

Making your every move count



Next generation straddle and shuttle carriers

Building on long heritage and experience



2013 New products & new product portfolio

2013 5000th Kalmar Straddle Carrier to Sydney

2005 7th Gen. Electric SC & Automated SC to Brisbane

2002 1st Shuttle Carrier & Electric Straddle Carrier

1997 1st Twin-spreader Straddle Carrier

1993 1st 4-high Straddle Carrier

1976 Kalmar container Straddle Carrier

1972 Kalmar Straddle Carrier for stacking

1968 1st Straddle Carrier for containers

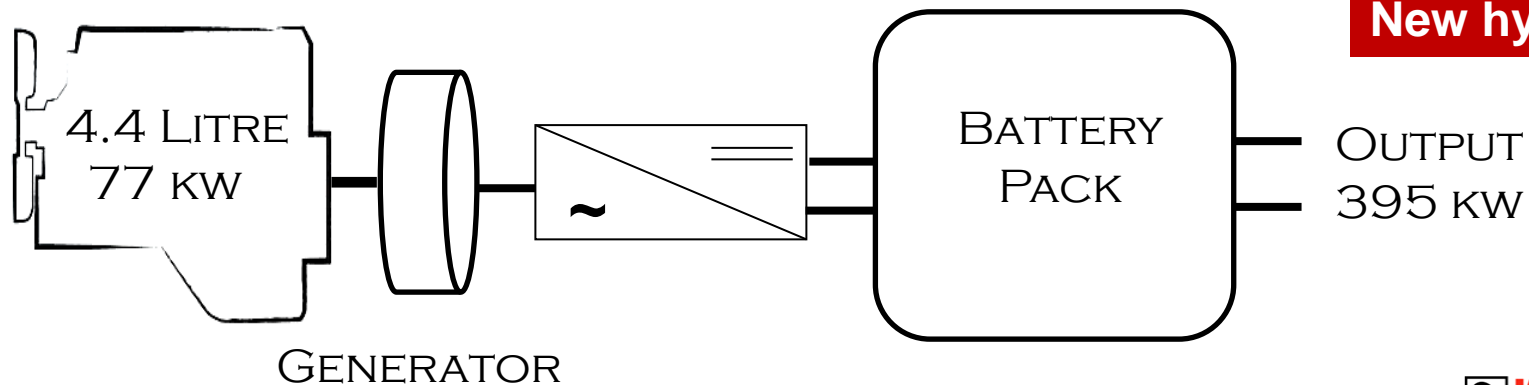
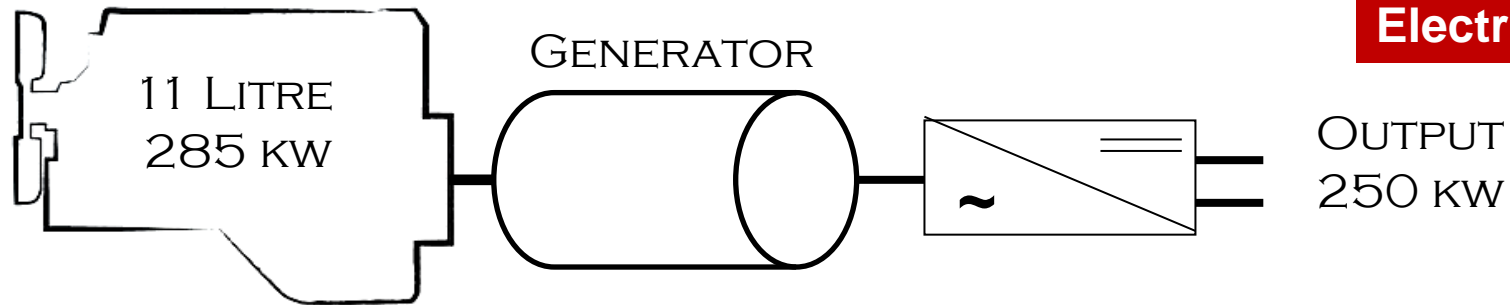


Lowest Fuel Consumption in the Market !
New Revolutionary Hybrid



New modular powertrain

New modular powertrain



Powertrain with new Volvo D11 Stage4

- Volvo D11, 11 litre, 6 cyl., 285 kW, Stage4
- Characteristics developed for Kalmar straddle carrier application
- Small technology step from 3B to 4F
 - Small exhaust gas recirculation
 - Selective catalytic reduction (SCR)
 - No diesel particle filter
- Proven in on-road and off-road applications
- Reachstacker uses same engine
- Fulfils emission regulations in AMER and Europe
- AGCO & Cummins available with flex and pre-buy Stage 3A & 3B from 1/2014-



Customer benefits

- Industrial based engine design
- Good torque and response properties
- Long engine lifetime
- Good fuel consumption
- Long service intervals
- Local and global support

New hybrid powertrain

- AGCO, 4.4 litre 4 cyl., 77 kW
- Automatic engine shut down - Start & stop
- Engine only on – off at best optimal RPM
- Independent hydraulic oil system for braking, steering and spreader functions
- Permanent magnet water cooled generator
- Lithium-ion based energy storage for storing energy from hoisting and gantry movement

Customer benefits

- Fuel savings up to 40%
- Less pollution, noise, oil
- Longer lifetime of equipment
- Longer service intervals
- Higher machine availability

Customer Case A: Straddle Carrier Operation



Fuel consumption decreased by 30% (- 6 l/h)

- Annual fuel saving 27000 l, when operated 4500 hours



Estimated engine running 70% of operation time

- Engine and generator operating hours increased



Lower noise

- Engine quieter - use only part of time and at same RPM



Environmental impact

- CO₂ emission reduced by ~ 72 000 kg, less oil used



Higher machine availability

- Less fueling and maintenance

Customer Case B: Shuttle Carrier Operation



Fuel consumption decreased by 40% (- 7 l/h)

- Annual fuel saving 21000 l, when operated 3000 hours



Estimated engine running 60% of operation time

- Engine and generator operating hours increased



Lower noise

- Engine quieter - use only part of time and at same RPM



Environmental impact

- CO₂ emission reduced by ~ 56 000 kg, less oil used



Higher machine availability

- Less fueling and maintenance

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