



## PGMA - Panasonic Guided Manual Assembly helps to enhance manual assembly

## **PGMA**

GuidanceEnforcementKey Values Increase operator's efficiencyGet the assembly more reliableImprove product quality by higher yield TraceabilityMaterial ManagementFeaturesCentral storage of work flows and instructionsSharing and accumulate knowledge & know-howAvoid errors and increase motivationCost saving by reducing error factor Connection to MES and/or ERP systemProvide "just-in-time" required materials automatically Manual assembly included in the reporting loopCost saving by more efficient production and material planning Typical use-cases for PGMA to guide & enhance are: Manual THT insertionManual mechanical assemblySemiautomatic screw & nut mounting with and without torque controlManual visual inspectionSemiautomatic testing and/or measurementManual product packing and labelling incl. weight control (optional)Training for any manual assembly & activityThe ROI (return of invest) period for PGMA implementation is typically much less than one year due to reduction of failures and mistakes, speeding up the assembly process and finally increase of user's motivation.

## **Key Features**

avoid any mistakes during assembly

ensure an effective "zero-defect strategy"

share knowhow by organizing work instruction and work flows

introduce full traceability

apply an effective end-to-end material management



## PGMA

https://ap.connect.panasonic.com/p h/en/pgma

Controller as computer unit	for guidance setup & work instruction administration			
	as central data storage			
	incl. hardware interfaces and control			
Other	Connection to MES and/or ERP system			
	Interface to PanaCIM Material Control for "just-in-time" material preparation			
	Panasonic laser projector for visualization			
	High-resolution camera with high-intensity lighting as AOI			
	Touch Panel as GUI (General User Interface)			
	Monitor for local reporting / traceability of production data			
	Material boxes with Pick2light functionality			
	Barcode reader			
	Workplace table incl. suitable holders and fixtures			
	Conveyer with SMEMA interface			
Size	Typical size (depends on configuration): W x D x H = 1,0 m x 1,2 m x 2,80 m			
Weight	(depends on configuration): 200 kg			