



# Connection Solutions Low Pressure

Our Environmental Approach

aerospace  
climate control  
electromechanical  
filtration  
fluid & gas handling  
hydraulics  
pneumatics  
process control  
sealing & shielding



## **Parker Legris connectic**

products are available from

### **MARYLAND METRICS**

P.O. Box 261 Owings Mills, MD 21117 USA

ph: (410)358-3130 (800)638-1830

fx: (410)358-3142 (800)872-9329

email: [sales@mdmetric.com](mailto:sales@mdmetric.com) web: <http://mdmetric.com>

RFQ form: <http://mdmetric.com/rfq.htm>

**ENGINEERING YOUR SUCCESS.**



Parker-Legris, Fluid System Connectors Division Europe, a Division of Parker Hannifin since October 2008, structures its offer around the design, the development and the industrialization of a panel of connection solutions to enhance the productivity and profitability of its customers, while favouring better management of the environment. The company philosophy is permanently and continuously orientated towards the preservation of natural resources and environment protection.



**A philosophy that benefits nature, technology, and mankind.**

#### Protection of our natural resources

By optimizing energy use thanks to the performance of our industrial tool.

#### Permanent and continuous improvement

By changing old habits and promoting new materials and concepts.

#### Asserting our values for environmental protection

By achieving ISO 14001 certification for all our sites to gather our employees around clear objectives in terms of environmental protection.

## our Commitment to Sustainable Development



### Innovation

Parker-Legris has placed eco-design at the heart of its innovation in order to develop products that are more compact, more efficient and easier to use, and whose environmental footprint is optimum.

### Industrial Performances

Improve our production methods to reduce the quantities of material used and energy consumed ; reduce and re-use waste.

### Security - Health Protection

Fulfill the legal and regulatory/administrative requirements with regards to safety on our production sites, so as to ensure maximum prevention of risk for all employees.

### A Long-Lasting Relationship with our Customers

Develop partnerships with our customers and accompany them in their environmental approach.

# 4 Environmental Actions

- 1 Reduce the Impact of our Industrial Sites
- 2 Anticipate Regulations
- 3 Offer Environmentally Friendly Products
- 4 Communicate on the EPP (Environmental Profile of a Product)



## 1 Reduce the Impact of our Industrial Sites

Parker-Legris integrated the management of environmental protection into the running of its industrial sites and this step has allowed valorization for 85% of waste recycling and a 15% reduction in our energy consumption.

## 2 Anticipate Regulations

### To Act for the Future

Parker-Legris products are only indirectly affected by WEE, ROHS and REACH regulations. However, Parker-Legris continually goes above and beyond its legal obligations, and endeavours to find the appropriate mix of materials, recycling channels and technical performance in order to facilitate the recycling of these products at the end of their life cycle.

### Privilege Recycling

The materials contained in our products are listed in our catalogues and on the products themselves, which facilitates their recycling. All our products are packed in packaging made of recycled materials.

Parker-Legris subscribes to the EcoFolio organisation and thereby contributes to paper reduction, re-use and recycling.



## A Global Approach :

- Values of Excellence
- Security - Health protection
- Industrial performance
- ISO 14001 certification
- Everyday management of industrial hazards

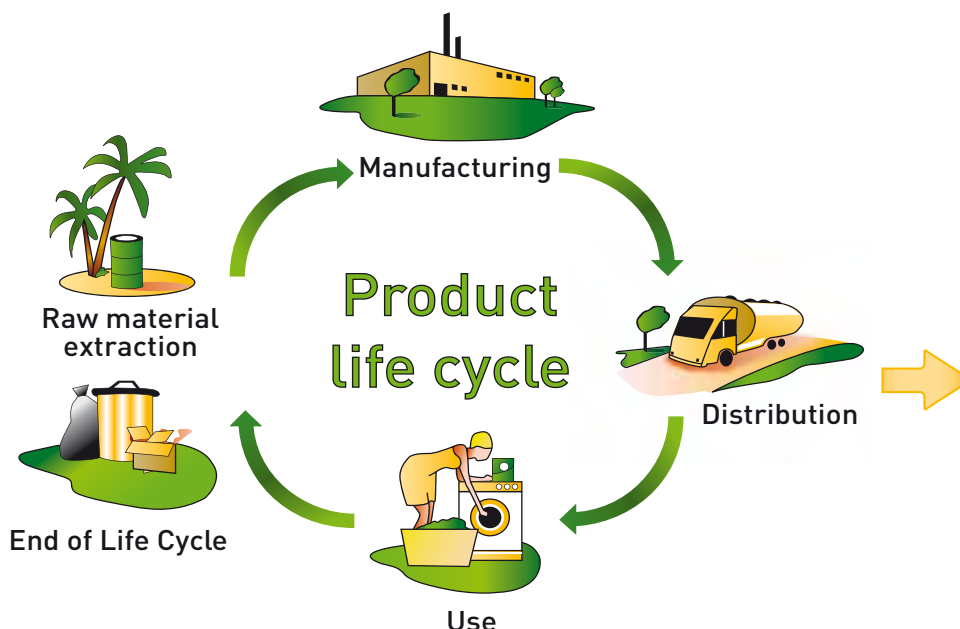


### 3 Offer Environmentally-Friendly Products

A product has an impact on its environment during its entire life cycle, from raw material extraction to treatment at the end of its life cycle.

Parker-Legris takes an active approach to continuous improvement and ecologically sound manufacturing and relies on Product Life Cycle Analysis (PLCA) to optimise the environmental impact of its products.

The evaluation of these environmental impact is detailed in the 11 indicators below; they cover all types of pollution so as to guarantee the multicriteria reasoning: this limits the transfer of pollution from one step of the cycle to the other.



## Life Cycle Analysis

Aims to evaluate the environmental impact of a product during its different life cycle stages :

- Manufacturing,
- Distribution,
- Use,
- End of Life Cycle.

## Environmental Impacts

- Global Warming
- Air Acidification
- Water Eutrophication
- Raw Material Depletion
- Hazardous Wastes
- Water Toxicity
- Air Toxicity
- Ozone Depletion
- Photochemical Ozone Creation
- Water Consumption
- Energy Consumption

### 4 Communicate on the EPP (Environmental Product Profile)

This communication tool is common to all professions and delivers a clear and reliable message which promotes ecological progress and permits data integration into the Life Cycle Analyses of the equipment.

Parker-Legris proposes EPP covering the whole new range of "LIQUIfit" products. This documentation will be developed for all our new products.

This model relies on the standard ISO/TR 14025 : Environmental labels and declarations, Type III.

It uses recognized methods and tools :

- Life Cycle Analysis (according to ISO 14040 standards)
- EIME software (Environmental Information & Management Explorer)



# Environmental Benefits

- 1 Optimize your energy
- 2 Make the most of your equipment
- 3 Optimize your environmental impact

## 1 With Parker-Legris : optimize your energy

Compressed air is a widely used industrial fluid. However, it is probably one of the most expensive energy fluids... The European industry's annual electricity consumption is estimated at 400 TWh\* according to 3 main energy categories: Coolers, Compressed Air, others. Compressed Air represents up to **40% of the consumed electricity**.

In an average installation : 70% of the generated **compressed air** is used in air blowing and exhaust applications, 10% in the working process, and the **remaining 20% are lost in leaks**. **Considering that - on average - a 30% energy saving can be attained when using high-performance compressed air systems**, electrical energy savings, in Europe in compressed air systems, would total more than 2 billion euros !

We have solutions to save energy on compressed air equipment and products to help you reduce your energy consumption, saving you money while optimizing the efficiency of your equipments. By taking into account the most demanding design criteria (ISO 14743), controlling 100% of our products and offering you the best know-how in terms of service, we now offer LF 3000 fittings with the lowest leak rate of the market : 0,02 Nl/h up to 20 bar working pressure and a safety factor = 4.

**Using our fittings:  
means 49% of  
energy saved, or  
200% within 5 years\*\***

\* source ADEME

\*\* Protocol simulating five years of operation : cycle level of -20°C to +80°C under 7 bar for 500h and measurement of vacuum capability and extent of resistance to pressure test.





## 2 With Parker-Legris : Make the most of your Equipment

The eco-design which we improved as we developed the different generations of our LF 3000 has enabled us to offer more services, to innovate and to assert our true commitment for sustainable development.

We have carried out a comparative Eco-analysis based on 3 indicators linked to Global Warming between the 2 latest generations of our LF 3000 fitting. Taking into account the environmental constraints right from the design stage, we can offer a double benefit, both functional and environmental.

### LF 3000® stud elbow

2<sup>ND</sup> GENERATION

3<sup>RD</sup> GENERATION

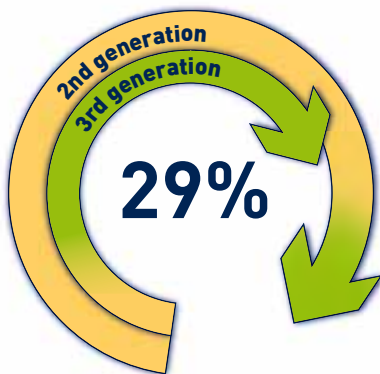


#### Functional advantage

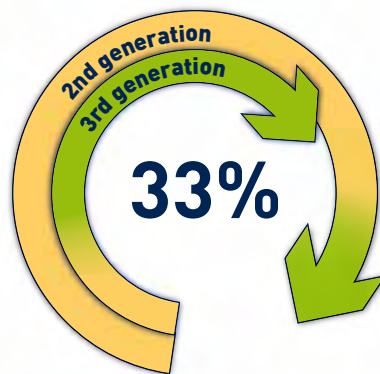
- Compactness
- Reliability
- Lightweight
- Ease of use
- Maximum flow

#### Environmental benefit

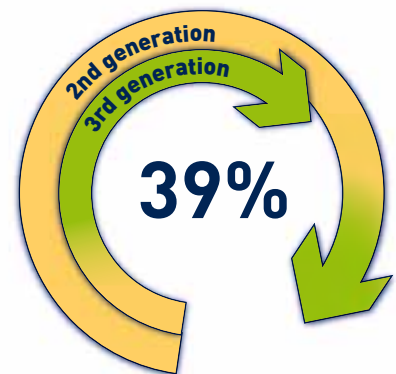
Reduction of 29% to 39% of the environmental impact related to the greenhouse effect (*GWP : Global Warming Production*), to the ozone layer depletion (*OD : Ozone Depletion*) and to energy consumption (*ED : Energy Depletion*).



**Energy Depletion :**  
Gain in terms of energy savings during a product's life cycle



**Global Warming :**  
Gains in terms of CO2 rejection during a product's life cycle



**Ozone Depletion:** Gain in terms of gas rejection affecting the ozone layer during a product's life cycle

### 3 With Parker-Legris : Optimize your Environmental Impact

The comparative LCA offers a true alternative in terms of environmental differentiation and valorization.

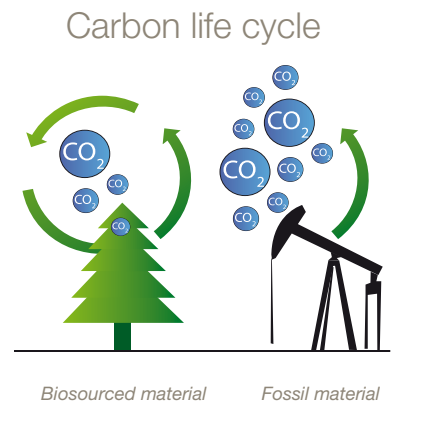
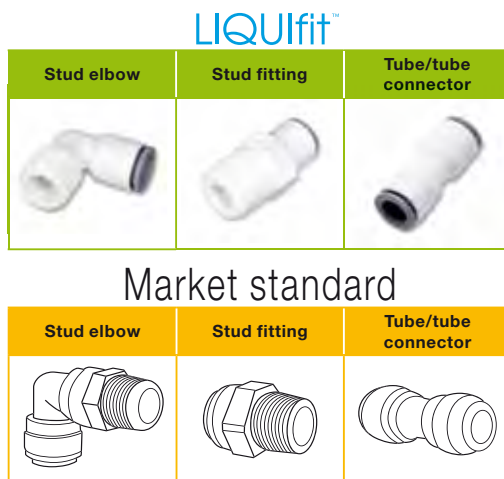
#### Comparative LCA :

We carried out a comparative Life Cycle Analysis on the market of drinking water between 3 Parker-Legris fittings and the standard products on the market.

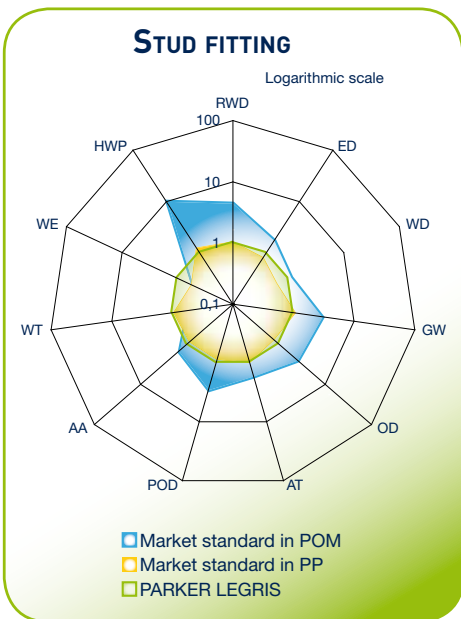
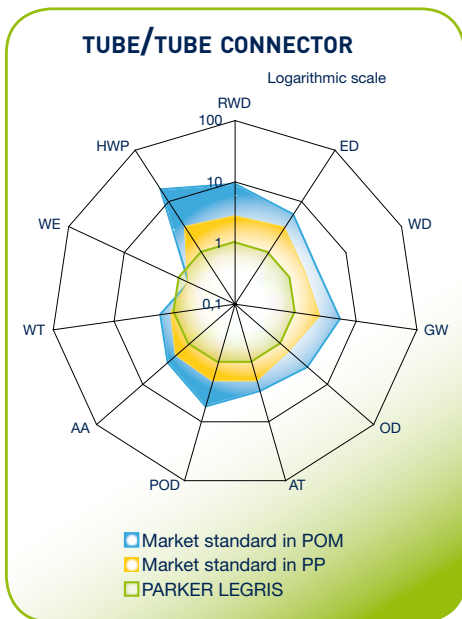
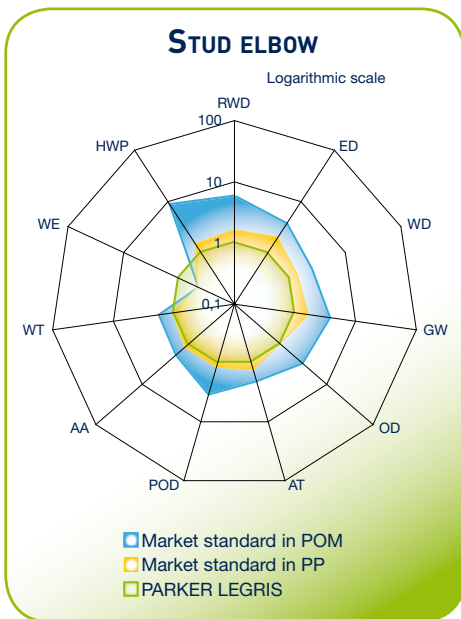
The Parker-Legris products have the lowest environmental footprint of the market.

#### Context of the study :

This summary relies on ISO 14020, ISO 14025 and IEC PAS 62545 standards related to the general principles of environmental regulations. The results are presented in a report approved by an ethics committee (ADEME and Bureau Veritas organizations).



Parker-Legris products are **compact**, consume little energy and are made of **biosourced materials**.



- RWD : Raw Material Depletion
- OZ : Ozone Depletion
- WT : Water Toxicity
- ED : Energy Depletion
- AT : Air Toxicity
- WE : Water Eutrophication
- WD : Water Depletion
- POC : Photochemical Ozone Creation
- HWP : Hazardous Waste Production
- GW : Global Warming
- AA : Air Acidification

## **Parker Legris connectic**

products are available from

### **MARYLAND METRICS**

P.O. Box 261 Owings Mills, MD 21117 USA

ph: (410)358-3130 (800)638-1830

fx: (410)358-3142 (800)872-9329

email: [sales@mdmetric.com](mailto:sales@mdmetric.com) web: <http://mdmetric.com>

RFQ form: <http://mdmetric.com/rfq.htm>

Fluid System Connectors Europe

### **Legris SAS**

Parker Hannifin Corporation

CS 46911 - 74 rue de Paris

35069 Rennes

Phone : +33 (0) 2 99 25 55 00

fax : +33 (0) 2 99 25 55 99

