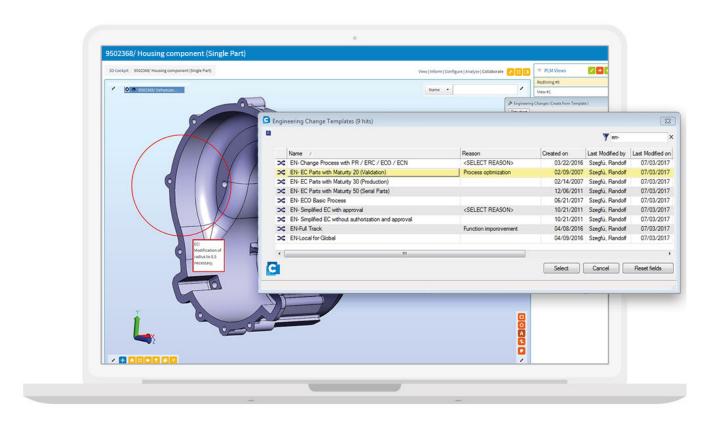




Engineering changes constitute one of the major processes in the life cycle of a product. Their impact on quality, costs and time-to-market require concise planning, execution and documentation. CONTACT Elements' digital, workflow-driven Engineering Change Management provides manufacturers with a powerful alternative to a traditionally manual, paper-based approach. Well defined IT change folders with all related parts, documents and models, together with the process control, provide the backbone for a targeted, digital engineering change processes.



# Accelerate your change processes through digital workflows and standards

Technical changes account for up to 50 percent of development costs! This means that there is great potential for cost reductions and faster market launch. With CONTACT's Engineering Change (EC), you can control changes to your products flexibly and reliably: Change processes have their own status-controlled lifecycle. Templates for the verification measures that are appropriate for the company provide users with workflows for optimum process implementation, for example on the basis of the level of maturity of the product.

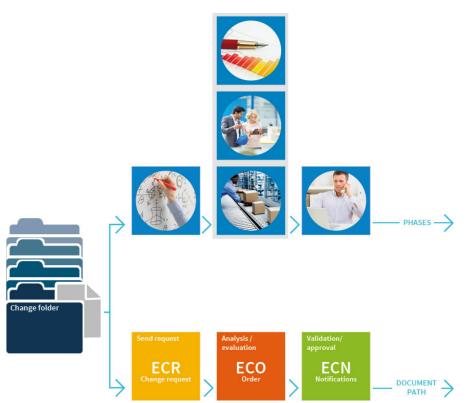
#### System-controlled push effect

Use digitalization to speed up your change processes compared with paper-based processes. Engineering Change supports your processes through workflow push via e-mail and integrated task

management. Speed up the process by processing parallel branches of the workflow and automatically supply specialist departments such as Development, Tool and Model Making or Production Planning with the current development statuses. Take advantage of the benefits of automated processes such as the batch release of CAD models and parts or the computation of the configuration of test processes, for example on the basis of the product type and level of maturity.

## Simplify your employees' work with digital folders and Task Manager

Workflow-assisted process control combined with digital change folders provides maximum transparency. The folders contain all the information and documents needed to assess and implement a technical change. They give all participants at all sites worldwide direct access to all the necessary models, documents and information in lines with their individual permissions.



#### **In-process documentation**

Engineering Change not only offers standardized processes and transparent processing sequences but also end-to-end documentation. Your employees do not have to record information separately in order to comply with the various documentary requirements, e.g. within the framework of the Machine Directive. These and other compliance requirements are fulfilled automatically thanks to the accompanying "in-process" documentation. We call this principle "compliance in process".

# Validate the evaluation of technical changes on the basis of 3D models

#### Reliably control your test and release processes

Technical changes can often best be evaluated on the basis of the model geometry. With CONTACT 3D Connect, you can give your staff this possibility and

thus validate the evaluation of the change. 3D Connect makes the 3D models and information available on every workstation without the need for a CAD system or separate viewer. Redlining and markups are easy to perform and can be shared directly with colleagues. In this way, you can reliably control your change, assessment and approval processes together with information from the product structure and document base.

#### **Task Manager**

Depending on the product group and level of product maturity, your employees examine and process changes from different perspectives, for example with regard to costs, customer acceptance, factory assignment, compliance, etc. The EC templates, together with your rules on variants, make sure that all employees are supplied with the corresponding verification and release tasks according to their specific roles. This is possible thanks to the Task Manager, which indicates all the tasks that are relevant to them, provides direct access to the required documents and information, and makes the corresponding activities possible.

### Validate the analysis of technical changes using 3D models

CONTACT Engineering Change is flexible and easy to configure. Thanks to the appropriate switch settings and templates, change processes can be mapped in a way that takes account of the special requirements of any given industry – for example FDA regulations in the medical engineering field or SASIG recommendations in the automotive sector. In this way, you can adapt industry-specific regulations and guidelines precisely to meet your own specific requirements within the framework of the proven ECR/ECO/ECN logic. With Engineering Change, you benefit from the effective control and monitoring of the change process combined with an outstanding level of flexibility.

## Advantages for enterprises and employees

- Accelerate change processes through digital workflows and standards
- Simplify work with digital folders and Task Manager
- Map change processes easily and flexibly and benefit from end-to-end documentation
- Validate the analysis of technical changes using 3D models

# energizing great minds