# Group-Based Modeling in KISSsys

During the design process, the aim of every design engineer is to be able to create a representation of their design in a calculation program as quickly as possible. As the process involved here is usually an iterative process in which parts of the current solution are constantly being rejected, adapted and modified, the calculation program must run as efficiently as possible, to provide the designer with the support they need.

Group-based modeling

- Flexible handling
- Predefining components

KISSsys Version 03/2018 has the option "Group-based modeling". Using it, individually modeled assemblies can be extracted from existing gear designs and then combined with different groups. A shaft can be cut into parts at any point and then merged together with a different shaft in a different assembly (for example, the shaft in a Ravigneaux set).
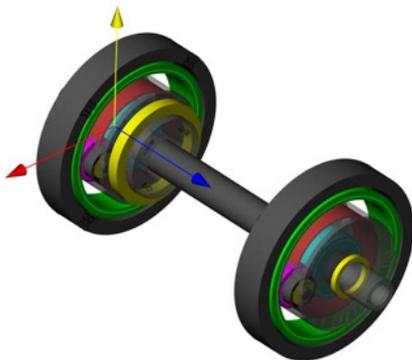
This means a design can be created quickly from a number of different components. This option also has the advantage that it enables designers to define company-specific assemblies of standard components in advance, so that these existing solutions can be accessed again quickly and used in new designs. This process is known as "Group-based modeling".
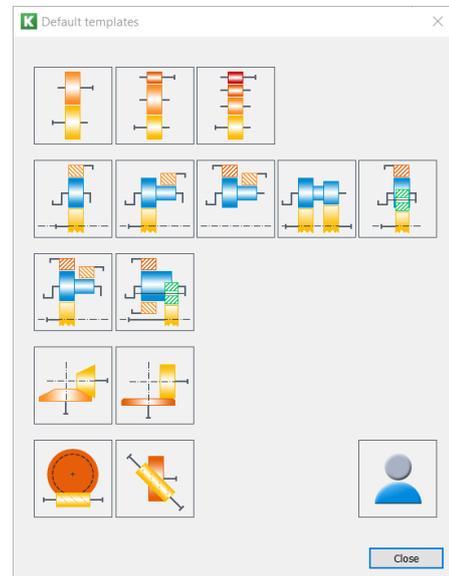
Groups box

- Library with basic structures

The "Groups box" template is now available for the user in this context. The system displays a library of frequently used assemblies that can be used as basic structures. Simply click on an assembly to add it to the design. After that, you only need to construct the missing shaft structures between the assemblies. The clearly structured models supplied with KISSsys can be modified easily to turn them into company-specific components. These components are then displayed as user-defined components in a local folder via the Groups box.

This procedure makes creating models in KISSsys much simpler and speeds up the entire development process.

If you are interested in acquiring a test license, please contact us at info@KISSsoft.AG