



ecoline™

eSense™
counterbalance solution

stability +
efficiency

SUN hydraulics®

A HELIOS TECHNOLOGIES COMPANY

STABILITY + EFFICIENCY from the World Leader in Counterbalance Valve Technology

For over half a century, the world has trusted Sun Hydraulics' cartridge valves for many of its load-holding applications. As a leader of this industry, Sun has a responsibility to develop and enhance load-holding solutions while prioritizing the quality and safety you've come to expect from our brand.

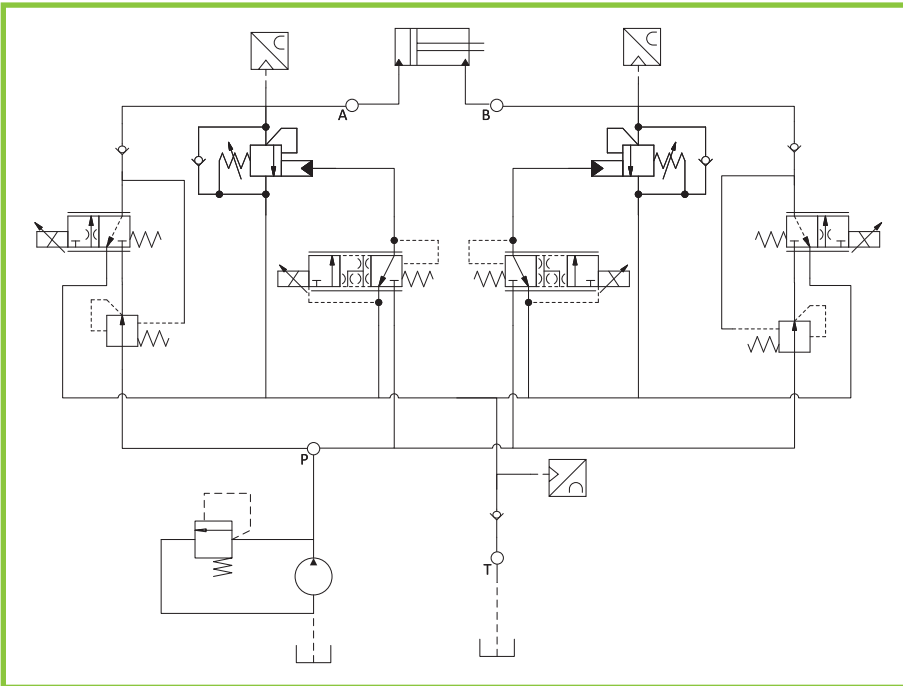
Counterbalance valves are a necessary part of many applications, used to prevent system failure, hose bursts, and over-pressurization. Choosing the wrong counterbalance valve can lead to hassle, grief, and even application failure. Even with the best of intentions, choosing a traditional counterbalance valve can lead to excessive oscillation and energy dissipation.

Save energy *without* sacrificing performance with eSense™

In collaboration with Perdue University, Sun Hydraulics has created the next generation of load-holding technology. Part of the new ecoline™ program, eSense™ is the efficient and innovative solution the world has been waiting for. This powerhouse solution adapts to any load and provides up to **85% of energy-efficient power** to your application. Combatting the industry's ongoing challenge for shock absorption, eSense™ provides up to **90% less oscillation**. Resilient and compact, this low-leakage solution is optimized for the user's smooth control and safety.

*In collaboration with Perdue University,
the next generation of*

eSense™ example schematic:

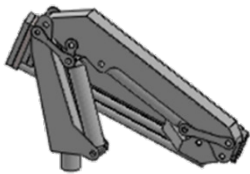


Possible Applications

- Hydraulic Press
- Gantry crane
- Planter
- Material handling machine
- Crane
- Scissor lift

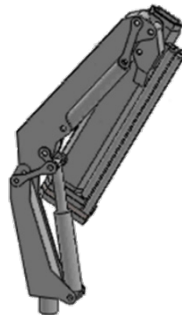
eSense™ example results versus standard counterbalance:

Main Boom Extension



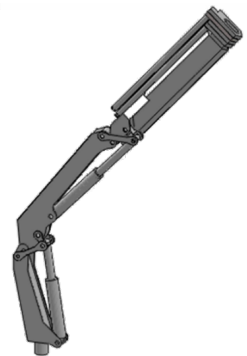
85% Energy Savings
15% Less Oscillation

Main Boom Retraction Outer Boom Folded



78% Energy Savings
1% More Oscillation

Main Boom Retraction Outer Boom Unfolded



84% Energy Savings
89% Less Oscillation

*Sun Hydraulics has created
load holding technology.*


about ecoline™


As a leading manufacturer of high-performance cartridge valves and integrated packages, Sun Hydraulics has gathered a collection of innovative solutions proven to significantly boost and improve energy efficiency, reduce fuel consumption, and ultimately provide cost savings for the end user.

Sun's new ecoline™ program is comprised of popular products such as the LoadMatch™ cartridge valve, LoadAdaptive™, Series 4 PLUS cartridges, T-18AU & T-19 AU cavities, Sun Cavity & QuickDesign™, Energen and the latest ecofriendly addition, the eSense™ solution. Contact us to learn more about ecoline™ and how these products can optimize the efficiency of your application.



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