

MAKE

• STORE

• MOVE

• COMPETE

Powered by Penton

June 2017
www.mhlnews.com

MH&L

MATERIAL HANDLING & LOGISTICS

FORKLIFTS: WHERE THE ACTION IS

MH&L looks at
the Top 10 forklift
manufacturers.

p. 18

**Low-Level
Order Picking**
p. 14

**Circular
Supply
Chains**
p. 22

**Safety at the
Loading Dock**
p. 25

**The Amazon
Effect**
p. 28

**Make Room for
Corporate Growth**
p. 30

#####PBM**CHR-RT L01**C-031
#925LE011 3# M3 004 221 00117 C
JMS MM 1 JUNE17 0013 #32 #7596
KELTIA @ALEBA
BEN SIMBORIO
21131 MARBELLA AVE
CARSON CA 90745-1339

COVER FEATURES: LIFT TRUCKS

14

**Cutting Five Seconds per Pick:
How to Optimize Low-Level
Order Picking**

Automated solutions, such as forklifts controlled by wearable technology, are a viable path to significant productivity improvements.

BY JIM GASKELL

18

**The Top 10 Forklift
Manufacturers of 2017**

Our annual look at the 10 largest global manufacturers of lift trucks ranked by revenue.

BY DAVE BLANCHARD



MATERIAL HANDLING & LOGISTICS (ISSN:2157-0302) is published monthly, except for a combined issue in January/February, July/August and November/December, by Penton Media, Inc., 9800 Metcalf Ave., Overland Park, KS 66212-2216. Phone 216-696-7000. Editorial FAX 216-696-2737. Internet address: www.mhlnews.com. Periodicals Postage Paid at Kansas City, MO, and at additional mailing offices. **POSTMASTER:** Send address changes to *Material Handling & Logistics*, PO Box 2100, Skokie IL 60076-7800. Can. GST #R124631964. Canada Post International Publications Mail. Canadian Publications Mail Agreement No. 40612608. Return undeliverable Canadian addresses to IMEX Global Solutions, PO Box 25542, London, ON N6C 6B2 Canada. Paid subscription rates: U.S.: 1 year/\$70, 2 years/\$100, single copy \$10. Canada: 1 year/\$85, 2 years/\$130, single copy \$15. International: 1 year/\$105, 2 years/\$165, single copy \$20. Send remittance in advance to Penton Media Inc., PO Box 2100, Skokie IL 60076-7800. For subscription customer service go to materialhandlinglogistics@mhldata.com or mail to Customer Service, PO Box 2100, Skokie IL 60076-7800. Phone: 847-763-9670. Printed in U.S.A. Copyright © 2017 by Penton Media. **Copying:** Permission is granted to users registered with the Copyright Clearance Center Inc. (CCC) to photocopy any article with the exception of those for which separate copyright ownership is indicated on the first page of the article provided that a base fee of \$1.25 per copy of the article plus 60 cents per page is paid directly to the CCC, 222 Rosewood Dr., Danvers, MA 01923. (Code No 0025-5262/09 \$1.25 + .60).



features

22

MAKE
**How to Transform Your Supply Chain for
the Circular Economy**

Companies that go beyond basic recycling in favor of strategic sustainability approaches are achieving significant business value..

BY SUDIPTA GHOSH AND HARRY MORRISON

25

STORE
**Safety and Security at the Loading Dock:
Know Your Risks and Take Control**

The key to safety at the loading dock is proper and constant communication.

BY WALT SWIETLIK

28

MOVE
**Transportation Network Optimization in the
Amazon Effect Era**

Having transparency across all aspects of your logistics operation will enable your company to succeed in a competitive marketplace.

BY GARY ALLEN

30

COMPETE
How to Make Room for Corporate Growth

Learn how to recognize and utilize unused space in your facility—it could save you money while generating new sources of revenue.

BY CHRISTINE EMMERICH



