

**3D**EXPERIENCE

# MACHINE FOR MANUFACTURING “ECODUCTS” – PROJECT AND DESIGN

AN ALTERNATIVE FOR RECYCLING  
TYRES



With SIMULIA and CATIA V5

By Fransisco Porritiello & Andres Martinez del Pezzo

((( CASE STUDY: MACHINE FOR MANUFACTURING "ECODUCTS" - PROJECT AND DESIGN

((( PLACE: Aeronautical Department - School of Engineering - National University of La Plata - La Plata - Buenos Aires - Argentina

((( SITE: Aula Virtual - DSS PLM Center

((( DS BRAND: SIMULIA - CATIA V5 - CATIA V6 - ENOVIA V6 - Academic and Research Solution



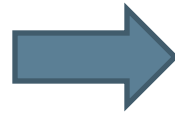
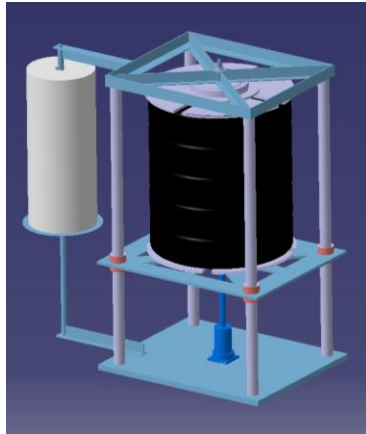
**Generating KNOWLEDGE  
 and its application to  
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## OBJECTIVES:

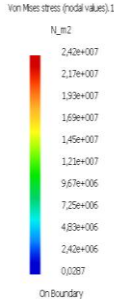
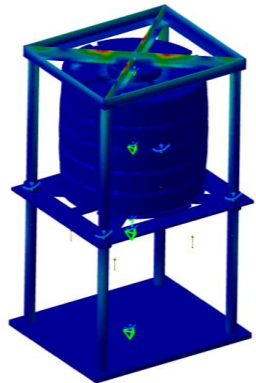
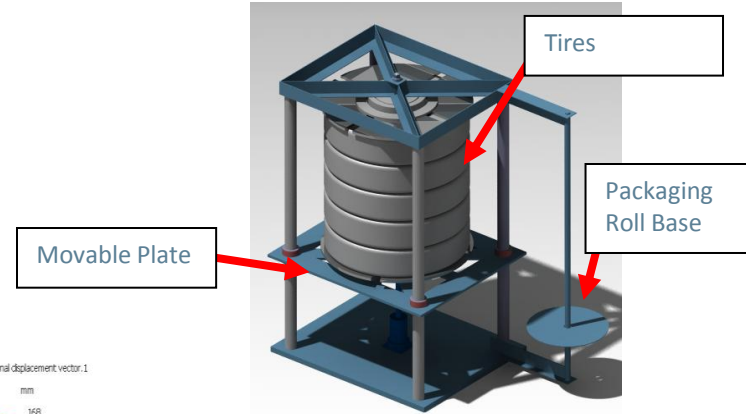
DESIGN AND ALTERNATIVE FOR RECYCLING AUTOMOTIVE TIRES.  
THIS ALTERNATIVE CONSIST IN THE USE OF TIRES AS WATER  
CONDUCTS. THE OBJECTIVE IS TO DEVELOP A MACHINE FOR  
MANUFACTURING "ECODUCTS". A DUCT FOR DRAIN STACKED  
WATER.



# SUMMARY:

- ✓ DESIGN AND VIRTUALIZATION OF THE MACHINE
- ✓ ANALYSIS OF MODELING TECHNIQUES
- ✓ FINITE ELEMENT ANALYSIS
- ✓ RESULTS ANALYSIS
- ✓ VALIDATION OF RESULTS USING THE MANUFACTURED PROTOTYPE
- ✓ MANUFACTURING DRAWINGS

## MACHINE DESIGN



### FEM Analysis

