

An underwater scene with several sharks swimming in clear blue water. Sunlight rays penetrate from the surface, creating a dramatic lighting effect. The sharks are positioned at various depths and angles, with one prominent shark in the center and others in the foreground and background.

Revolutionizing the Printing Industry production floor

Autonomous loading and unloading of the press

“There’s nothing this fish would fear.
Other fish run from bigger things.
But this fish doesn’t run from anything.
It doesn’t fear.”

The logo for MOVIGO ROBOTICS features a stylized white shark silhouette above the word "MOVIGO" in a bold, sans-serif font, with "ROBOTICS" in a smaller font below it.

MOVIGO
ROBOTICS

Automating your Print Shop

MoviGo Robotics and HP Indigo collaborated to find a solution that helps the print industry in its search for cost reduction and resolve shortage of labour. The outcome is the integration of an AMR with HP's press.

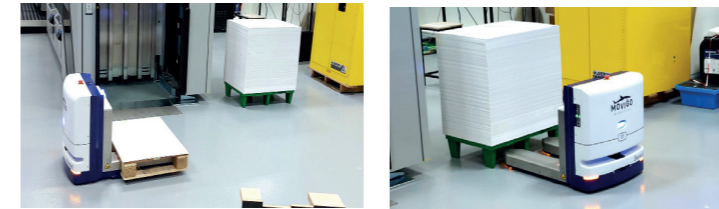
What separates the combined solution from all the other AMR's on the market is that we developed the Sharko5 from the ground up to serve the Printing Industry. The AMR can now become your Press Operator and your Operator now becomes its Supervisor. This innovation allows a single press operator to supervise multiple presses.

INDI Software

Our INDI software is designed to service Print Shops. It allows for interfacing with the press, manages pallet locations in the warehouse and manages pallet locations near presses and finishers. Combined with our Sharko5 autonomous mobile robots (AMR's), our solution for pallet transportation performs throughout your Print Shop, saving manual labor and streamlining your workflow while keeping your presses continuously operational.

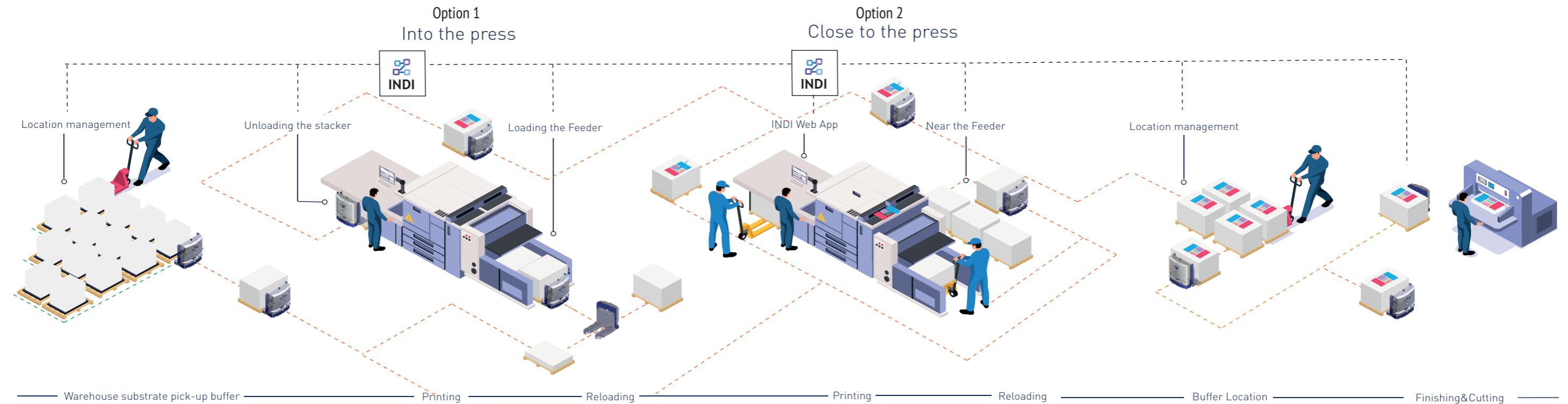
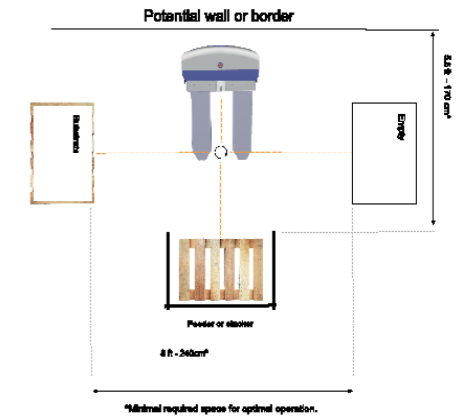
Into the press

INDI is optimized for pairing with HP Semi Autonomous Press Kit. When paired, our AMR's can load feeders and empty stackers directly in the press. The press can send substrate requests directly to our INDI software or when the press is not fitted with the Semi Autonomous Press Kit, requests will be initiated by the operator, using the button input web-app.



Required space

The Sharko5 compact AMR operates in small aisles and narrow spaces, it does need some space however, to execute the loading cycle when driving into the press.



How does it work?

Feeder

A warehouse employee places prepared pallets in a dedicated location. Now the pallet with the requested substrate is ready for pick-up by the Sharko and drop-off near the feeder of a press. When using the Autonomous Press Kit, your robot is able to drive into the press for loading. Without the Autonomous Press Kit, the robot will drop off the substrate near the press. The Sharkos will perform the reloading cycle in less than 2 ½ minutes.

The robot will pick-up the return pallet from the feeder, put it aside and place the pallet with substrate directly into the feeder. The return pallet gets picked up and taken to the warehouse. During the reloading cycle, the press can continue to print from its drawers and will switch to printing from the feeder when the reloading cycle is finished.

Stacker

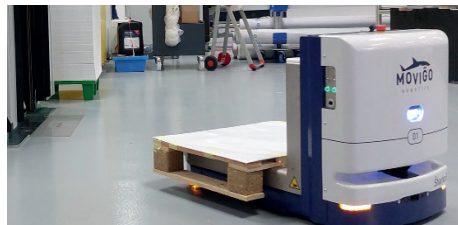
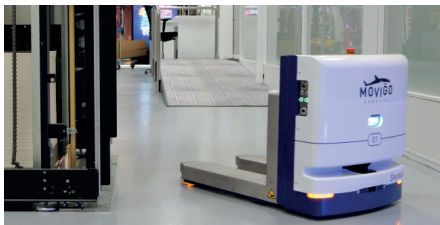
INDI receives an unloading request from the press, if the Semi Autonomous Press Kit is installed. If not, an operator uses the INDI web-app to initiate the unloading cycle. Both the Semi Autonomous Press Kit and the web-app allow the operator to select the next machine for finishing. The Sharko5 will pick up directly from the stacker and transport the pallet near the next finishing device. An empty pallet can be reloaded into the stacker.

About MoviGo Robotics

We specialize in developing, delivering and implementing AMR transport solutions for production environments. With a very compact and maneuverable mobile robot that can work alongside people.

Sharko5 Print Industry AMR

Size (LxWxH) inches/cm	36 x 22 x 25	91 x 56 x 64
Fork height up	9.6 inches	245 mm
Fork length	24 inches	595 mm
Ground clearance	0.5 inches	13 mm
Vehicle weight	333 lbs	151 kg
Max. load	1433 lbs	650 kg
Max. speed	4.3 ft/s	1.3 m/s
Battery type	LiOn 48V	
Lift installation	Electrical mechanical	
Minimal Aisle width (straight line)	39,4 inches	100 cm
Navigation	Autonomous, LIDAR combined with infrastructure-free localization technology.	
Charging	7 hours on full charge. Opportunistic charging when possible.	
Safety	Front Safety LIDAR, object detection in forktip, Audio & visual signals while moving. BlueSpot LED, emergency button. Joyride detection.	
Features	Pallet weight registration, Substrate height registration.	



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