Implementing Dynamic Packaging Engineering for a Global Medical Device Manufacturer

BUSINESS GOALS

The client is a global leader in spinal implants, with R&D facilities in the U.S. and manufacturing in Europe. They offer more than 10,000 separate products, including cages, rods, hooks, connectors, plates and screws. They turned to Atos Syntel for help creating a more responsive, dynamic process for managing packaging designs for this wide array of products.

BUSINESS BENEFITS

- More efficient process for creating new drawings through the use of CAD templates
- Centralized library of packaging configurations for more than 10,000 spinal implants
- Greater adaptability to package configuration changes, with easier editing of drawings
- Packaging standards helped make drawings uniform
- Dramatic decrease in the time taken to create new packaging designs

CHALLENGES

- The designs for their existing packaging were un-editable AutoCAD drawings
- The existing process for creating packaging drawings was non-uniform and time consuming
- Trained packaging professionals are highly sought-after and difficult to hire
- Packaging activities are highly variable, with long lulls followed by sudden spurts of designing, packaging drawing, and validation

SOLUTION

Atos Syntel drew on years of experience working with medical device manufacturers to develop a solution for designing and developing standardized sterile product packaging components, defining packaging configurations, standardizing CAD templates, and creating Device Master Records (DMRs). Our solution consisted of the following steps:

- Recreated old drawings in NX to make them editable
- Standardized the packaging drawing process and created CAD templates for frequently used packaging components
- Leveraged parametric modeling to create packaging components like cartons, clamshell blisters, pouches, etc.
- Defined packaging configurations for more than 10,000 components
- Finalized design validations and packaging integrity validations
- Standardized validation documents using templates
- Created and updated DMRs for all sterile implants