



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



# Refuse Collection Vehicles

Dedicated Products, Systems and Solutions



ENGINEERING YOUR SUCCESS.

# Complete System Solutions for Refuse Collection Vehicles

Parker – an experienced partner at your service

## Market Knowledge and Solutions

Parker's commitment to the refuse industry is clearly demonstrated by the products, the solutions and the customer service provided, always with environmental awareness in focus.

Parker has successfully integrated products that address the needs of the refuse industry for over fifty years. Innovative products like Silent Packing, Power Equalisation, Energy Recovery, Variable Pack Systems using Integrated manifolds and complete Electro-hydraulic Systems are just a few examples.

## Total System Capabilities

Parker has dedicated teams of application specialists working globally to assist our clients in the design of systems, sub-systems and solutions to meet the most demanding requirements, offering unbeatable global product availability and service.

There are several immediate value-adding benefits from utilising our expertise and our advanced technology.

The manufacturer is able to reduce development time and time-to-market, whilst seeing

production time and cost savings.

This is due to the integrated solutions, unique design features and globally synchronized logistics along with Value Added Services such as Kanban, Kitting and Pre-assembly, which cuts inventory and simplifies purchasing significantly.

For the end-user, benefits such as greater efficiency, reduced down-time and less maintenance contribute to an improved profitability.

ELECTRONIC CONTROLS & DISPLAYS • MOBILE SENSORS • POWER TAKE-OFFS • HYDRAULIC PUMPS • HYDRAULIC MOTORS • ELECTRO-HYDRAULICS • PNEUMATICS • MANIFOLDS & VALVES



HOSES • HARD TUBING • FITTINGS • CYLINDERS • ACTUATORS • ACCUMULATORS • COOLERS • FILTRATION • LOGISTIC SERVICES • MOBILE SYSTEMS TEAM SERVICES • GSM CENTRES



# Meeting Tomorrow's Needs Today

Stay ahead of the trends with Parker know-how

## A challenging future ahead

Future legislation will continue to impose lower CO<sub>2</sub> emission levels (Euro VI engines), driving manufacturers to pursue greener technologies and reducing our footprint on the environment. Safety of operation and of all those around the machine will remain a crucial aspect of machine design. Moreover, more silent system solutions could boost productivity and return on investment. In the medium term, new fuel types (bio-fuels, methane diesel, etc.) will become a reality, imposing technological breakthroughs. On the other hand, reliability will remain a fundamental requirement.

## Parker at your service

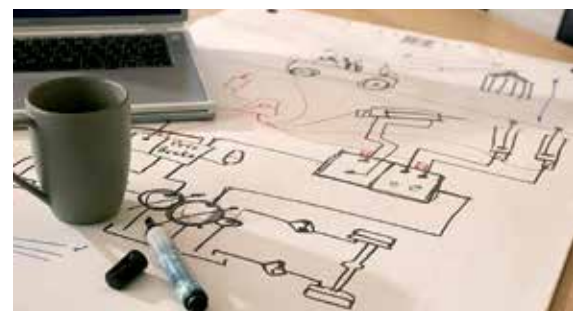
More energy efficient systems reduce emission levels and reduce fuel costs. Parker has a long experience when it comes to system customization, adapting to the customers' requirements and specific application needs. Additionally, safety is a top priority for us. We can provide the highest safety standards within the marketplace. And last but not least, we can offer you a range of very silent components, enabling you to increase productivity.



# At Your Service – Worldwide

Our specialised mobile systems and application engineers work out of eight uniquely equipped motion control technology centers strategically placed around the world to best serve our customers. In Europe, the regional operations and proving grounds are located in Borås, Sweden and Kaarst, Germany. True customer partnerships are cultivated and Parker's industry-leading systems are developed

and validated. With a multi-disciplined engineering team on site, efficiencies allow your projects to be completed in a shorter period of time. It's a collaborative effort with all applicable Parker divisions engaged in product development that addresses real customer needs, adding a competitive edge to your business.



## Let us help you improve:

- Reduced cycle times
- Energy efficiency
- Commissioning costs
- Circuit simplification
- Space utilization
- Life cycle costs
- Ergonomics
- Environmental impact
- Operator safety
- Logistics costs



# Cab & Controls



## The intelligent way to higher productivity

IQAN by Parker is a flexible electronic control system containing all functions for total system solutions. With the user-friendly software tool IQANdesign, you can build advanced machine functions in a simple way, increasing productivity and cutting costs.



## Touch-screen displays

The IQAN-MD4 is the latest display in the IQANdesign platform. It comes as 18 cm (7") with standard touch-screen, and in a 14 cm (5.7") version with optional touchscreen. Weather protected and easy to configure with IQAN programming tool.

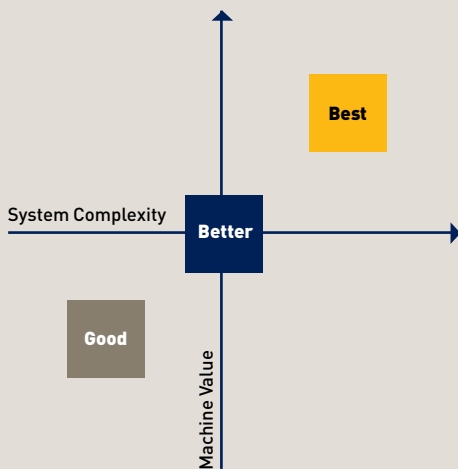


## Quadruple control

The IQAN-LC6-X05 is a mini-coordinate joystick that incorporates ergonomic design with ruggedness, functionality, light weight and flexibility for mobile applications. The unique (patent pending) rotary knob integrates a fourth proportional function in the handle.



## Product Selection Guide



The IQAN MC-3 is designed in accordance with EN 13849-1 and IEC 61508 standards, greatly simplifying the design of a refuse collection vehicle that meets all legislative demands.

## Ergonomic operation

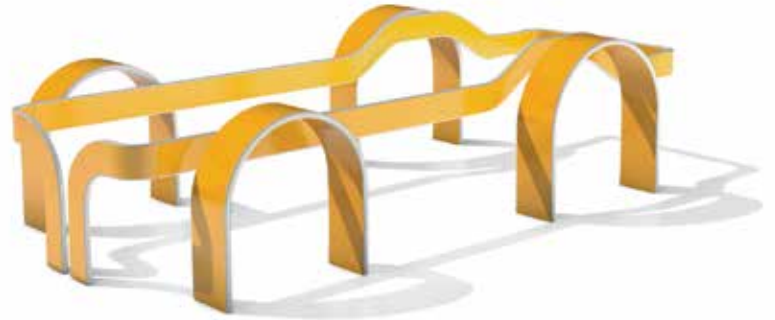
A range of linear and joy-stick levers for pilot control, adapted to the specific demands of construction machines.



# Chassis

## Power Take-Offs

A wide range of gearbox mounted power take-offs with capacity up to 908 Nm. Direct coupling flanges are available with wet splines to extend the PTO and pump shaft life. Programmable Over Speed options are available to protect the driven component.



## Pumps and variable displacement motors for direct PTO and cardan transmission mounting

400 bar rated piston pumps and motors as well as vane and gear pumps for direct PTO and cardan transmission mounting, designed for high efficiency at low speed, giving low noise operation. They allow 'packing on the move' with unchallenged driveability as well as providing lower oil temperature, reduced emissions and improved fuel economy. The pumps are available with single, double, triple, variable or a combination to suit constant flow as well as load sensing systems.

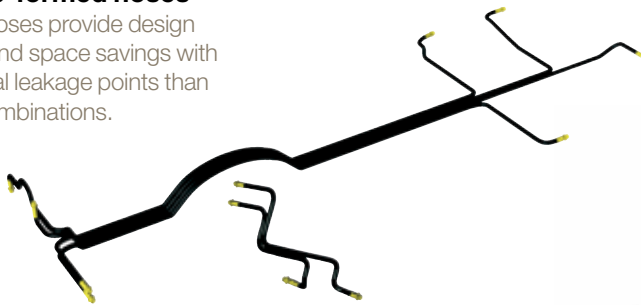
## Hoses and connectors

A wide range of hoses and connectors for mobile markets with possible PTS system for tagging and tracking Parker hose assemblies.



## Pre-formed hoses

Pre-formed hoses provide design advantages and space savings with fewer potential leakage points than hose-tube combinations.

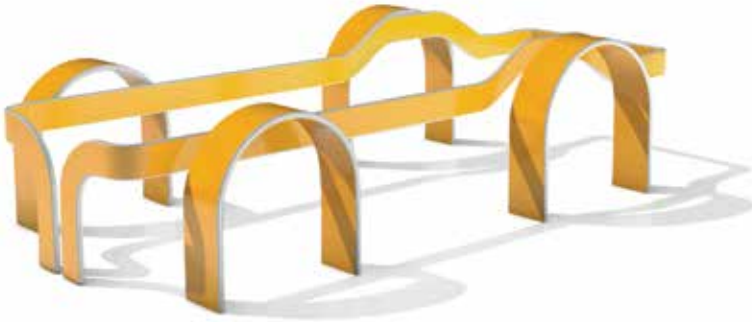


## Store energy

A complete range of CE-approved bladder, diaphragm and piston accumulators maintains high pressure for safe braking, manoeuvring and smooth ride control.



# Chassis



## Cooling systems

Compact, lightweight and efficient air/oil/water cooling systems, developed for mobile applications.



## Adding system life by adding Parker Filtration solutions

Parker Filtration's proven, innovative technology extends the life and increases reliability of machinery and systems in this market. In addition to a wide range of low, medium and high pressure hydraulic filters, lube and fuel filter products and quality reservoir accessories, Parker offers over 50,000 Parfit™ interchange filter elements and advanced fluid condition monitoring with the icountLCM portable particle counter and icountPD particle detector. A comprehensive range of patented filtration products that combined with our experience help reduce equipment downtime and minimize life cycle costs.

## Reservoirs

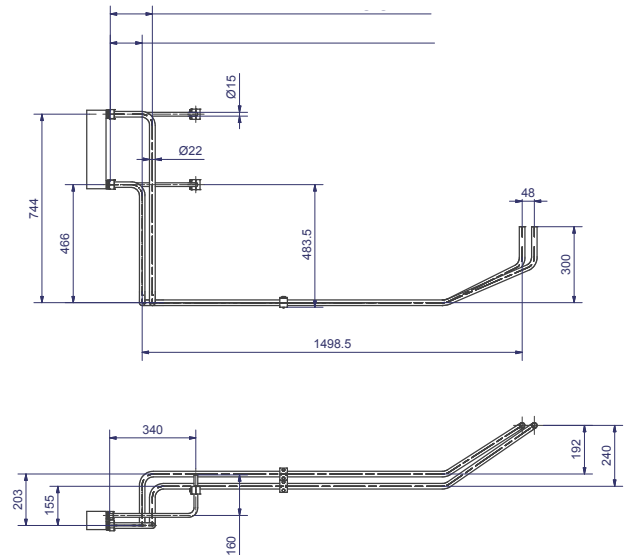
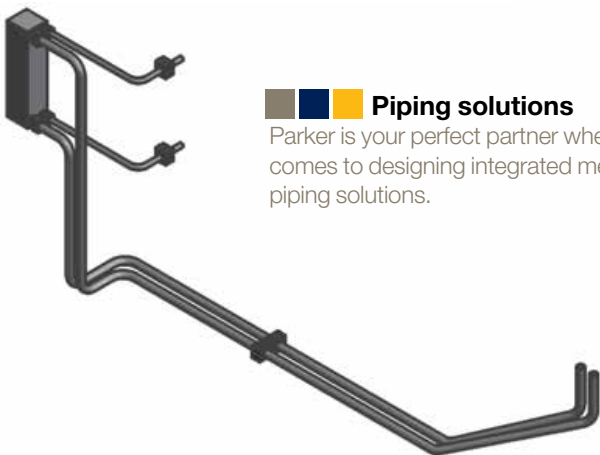
All reservoirs come complete with mounting kits for ease of installation. All steel parts are powder coated black, protecting them from the harsh elements. Reservoirs are designed for both 2- and 3-line systems for design flexibility. All ports are internally diffused to help with heat dissipation and all reservoirs include easy reading oil/temperature indicators.

## Sensors

Fast response time and quick and safe connection guarantees safe capture of pressure in hydraulic systems.

## Piping solutions

Parker is your perfect partner when it comes to designing integrated metallic piping solutions.

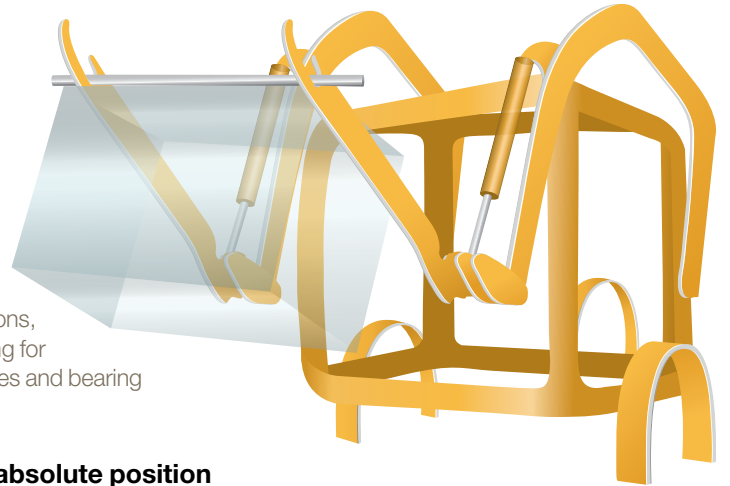


# Implements



## Custom designed cylinders with integrated functionality

Cylinders, purpose-built to customer requirements, are designed to the specific needs of extremely demanding applications. Available with hardened piston rod, through-rod feeding and position sensors for, e.g., the pack and sweep cylinders. Also available with integrated valve functions, (over-centre valves or lock valves) and end position damping for functions such as hopper door opening. A variety of rod eyes and bearing types completes the picture.



## Intellinder absolute position sensing for safety-critical applications

Rugged simplicity distinguishes Intellinder from other automotive position sensing solutions. By using the piston rod as the measuring scale, read directly by an opto-electronic sensor in the head of the cylinder, Intellinder delivers instantaneous response and exceptional repeatability while avoiding the vulnerability and complexity of traditional feedback designs. Available as a double rodded cylinder for steering systems, Intellinder can be fitted with two or more sensors for multiple redundancy.

## Global Shield protective surface coating

Parker's new Global Shield is a unique, high performance coating which provides superior corrosion resistance and dramatically extended service life in harsh environments. Applied to hydraulic cylinder piston rods in place of traditional chrome plating, Global Shield is an eco-friendly, fully dense coating with exceptional resistance to wear, for higher productivity and reduced life cycle costs.



## EHP subsystems for fuel-efficient, quiet machines

Parker's Electro-Hydraulic Pump subsystems include directly coupled permanent magnet motor/generators with hydraulic pump/motors. The electric motor is controlled by an intelligent DC/AC inverter enabling energy recovery. EHPs are used for power steering, implement actuators, and additional auxiliary functions.



## Custom adapted integrated functionality

Having the widest range of cartridge valves in the industry enables Parker to custom design complete valve blocks to fulfill every possible need in the Refuse trade. Either stand-alone units or flanged to a control valve, they form a vital part in a system solution.

## Pneumatic components for mobile applications

Parker offers a comprehensive range suited to the demanding operating environment in refuse collection vehicles, such as hoses, connectors, valves, filtration units and a variety of levers.



## Hydraulic valves with integrated functions for efficient production

Section-built open centre as well as load sensing valves for maximum flexibility. Integrated functions such as low spill emergency stop (in case of hose rupture), packer cylinder compounding system, tamper free sweeper blade roll-back relief valve, ejector barrier set-back sequence valve, hopper door maximum speed adjustment and maximum flow regulator – all of which save on materials, production time and purchase logistics.



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**US Product Information Centre**

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[www.parker.com](http://www.parker.com)

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