

DEFINIÇÕES

CAD (*computer-aided design*): desenho, projeto, testes,

CAE (*computer-aided engineering*): associado a elementos finitos.

CAPP (*computer-aided planning*): planejamento da produção,.

CAM (*computer-aided manufacturing*): controle do chão de fábrica, equipamentos, estoques, manutenção, geração de programas NC.

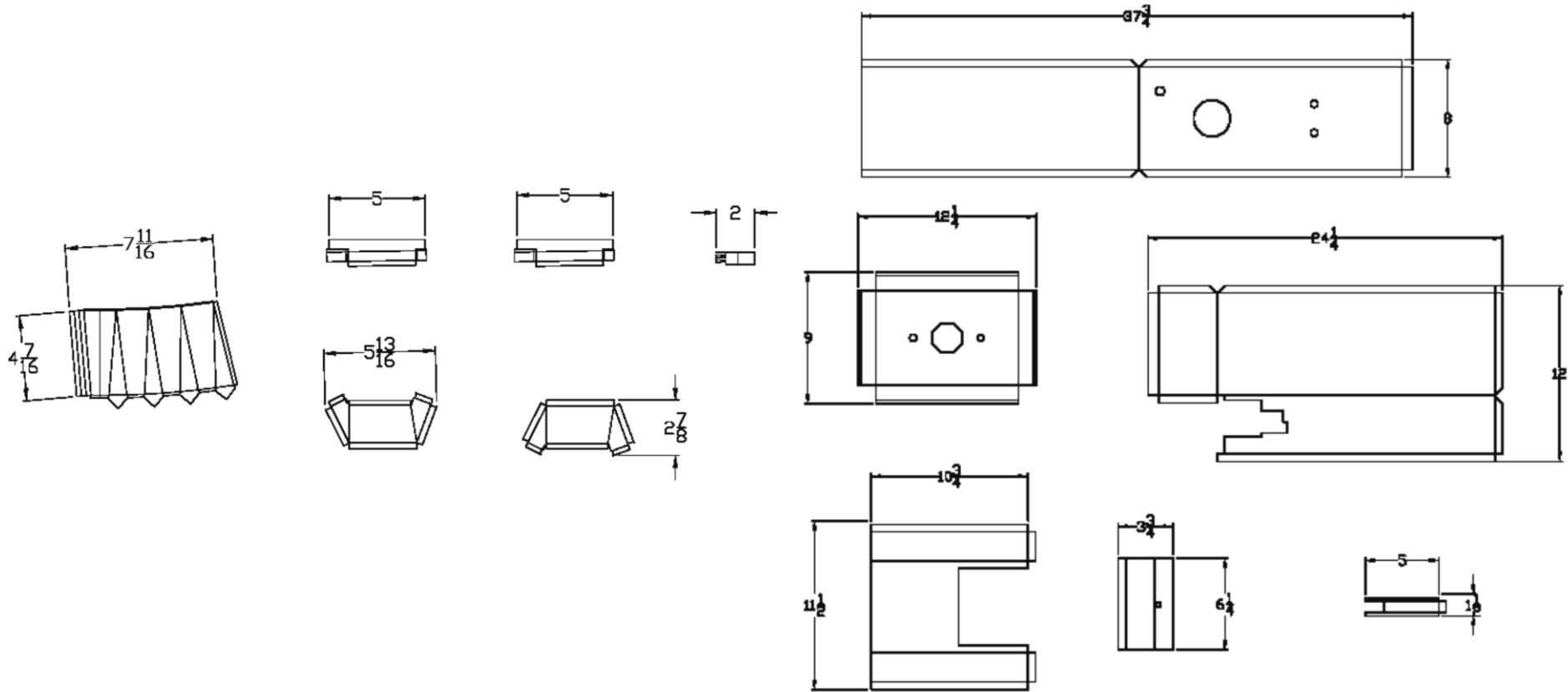
CAQ (*computer-aided quality control*): na fábrica (testes, verificação), fora da fábrica (atendimento ao consumidor, mercado)

CAD/CAM: CAD + CAE + CAP + CAM + CAQ

PP&C (*production planning and control*): planejamento dos recursos e requerimentos de manufatura.

CIM (*computer integrated manufacturing*): integra CAD/CAM e PP&C num sistema industrial.

AUTO CAD



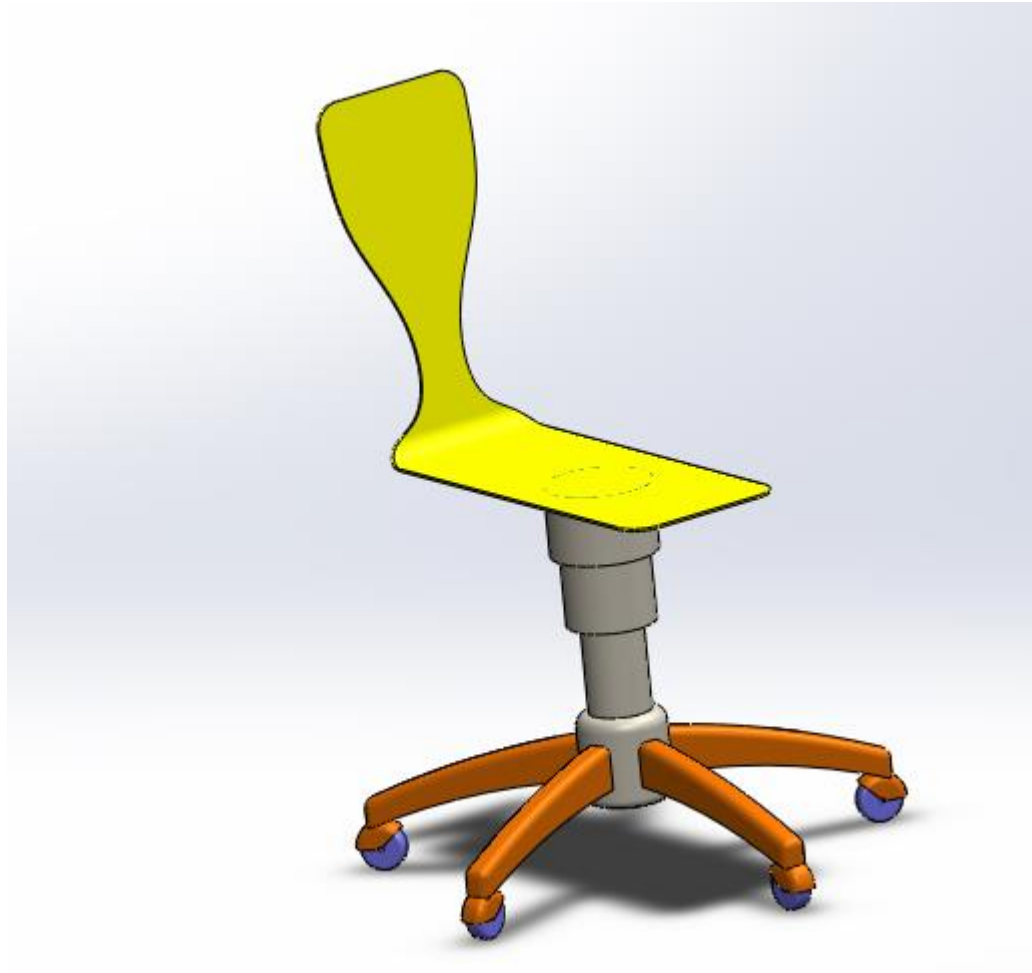
FERRAMENTA IMPORTANTE NO PROCESSO DE DESENVOLVIMENTO

- SOFTWARE SOLIDWORKS
- GERAÇÃO DO 3 D
- PROJEÇÕES , CORTES E DETALHAMENTO INTERNO
- MONTAGEM
- SIMULAÇÃO ESTÁTICA
- SIMULAÇÃO FLAMBAGEM
- SIMULAÇÃO DE FADIGA
- SIMULAÇÃO DE QUEDA
- SIMULAÇÃO DE FLUÍDOS
- CONFORTO TÉRMICO AMBIENTAL
- MOTION
- IMPACTO AMBIENTAL

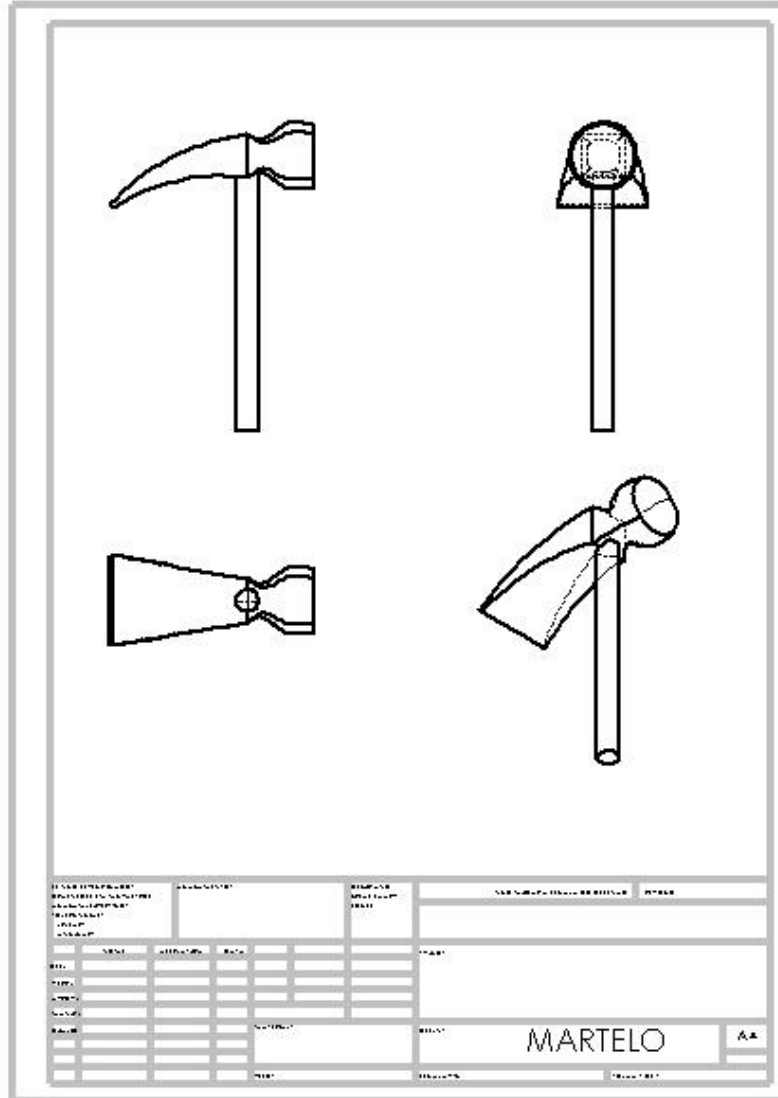
SOLIDWORKS – 3 D



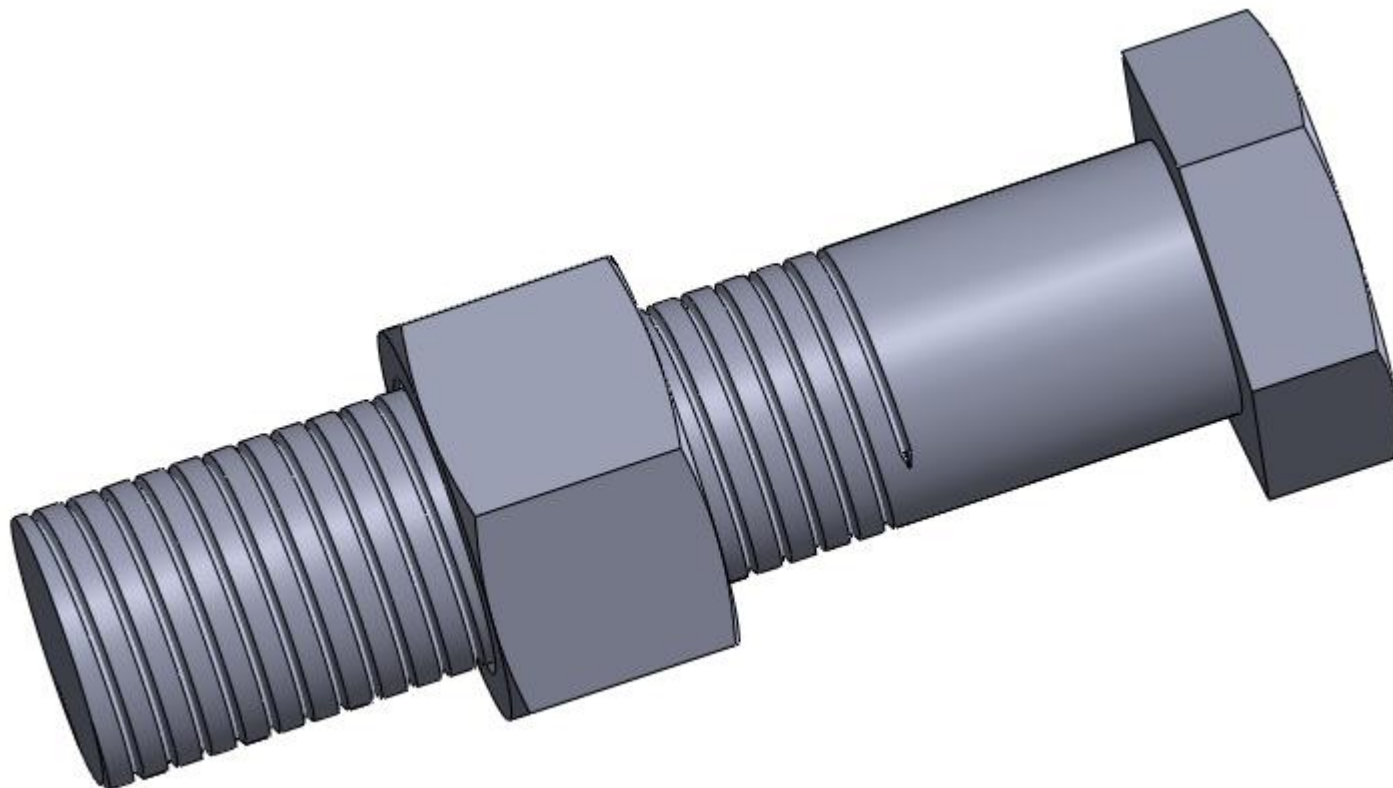
SOLIDWORKS – 3D



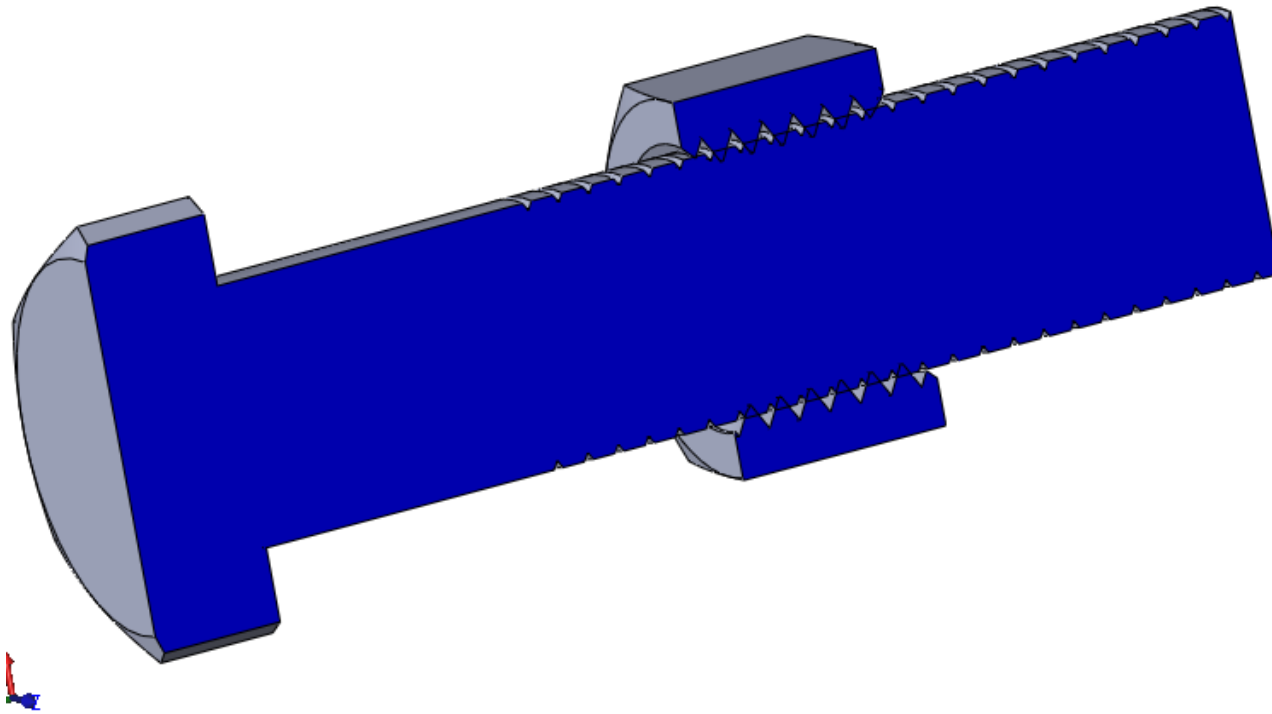
SOLIDWORKS - PROJEÇÕES



MONTAGEM



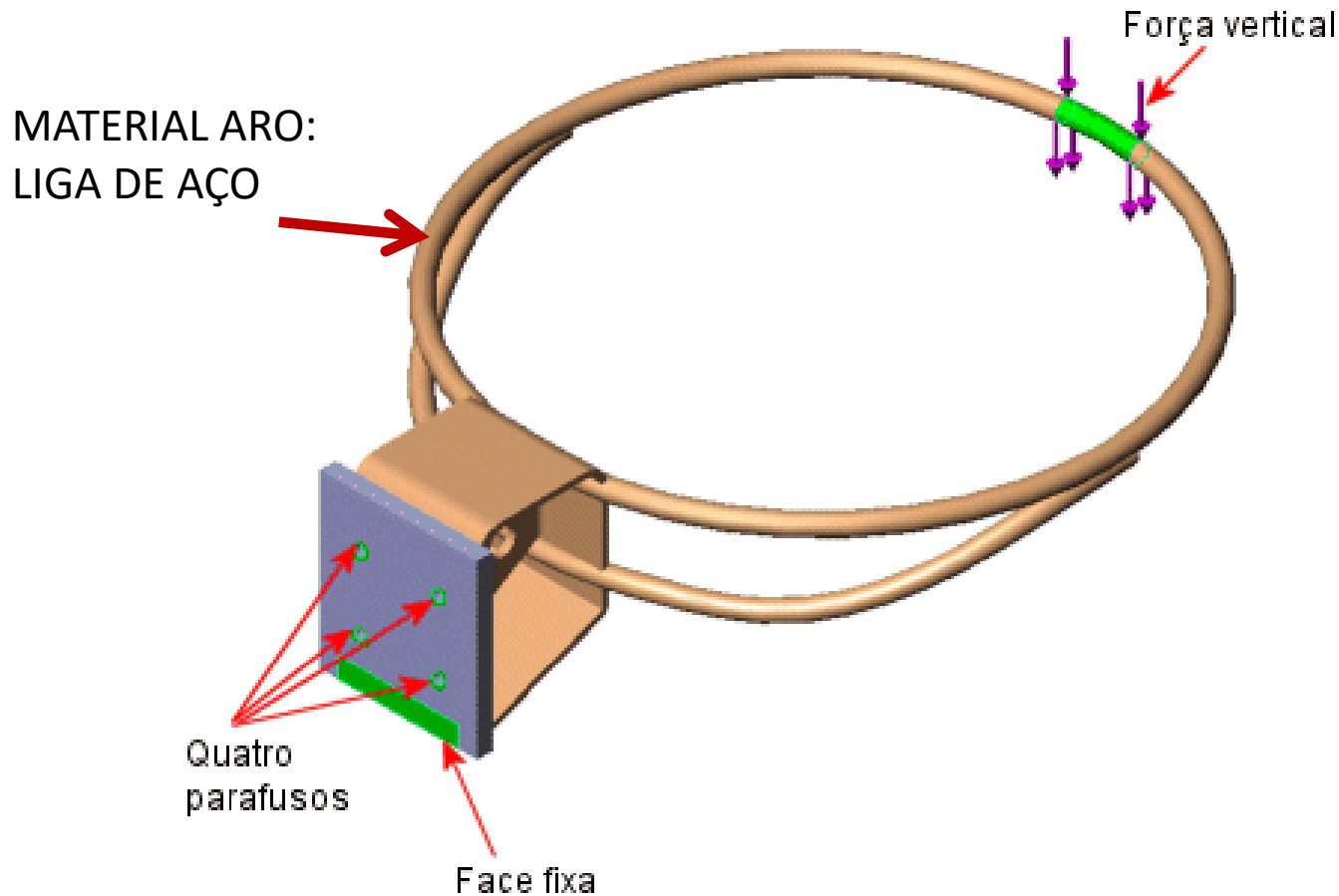
DETALHES INTERNOS



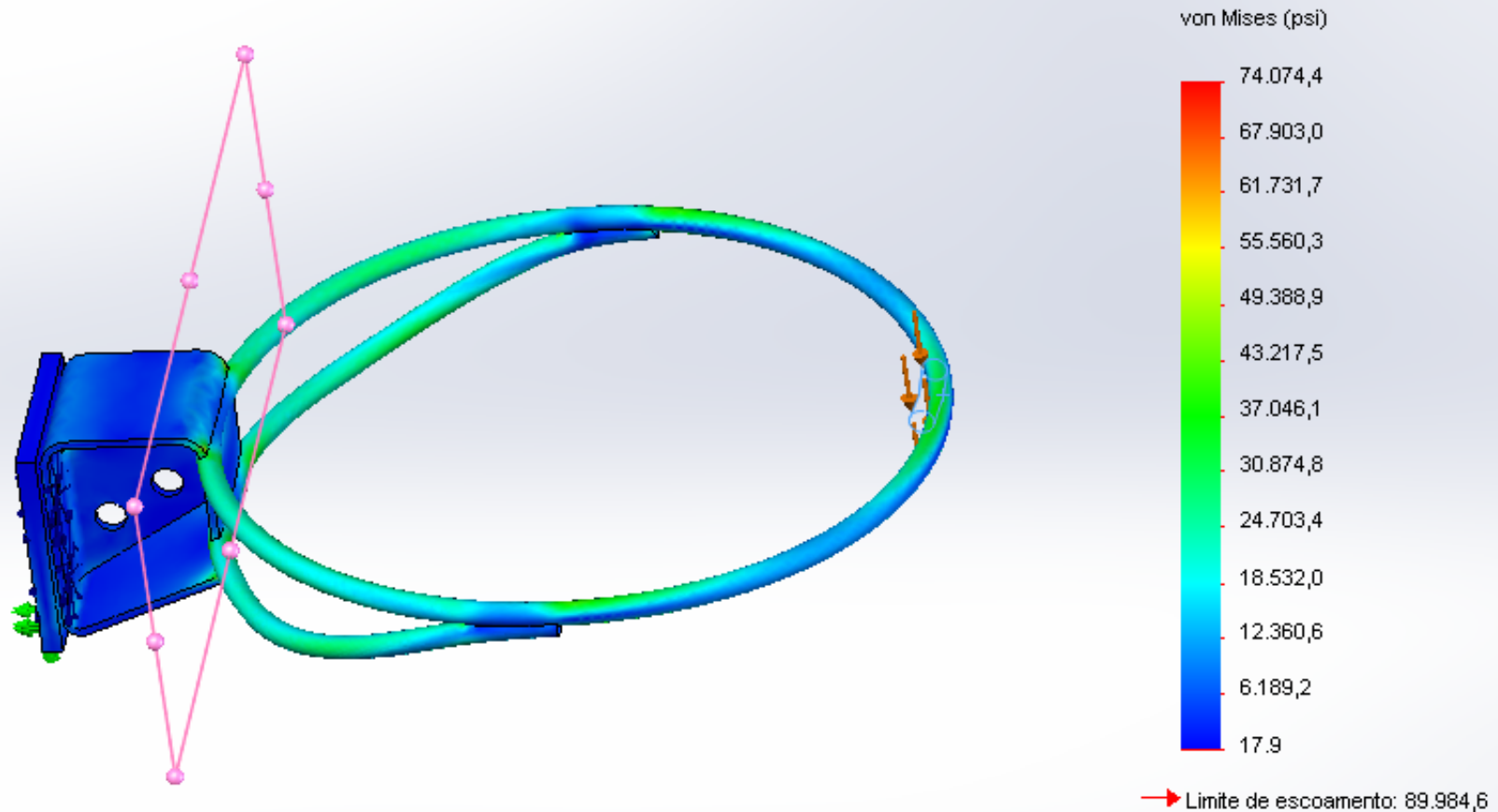
SIMULATION ESTÁTICA

ARO DA CESTA DE BASQUETE

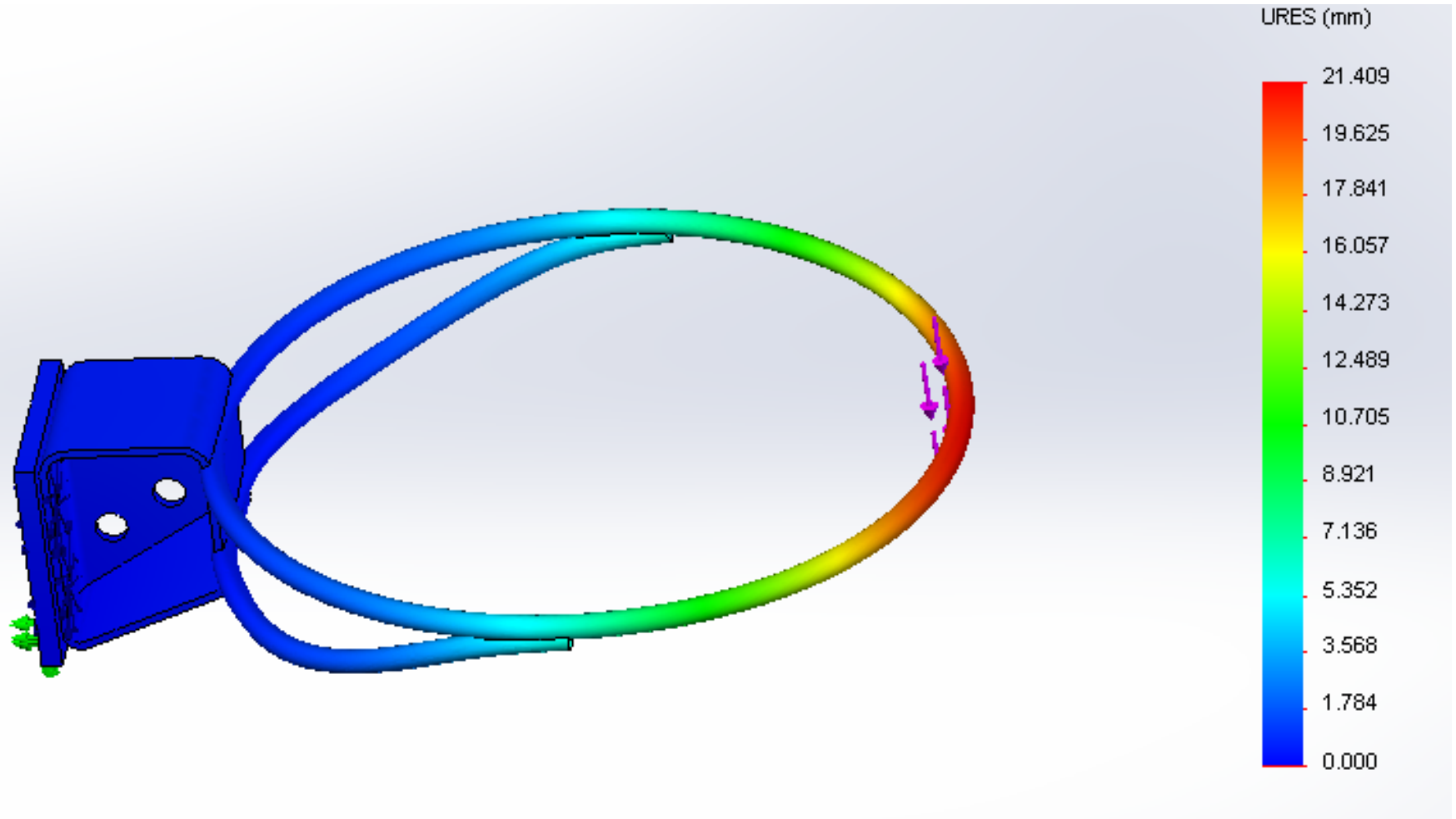
FORÇA VERTICAL APLICADA DE 250 lbf APLICADA NUMA PARTE DO ARO E UM TORQUE DE APERTO DOS PARAFUSOS DE 100 lbf



PLOTAGEM Von Mises



PLOTAGEM DESLOCAMENTO

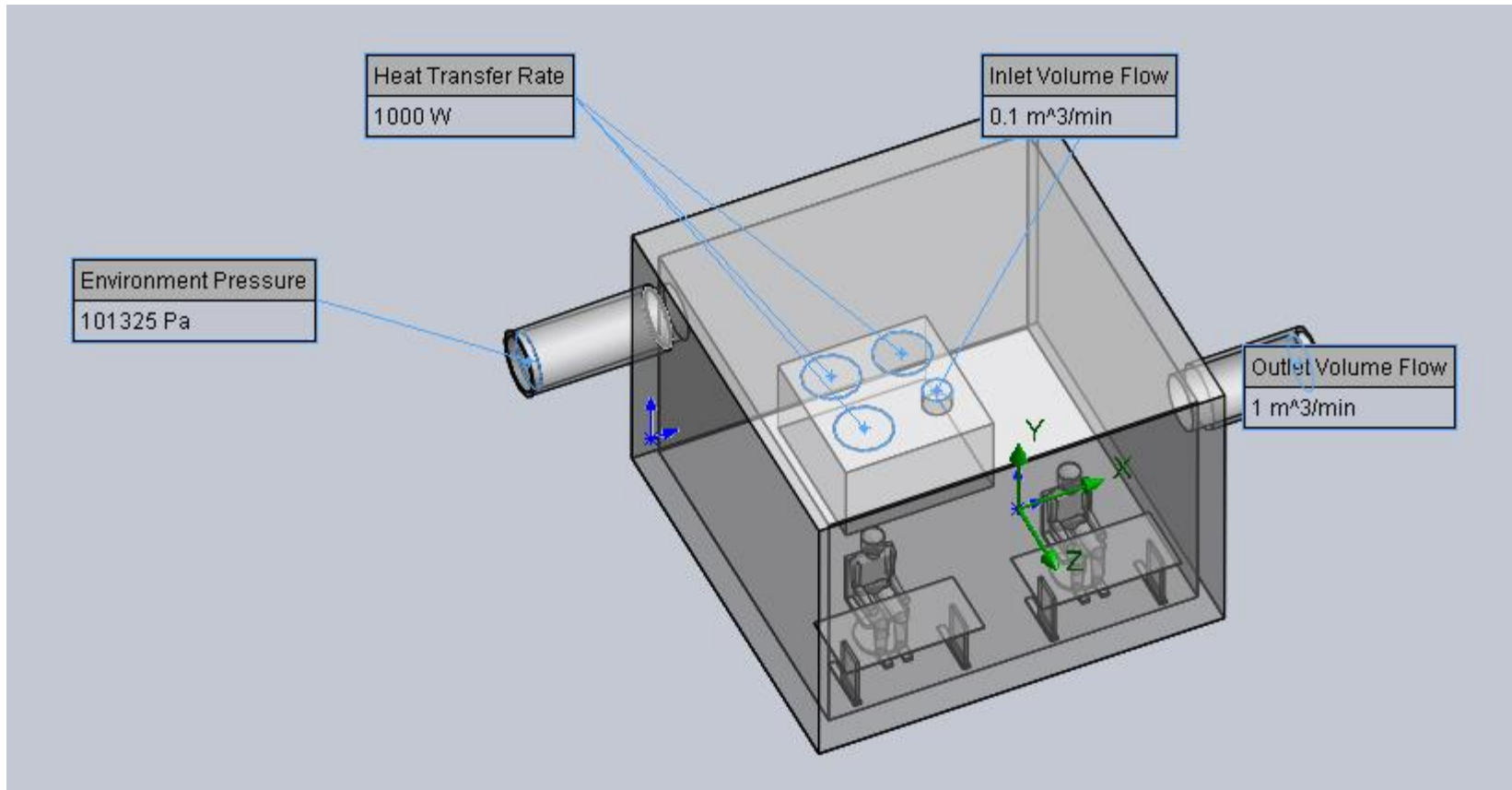


FLOW SIMULATION

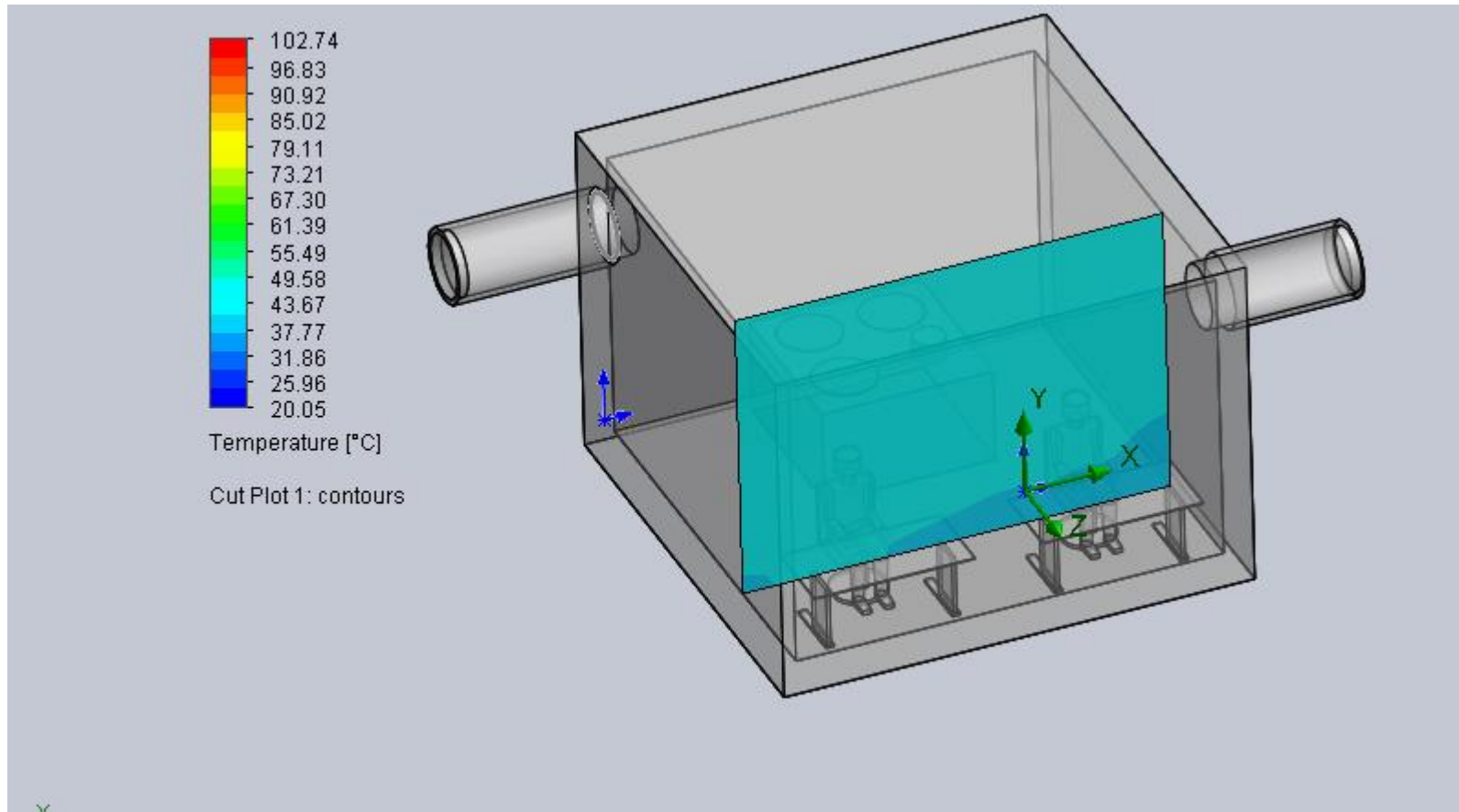
SOLIDWORKS

- FLOW SIMULATION
- CONFORTO AMBIENTAL
- FLUXO TÉRMICO
- FLUÍDO EXTERNO (AR)

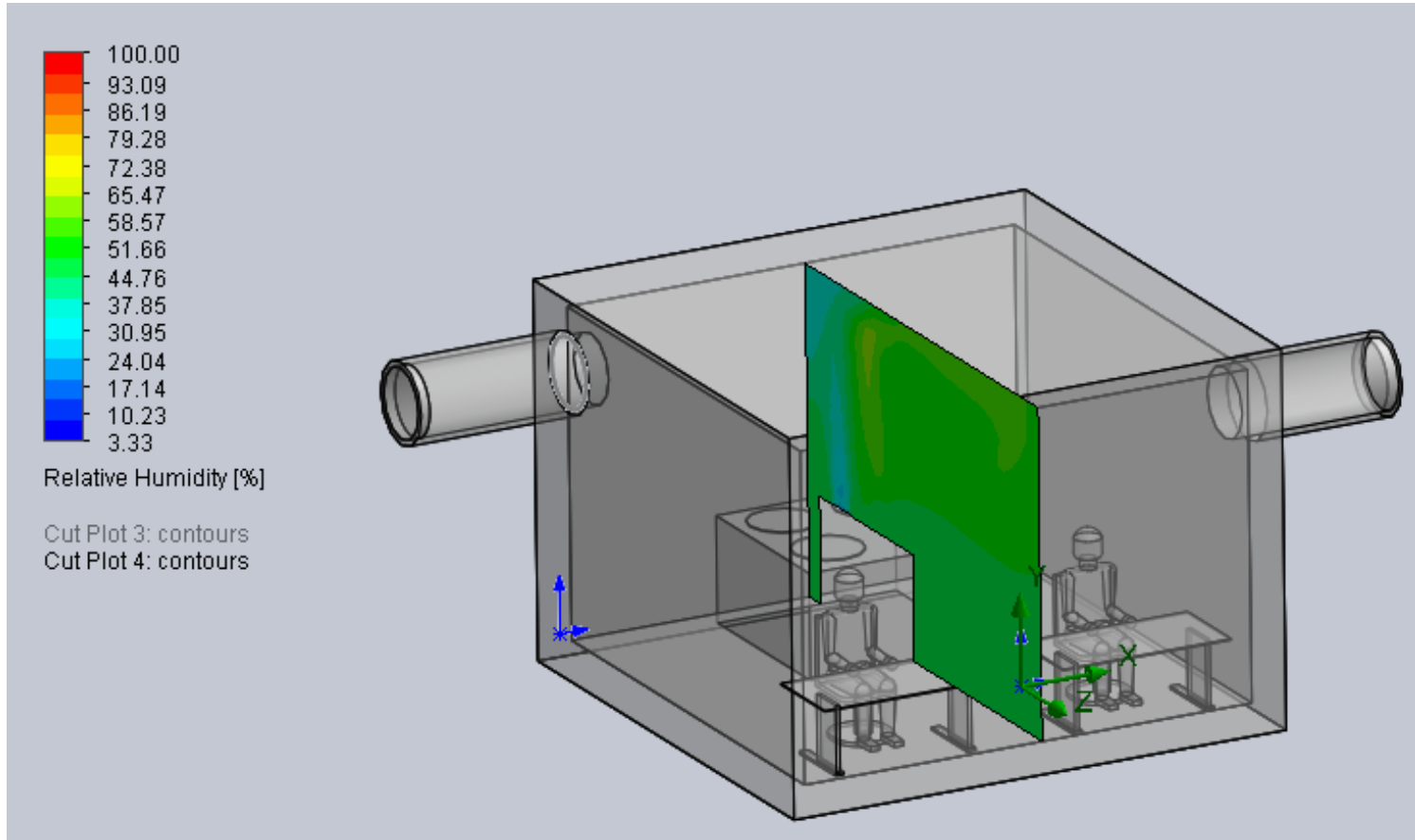
CONFORTO AMBIENTAL



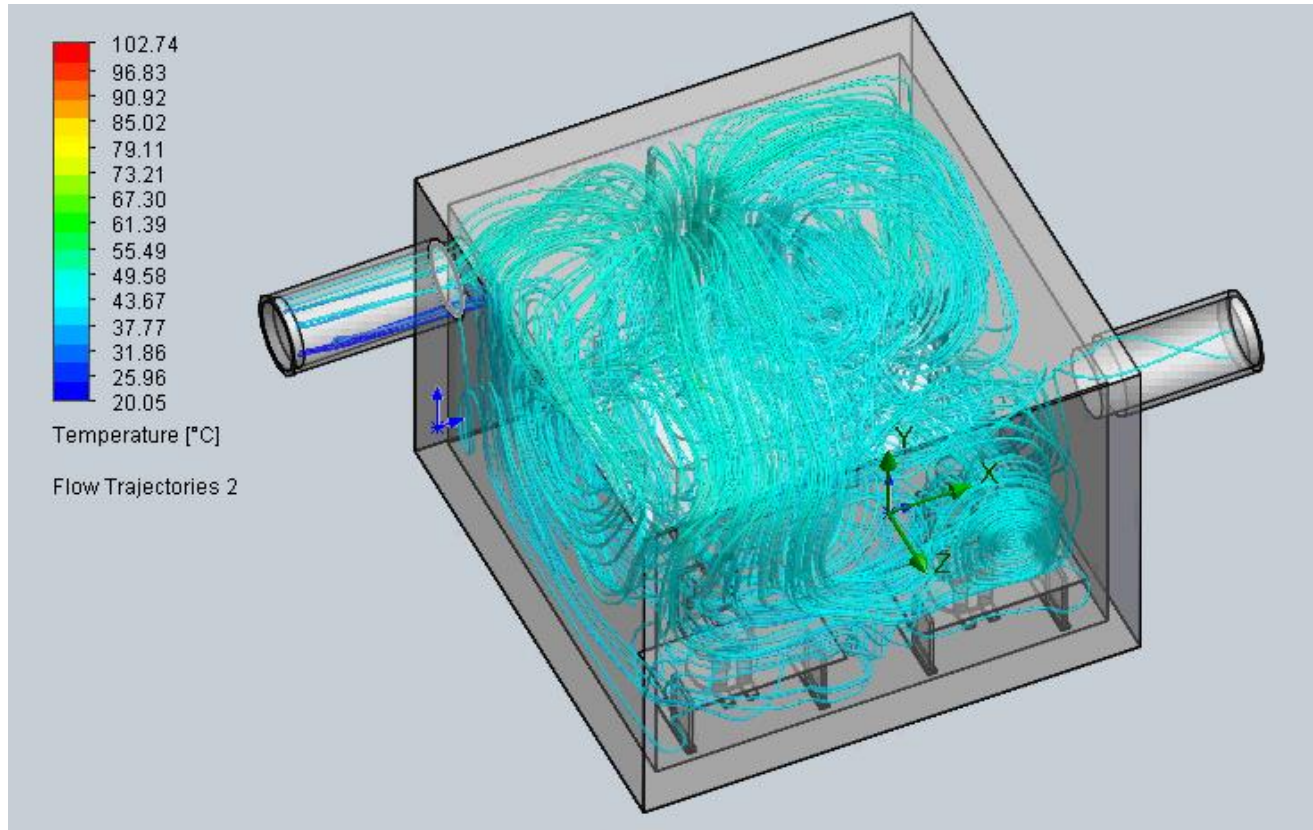
CONFORTO AMBIENTAL



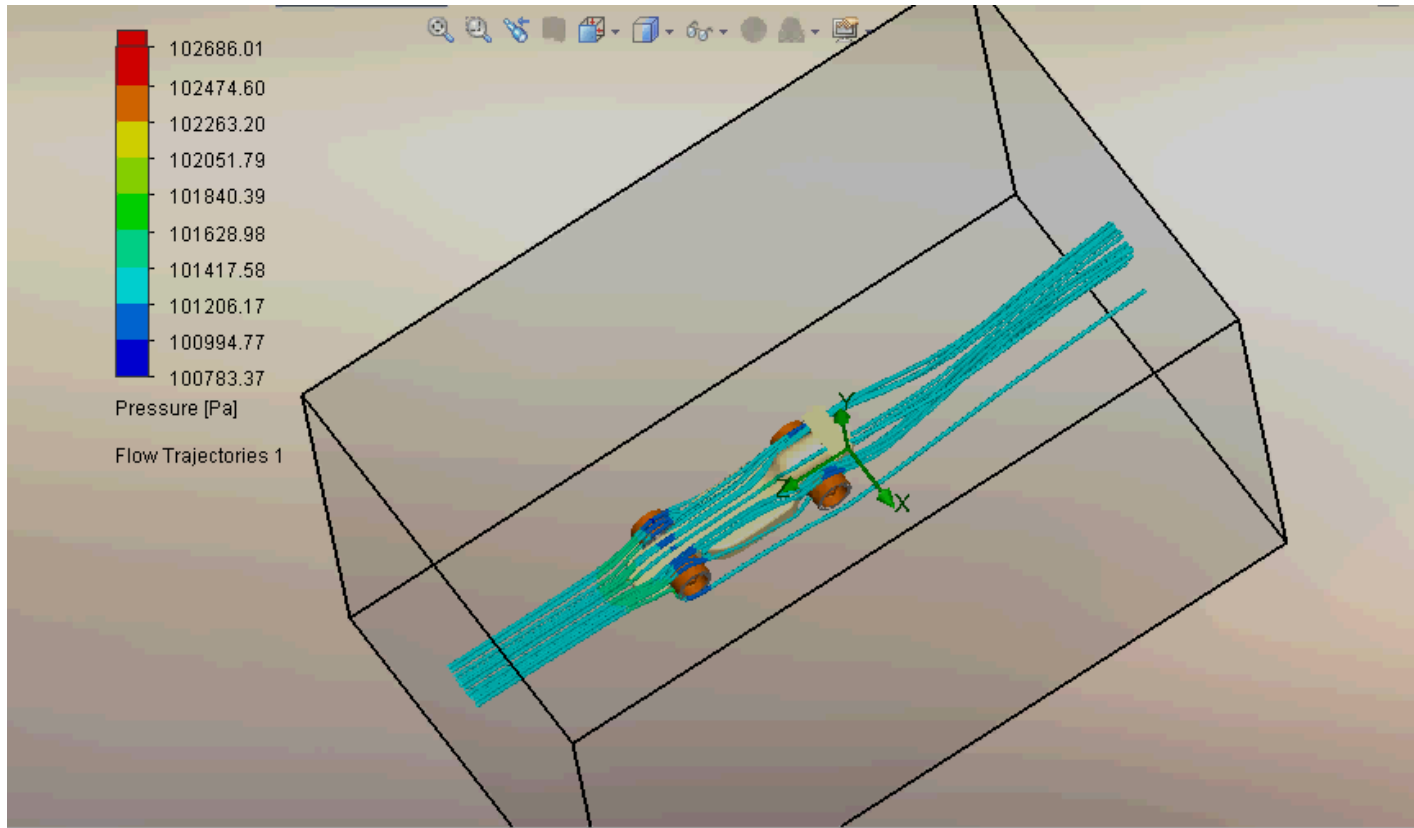
CONFORTO AMBIENTAL



CONFORTO AMBIENTAL

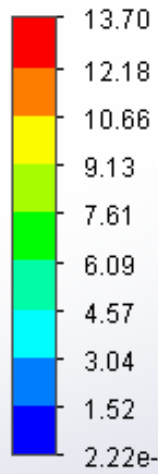


FLOW SIMULATION – FLUXO AR



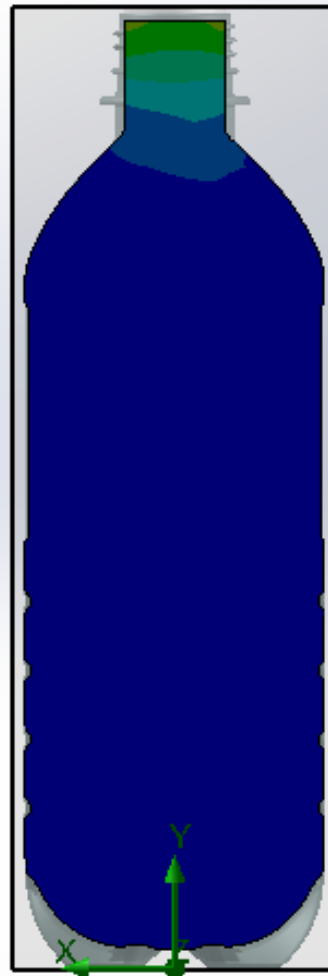
ANÁLISE TÉRMICA



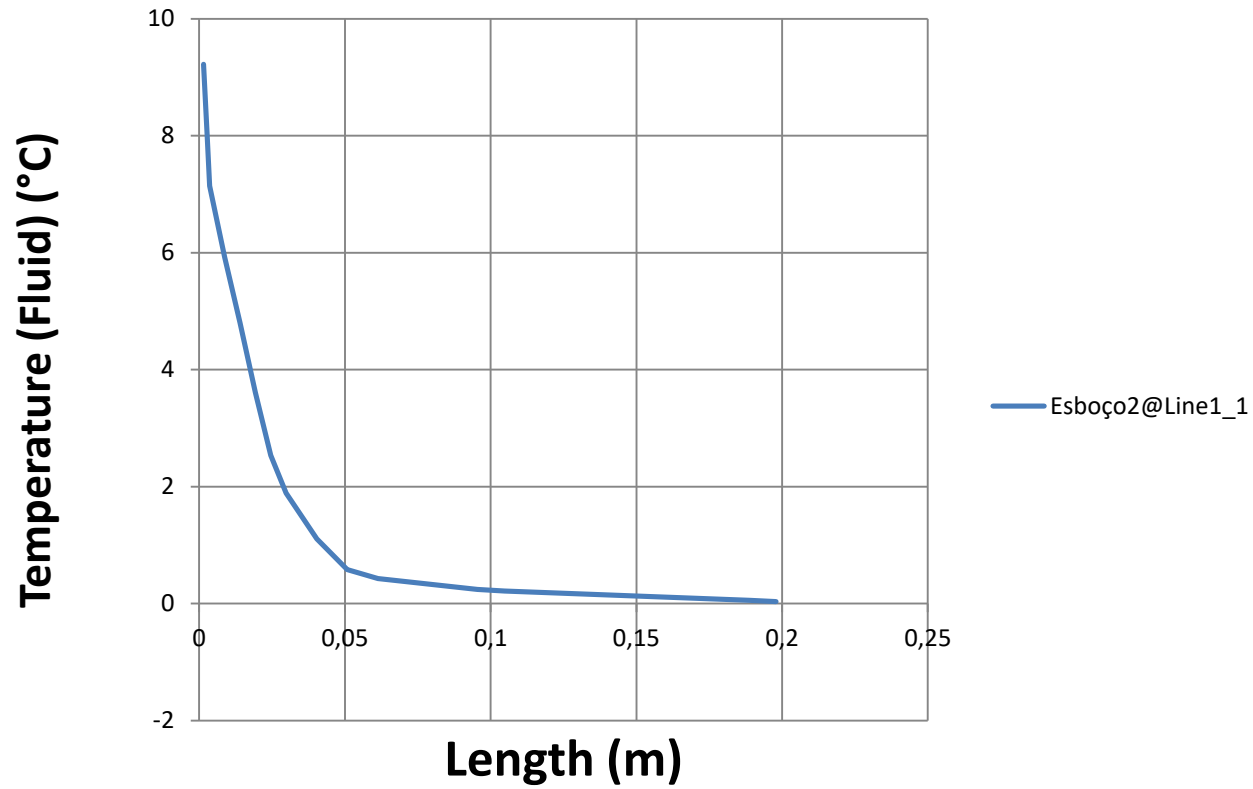


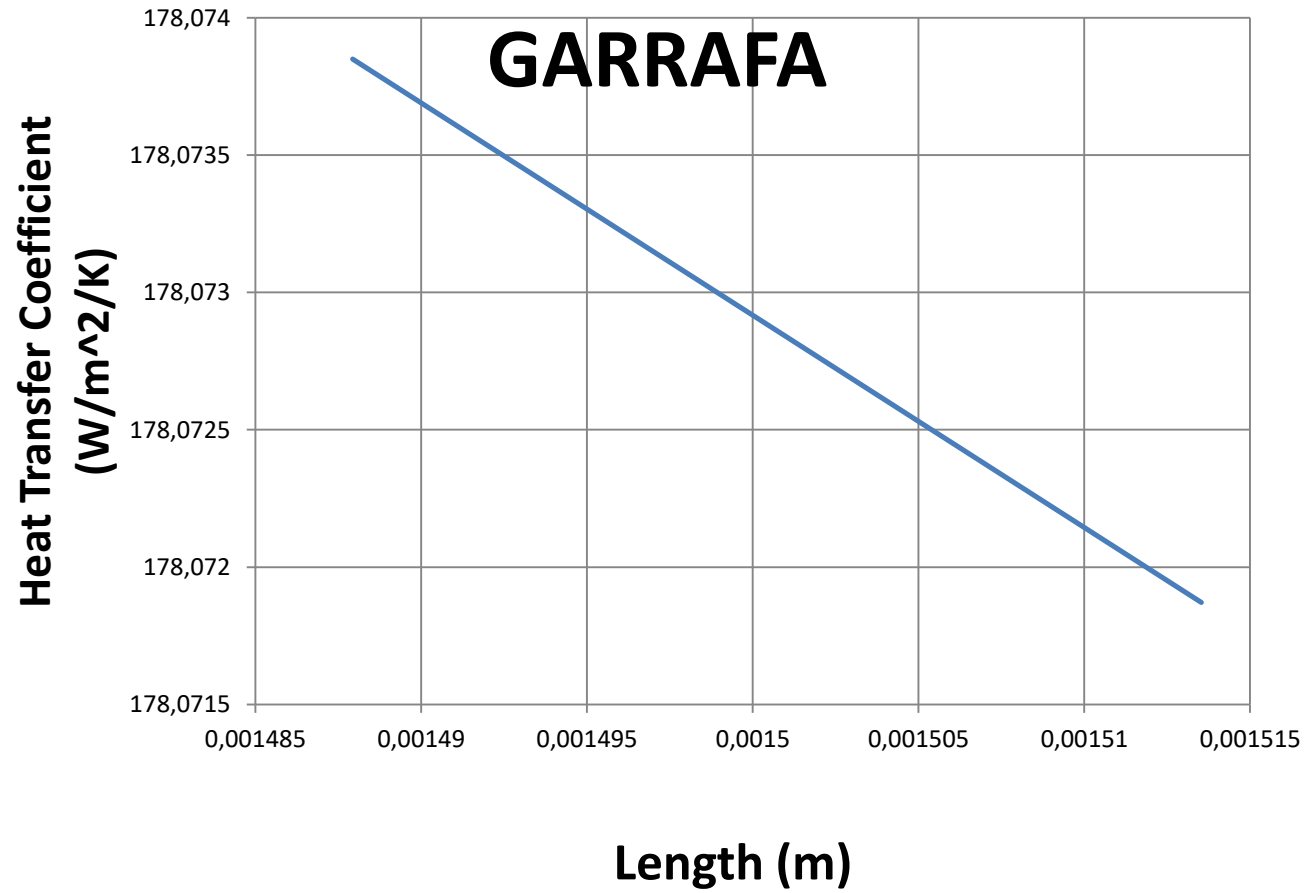
Temperature (Fluid) [°C]

Cut Plot 1: contours



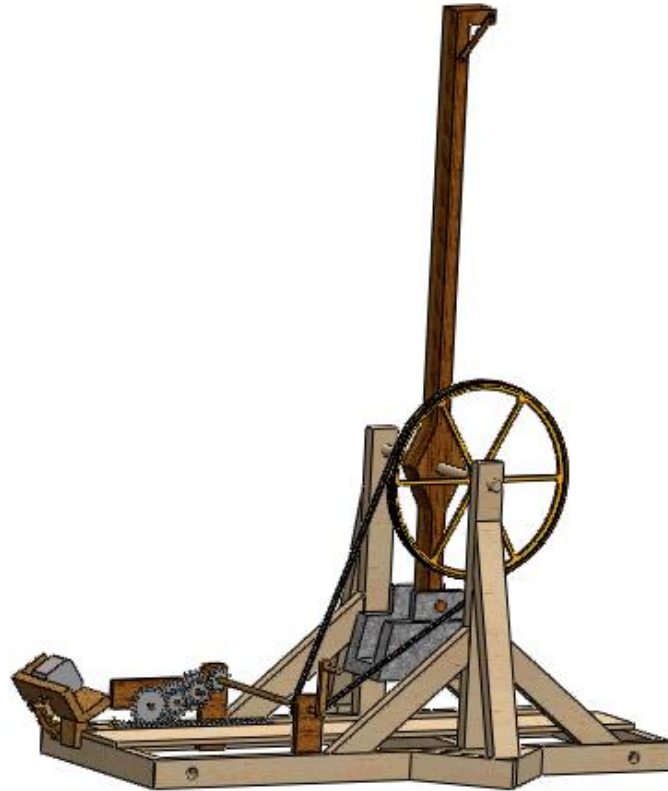
GARRAFA



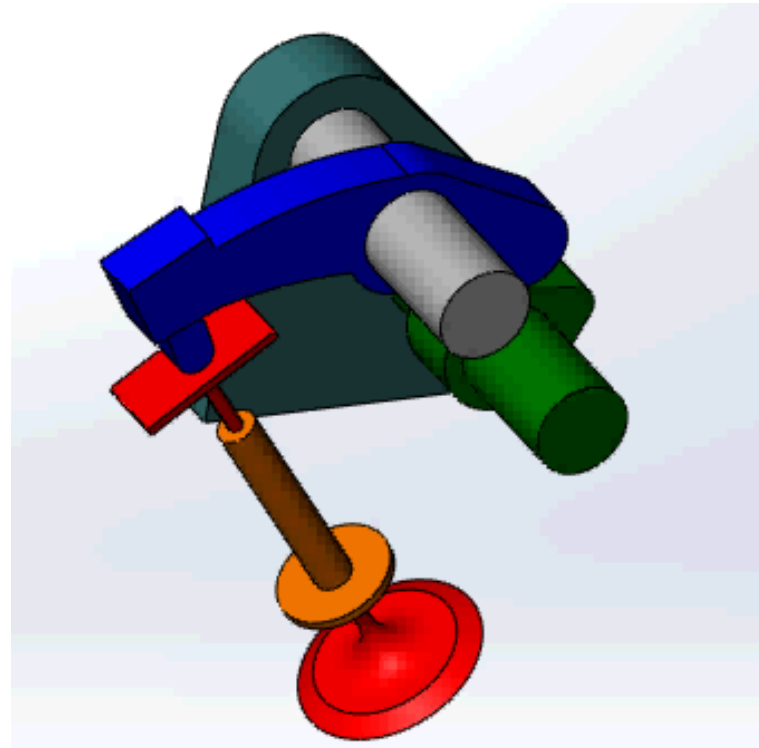
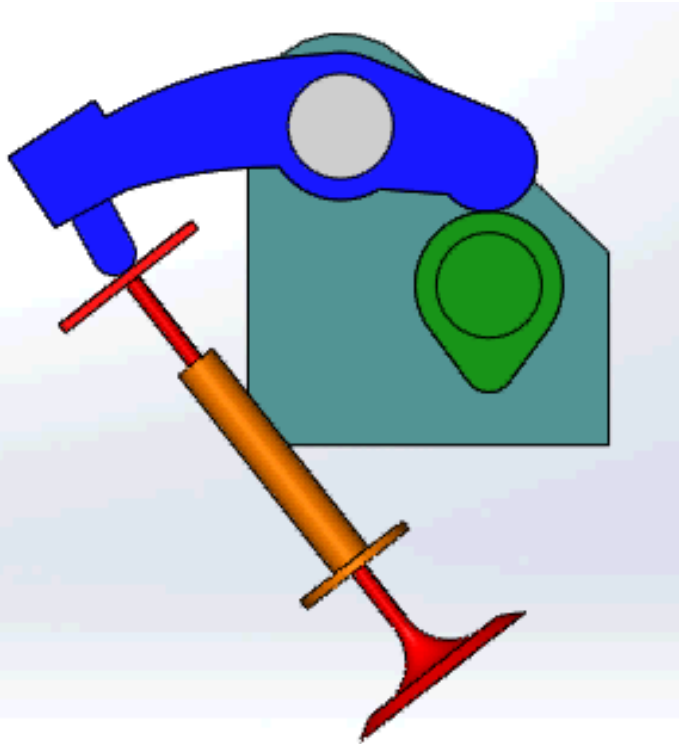


SOLIDWORKS MOTION

MOTION CATAPULTA



MOTION



CICLO DE VIDA DE PROCESSO SUSTENTABILIDADE

Sustainability



Sustainability

