Benefits

✓ Maximizes re-use of existing components

✓ Improves communication with manufacturing using scaled drawings

✓ Easily maintainable with a minimum of parts and features.

Case Study:

Product: Telescopic single and double acting hydraulic cylinders for robust applications such as: dump trucks & trailers, refuse trucks, airline support/service equipment, compactors, balers, mining equipment & oil/gas platforms.

Problem: Slow design time and lack of accurate costing information made it difficult to protect profit margins. Charted drawings were not optimal for manufacturing to read.

Solution: Automate configuration and drawing creation with Genus Designer.

Custom Hoists cut configuration time down to just a few minutes for 1 to n stage hydraulic cylinders with a large variety of standard and custom end connectors.

How? Custom Hoists captured and standardized decades of engineering knowledge using Genus Designer’s design automation language. Then, using this engineering knowledge and the customer’s specification, Genus Designer executes the design to produce a CAD model and drawings, providing:

• quick turnaround and
• higher accuracy.

Importantly, using Genus Designer’s generative capabilities to insert exactly the correct library components and templates for the required range of tube sizes. This precluded the combinatorial explosion of start parts that are the bane of traditional master model-based configurators.

Additionally, double acting cylinder end connectors required dozens of port feature configurations. This would have required dozens of part alternatives using a traditional configurator. Instead, Genus Designer solved this easily and efficiently by feature insertion into a single template part.