

Piab Custom-Line

Sixpack Gripper





Flawless banderoles and cardboard packaging

Vacuum technology proves once more to be the right choice for handling sensitive products. Contrary to mechanical grippers, this vacuum sixpack gripper leaves the



banderoles and cardboard packaging fully intact during automated handling and palletizing.



Strong and stable hold

Exchangeable cheeks stabilize the six-pack in the gripper during robotic handling. Decentralized vacuum generation for each of the three suction cups ensure a strong hold even in case of failure of one ejector.

Overview

With Piab's custom-made gripper, sixpacks with cardboard wrapping can be handled automatically, gently and without leaving any marks.



50% Less energy usage



Safe operation



Lightweight 3D-printing



Plug & play

- **Compact modular design:** the gripper can be easily adapted by Piab's experts to fit the specific sixpack format of each customer.
- **Mark free handling:** due to a specially developed load support inside the suction cup soft material is not sucked in.
- **Strong hold:** thanks to the decentralized vacuum system the system is fully functional even if one ejector fails.
- **Fast process:** equipped with an automatic blow-off, the gripper can place the sixpack quickly, while cleaning ejectors, tubes and suction cups simultaneously.
- **Low maintenance:** as the gripper has no moving parts and cleans itself while operating. Gripper exchange by handling just 4 screws.
- **Cost effective:** approximately half the price to standard mechanical grippers.

Vacuum Flow

Based on an example gripper with 3x Si08-2 ejectors

Feed pressure	Air consumption	Vacuum flow (NI/s) [scfm] at different vacuum levels (-kPa) [-inHg]								Max. Vacuum
MPa [psi]	NI/s [scfm]	0 [0]	10 [3]	20 [6]	30 [9]	40 [12]	50 [15]	60 [18]	70 [21]	-kPa [-inHg]
0.4 [58]	0.31 [0.66]	0.71 [1.50]	0.53 [1.12]	0.34 [0.72]	0.26 [0.55]	0.18 [0.38]	0.09 [0.19]	0.01 [0.02]	-	60 [17.7]
0.5 [73]	0.38 [0.81]	0.77 [1.63]	0.61 [1.29]	0.43 [0.91]	0.29 [0.61]	0.23 [0.49]	0.15 [0.32]	0.08 [0.17]	0.01 [0.02]	70 [20.7]
0.6 [87]	0.44 [0.93]	0.77 [1.63]	0.67 [1.42]	0.51 [1.08]	0.33 [0.70]	0.23 [0.49]	0.16 [0.34]	0.12 [0.25]	0.08 [0.17]	75 [22.1]