



DataCross 2.0 – Module Digital Twin / Product Passport

What is the Product Passport about?

The European Commission's Green Deal aims for a 55 % reduction of CO₂ emissions by 2030 (compared to 1990). Guidelines like the Ecodesign Directive, for example, are being recast to achieve that. An important element of this is transparency for authorities and to the public. Which is why the lawmakers are requiring companies to create so-called Digital Product Passports. The terms "Digital Twin" and "Digital Product Passport" are freely interchangeable in this context.

tec4U-Solutions is already working with the leading protagonists of the automotive industry in the Catena X network on the creation of standardized data and information flows along the entire value chain to develop and trial Digital Product Passports: www.catena-x.net

What are the resulting tasks?

According to the draft of the new Ecodesign Regulation, Chapter III – Digital Product Passport, Article 8, "... products can only be placed on the market or put into service if a product passport is available,"

There are specific regulations for the Product Passport's contents, depending on the product type. The Product Passport is meanwhile meant to feature the following contents, amongst others:

- ▶ Information on substances of concern
- ▶ Information for recoverers/recyclers
- ▶ Product and/or performance parameters
- ▶ Operating and repair instructions



- ▶ Products that conform with the law
- ▶ Mapping of improvement potentials
- ▶ Use in official and customer communications
- ▶ Diverse integration of QR codes
- ▶ Sustainable value creation chains

How will DataCross 2.0 support you for the new requirements?

As a DataCross 2.0 user, you can create a Product Passport by building on the function modules. The passport serves to meet the statutory communication requirements. An even greater benefit of the Product Passport lies in customer communications. The DataCross Product Passport can for example be used to send (end) consumers the latest offers, safety advice and operating instructions.

The DataCross software (www.data-cross.de) has long been successfully used by companies to request declarations and documents relating to legal substance-related and environmentally relevant requirements from suppliers, and then analyze and manage them. In combination with the established modules confirming material compliance requirements and enforcing the Supply Chain Act, and with the new module for mapping the CO2 footprint, many of the Product Passport's required contents are already realized in DataCross today. Thanks to expansions in the calculation of the recyclability, the tec4U Product Passport extensively maps the individual product attributes as a Digital Twin.

How the Product Passport works with DataCross 2.0

- ▶ You can comfortably combine data and documents from various sources, e.g. other DataCross modules or your ERP system.
- ▶ The data can be assigned to a product group or dedicated product.
- ▶ The Product Pass is typically accessed by scanning a QR code, meaning that the QR code contains a link, and you can individually decide who can see which information. This QR code can find various uses:

- ▶ on the products themselves
- ▶ on the packaging
- ▶ in operating instructions
- ▶ in offers
- ▶ in contract documents
- ▶ ...

The DataCross2.0 Product Passports can be structured as follows:

- ✓ Header data
- ✓ Product description
- ✓ Safety advice
- ✓ Offers
- ✓ Operating instructions
- ✓ Repair instructions
- ✓ Contact
- ✓ Material compliance
- ✓ Recycling
- ✓ CO₂ footprint

To make these functions available to the user, tec4U brought 30 years of experience and expertise to bear on the app development. In addition to which tec4U Solutions will also support you in the individual formulation of Product Passports/Digital Twins, always in view of the available data and the structural and economic possibilities of your company.

Your contact partner **Stefan Nieser** will be pleased to help you with any questions on the subjects Digital Twin / Product Passport.

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