Flexible Palletizing Solutions

With Collaborative Robots

UNIVERSAL ROBOTS



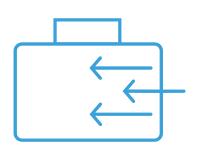
INDUSTRIAL ROBOTS

COLLABORATIVE ROBOTS



THE FUTURE IS COLLABORATIVE

3/5



3/5 manufacturers say there's a skill shortage New jobs created from companies "reshoring"



Only less than 10% of jobs are fully automatable 50%

50% increase in productivity with no job losses

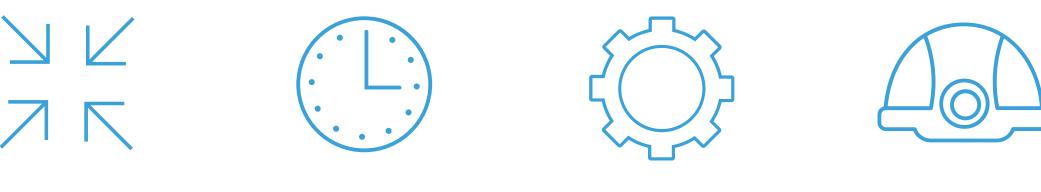




Source: IFR Report/ The Impact of Robots on Productivity, Employment and Jobs/ April 2017

ACHIEVE MAXIMUM PRODUCTIVITY

by merging human expertise with technological competency without compromising quality



Less space needed

Reduce human idle time

Free staffs' time for high value work Improve worker safety





BENEFITS OF A COLLABORATIVE ROBOT (1/2)

- **Safe** UR collaborative robots (cobots) are safe. With all the safety features and regulations being updated all the time they are even more equipped for present day reality.
- **Cost-Efficient** If the UR cobot can eliminate the amount of rejected product or poor quality product due to human error the investment is well worth it.
- Flexible The UR cobot can be moved to another application very easily.
- **No Guarding** The UR cobots have power and force limiting capabilities that allows for a reduction or elimination of impact when in contact with other objects like a human body.



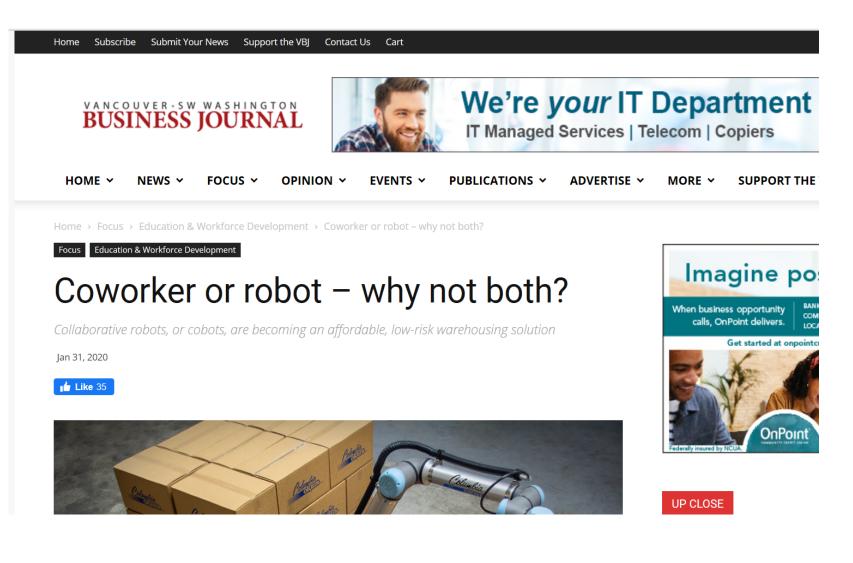
BENEFITS OF A COLLABORATIVE ROBOT (2/2)

- **Fast Payback** With the UR cobot coming in at an cost effective price and can work non-stop through every shift, the payback can be quite fast. The overall goal is to not eliminate workers, but help them with their process. As a general rule of thumb, the average payback for a UR cobot system is between 6-8 months.
- **Small Footprint** The UR cobot are designed to work alongside humans, so they are designed to be compact. This allows the end user to install the robot without major adjustments to their facility.
- **Easy Programming** It's as simple as 1-2-3. Show the UR cobot a couple of points to make it run. From there you can determine its perimeters and safety features to coordinate it safely with employees.





HUMAN OR ROBOT...WHY NOT BOTH?







HUMAN-ROBOT COLLABORATION IS 85% MORE PRODUCTIVE

than humans or robots alone

Source: MIT research data on Financial Times article "Meet the cobots: humans and robots together on the factory floor" on 5th May 2016

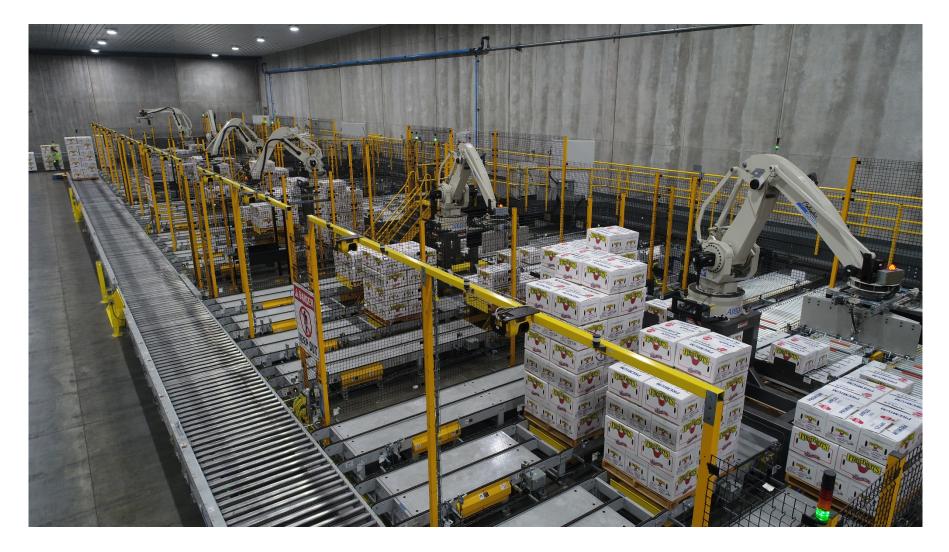
WHO WE ARE







PALLETIZING PORTFOLIO





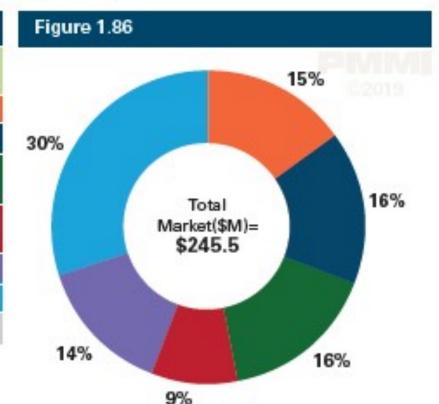


INDUSTRIAL PALLETIZING INDUSTRY

Palletizing / Depalletizing Machinery Shipments by Industry Sector, 2018

	2018	Share in 2018
Beverages	\$37.1	15.1%
Food	\$38.6	15.7%
Household, Industrial & Agricultural Chemicals	\$40.9	16.7%
Personal Care, Toiletries & Cosmetics	\$21.9	8.9%
Pharmaceuticals	\$33.6	13.7%
Other End-User Sectors	\$73.3	29.9%
Grand Total	\$245.5	

Data issued: August 2019 Source: IHS Markit







THE FUTURE IS FLEXIBLE PALLETIZING

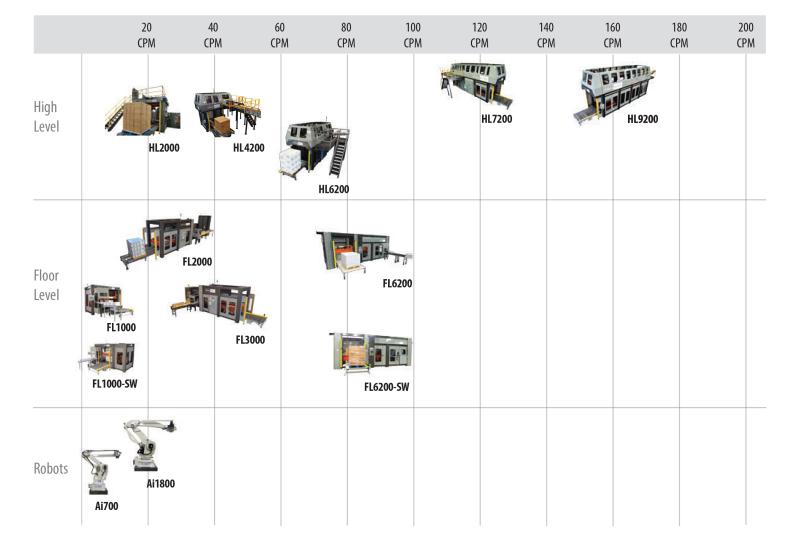






PALLETIZING MATRIX

PALLETIZER SPEED RANGES





COBOT PALLETIZING OPPORTUNITIES





CONFECTIONARY

FOOD & BEVERAGE



Image Source: professornerdster.com; flridapolitics.com; newsinheadlines.com; buflovak.com; howtogeek.com







QUICK PAYBACK

AVERAGE PAYBACK IS BETWEEN 8-10 MONTHS, DEPENDING ON APPLICATION AND INDUSTRY EFFICIENT SETUP

TAKES LESS THAN A FULL DAY; PLUGS INTO 110V AC WALL POWER

EASY OPERATION

NO PREVIOUS PROGRAMMING EXPERIENCE REQUIRED

FLEXIBLE DEPLOYMENT

OUR MOBILE SOLUTION IS EASILY MOVED AND RE-DEPLOYED TO NEW PROCESSES

NO GUARDING REQUIRED

A VAST MAJORITY OF COBOT APPLICATIONS WORK NEXT TO HUMANS WITHOUT PERIMETER GUARDING REQUIREMENTS













THINK BEFORE YOU BUY

- Define your application
- Do a risk assessment
- Calculate ROI
- Understand the trade-offs













QUESTIONS



