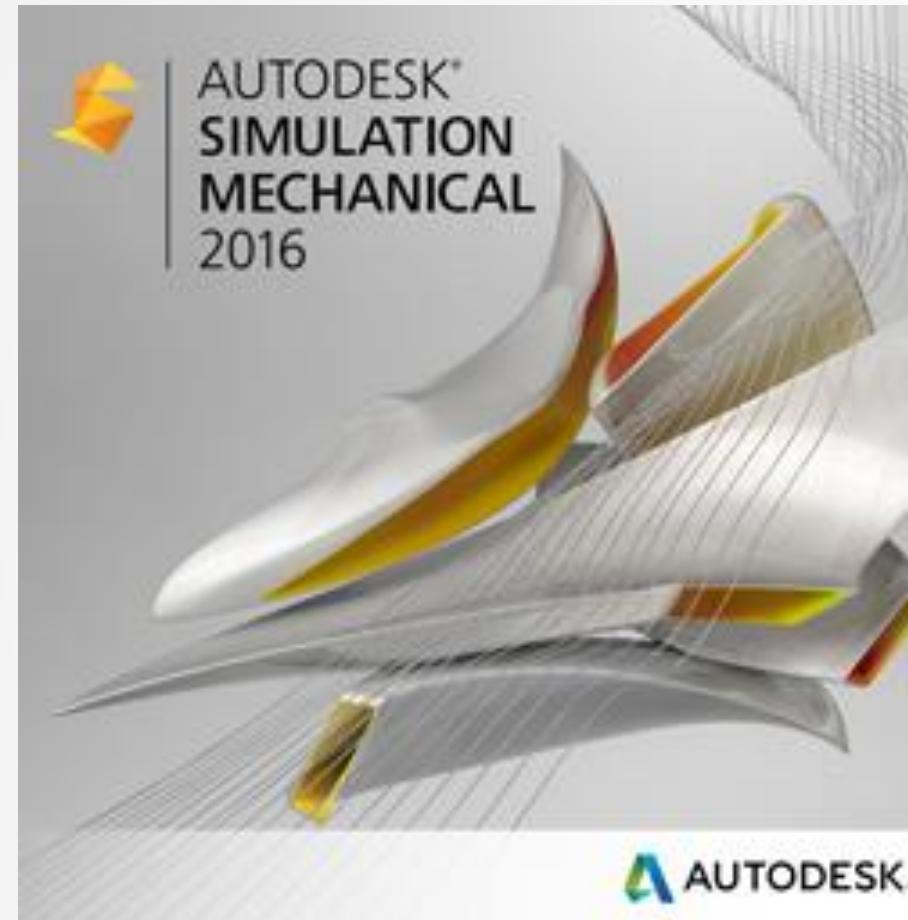
Gebäude- struktur



# Autodesk Mechanical Simulationsangebote

## Stand-Alone

Komplette und Robust  
Strukturmechanik-  
Simulationslösung



## Mechanical Simulation Platform

Zuverlässige und genaue  
Mechanical Simulation Solver

## CAD-Embedded

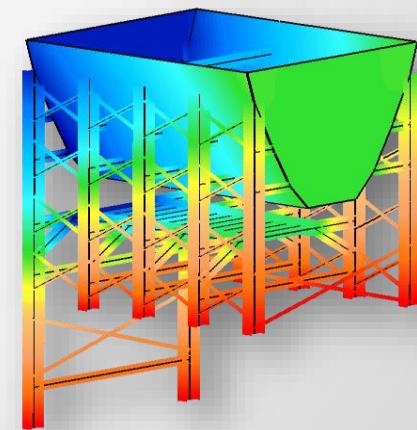
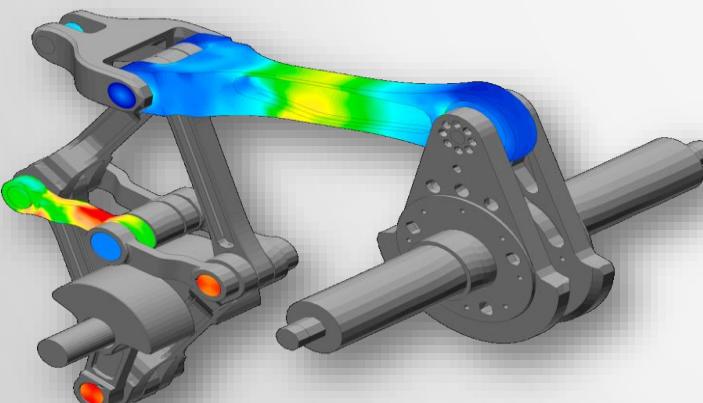
CAD-eingebunden  
erweiterte Struktur-  
Simulation

# Nastran In-CAD vs Inventor Simulation

## Typische Design-Herausforderungen

- Wird es permanente Deformation geben?
- Wie viele Wiederholungen bis Versagen?
- Was passiert wenn es herunterfällt?
- Welche Effekte haben Vibrationen?
- Wird mein Produkt knicken?
- Verbinden sich die Teile korrekt?

	Inventor	Nastran In-CAD
Embedded in Inventor	•	•
Associative with CAD geometry	•	•
Linear Static Stress	•	•
Modal Analysis	•	•
Thermal Analysis		•
Fatigue		•
Buckling		•
Composites		•
Random Vibration		•
Frequency Response		•
Response Spectrum		•
Transient Stress		•
Large Displacement		•
Non-linear Materials		•
Flexible and Rigid Body Motion		•
Impact & Drop Testing		•
Contact Types	4	6



# Nastran In-CAD – Workflow Effizienz

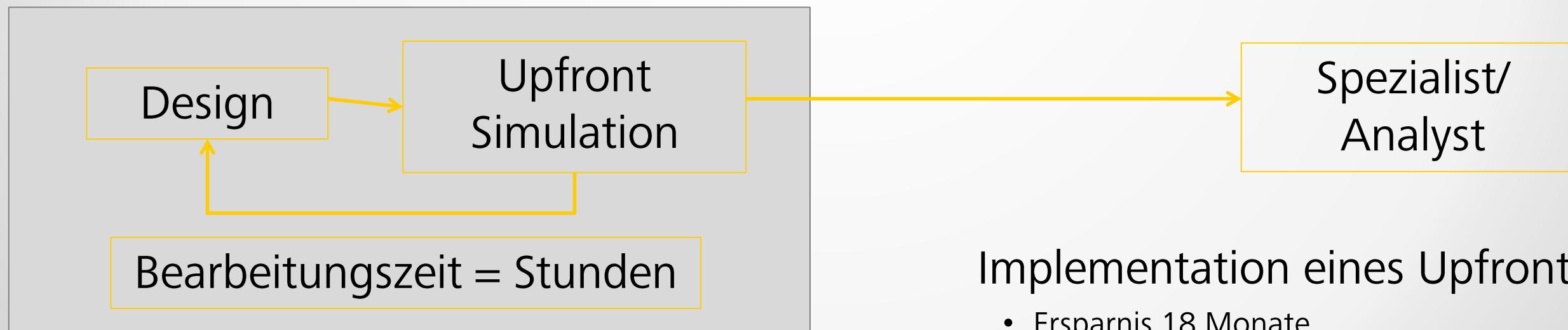
Konstrukteure müssen Simulationsabteilung nutzen

- Lange Bearbeitungszeit



Konstruktionsabteilung implementiert Upfront Simulation

- Kurze Bearbeitungszeit



Implementation eines Upfront Tools

- Ersparnis 18 Monate

# Autodesk Nastran In-CAD Live Demo

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NASTRAN® IN-CAD™



 AUTODESK®

# Nastran In-CAD – Mid-Surface



# Nastran In-CAD – Frequency Response



# Nastran In-CAD – Thermal

