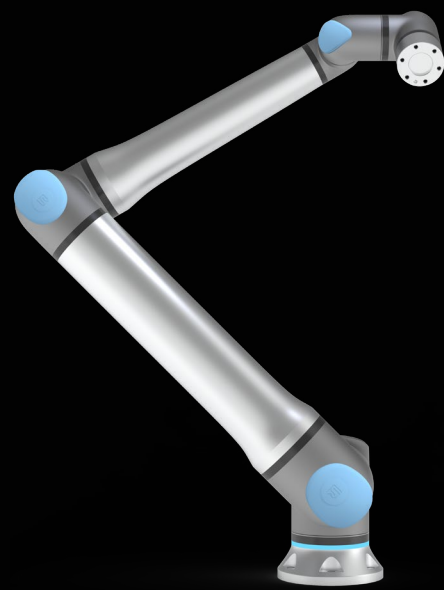




# miniPAL® 20

## COLLABORATIVE ROBOTIC PALLETIZER

The miniPAL® 20, offering a combined payload of 20 kg (44 lbs) offers a small footprint while still providing a flexible and robust palletizing solution. Containing integrated safety system, the miniPAL® 20 utilizes area scanners, radar and guarding, as well as the built in force limiting technology to offer safety and speed in an optimized footprint.



- « Applications include cases, spot packs, trays, bundles, and plastic bags
- « Complete system integration for your end-of-line automation
- « Speed, flexibility, and custom solutions
- « Equipped with easy-to-use pattern-building software
- « Optimized footprint for your facility
- « Increased productivity with no additional labor costs

### WHY COLLABORATIVE?

Collaborative robotic palletizers are designed to work easily and safely in collaboration with employees, freeing operators to do other tasks, allowing for higher production without having to hire additional people. Their force limiting capabilities make them ideal for facilities with limited floor space, deploying in close proximity to workers without compromising safety.

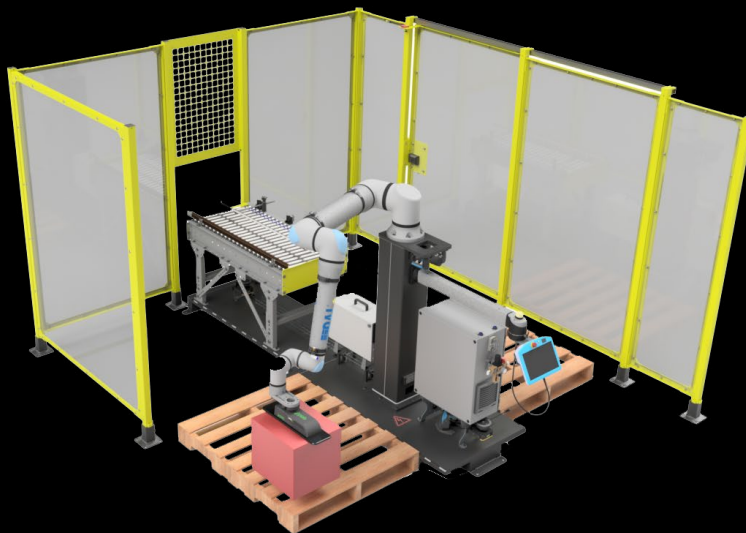


From custom-engineered solutions to complete integration to ongoing support, you can count on Columbia/Okura LLC to support your growth and success as if it were our own. We're committed to maintaining a long-lasting, collaborative partnership focused on meeting your unique needs. We believe in the transformative power of automation.

## SPECIFICATIONS

PAYLOAD	20 kg (44 lbs)	INFEED CONVEYOR	Hytrol E24 - 4' with product guides
END EFFECTOR	Vacuum and clamp style	SAFETY COMPONENTS	275° area scanners
RATE	6 - 28 cases/min (pattern/multi-pick dependent)	POWER REQUIREMENTS	110V, 1PH, 20AMP single phase outlet
LOAD HEIGHT	2032 mm / 80" (Optional 110")	PNEUMATIC REQUIREMENTS	80psi 6.0SCFM
PALLET BUILD LOCATIONS	48" x 48" max pallet size		

*Specifications are subject to change without notice*



## INTEGRATED SAFETY

When collaborative mode is enabled, the robot reduces its force, speed, and power, allowing operators to safely make adjustments within the working cell perimeter without stopping production. Collaborative robots are also equipped with force and power sensors that detect contact and immediately stop the robot, preventing injury to operators or other personnel



## PALLY® PALLETIZING SOFTWARE

Pally is a user-friendly palletizing software package developed by Rocketfarm® for Universal Robots. It allows users to create and manage pallet patterns, which are easy to download and upload to your system. Pally is flexible enough to handle changes in production packaging or pattern requirements with minimal downtime.



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