

Parker-Hannifin Manufacturing-division FSCE Enhanced **eco-designed** couplings

Parker-Hannifin FSCE has managed to transform an ordinary compressed air network connector into an eco-designed connector with enhanced performance. The innovation teams have adopted the eco-design approach for future projects.



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of a compressed air network, those improvements give a certain financial advantage to the new product.

In fact this overall approach has been extended to other areas, including packaging. “By optimising the design, we managed to increase the mass of connectors in one single box”, concludes Richard Boulom.

Further to this experiment, Parker-Hannifin FSCE wished to extend the eco-design approach to the development of other various projects.

developed in the mechanical sector provided a means to meet these objectives and allowed Parker to complete its initial approach.

Unquestionable improvements

After one year of development within Parker-Hannifin FSCE, significant improvements have been obtained: connectors thickness reduction and creation of a new range of connectors (straight connectors, elbow connectors, T connectors) with diameter of 50 mm and with reduced weight thanks to the use of aluminium and composite material (polyamide and glass fibre). The weight of the bi material branching flange and of the connectors was reduced by 30%. “This was achieved with performance similar to or even better than former equivalent products”, says Richard Boulom. When taking into account the complete life cycle

This was not the first eco-design experience implemented by Parker-Hannifin Manufacturing (FSCE division). “We had already used the lifecycle analysis (LCA) method to design a new connector for use in liquid networks”, says Richard Boulom, R&D project manager at Parker-Hannifin France. LCA makes it possible to quantify the environmental impacts of new products, but Parker wanted a more comprehensive and structured approach to guide its design team. With its comprehensive approach and simple implementation, the eco-design methodology

OUR CLIENT

Corporate name
Parker-Hannifin
Manufacturing, FSCE
division

Activity
Industrial connectors

Workforce (France)
950 employees

Cetim's asset

The eco-design method, initiated by Cetim and already



standardised in France (NF E 01 005), has recently become an European

standard (CEN TS 16524). The ATEP tool, which allows the implementation of the eco-design process, is available for download to Cetim subscribers, free of charge. The tool is also available to all other industries within the scope of Cetim collaborative projects.