

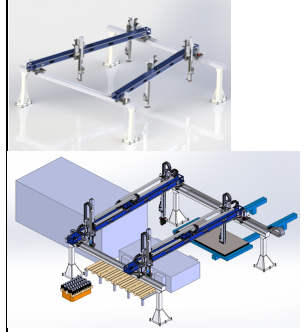
Technical Specification

ISOCHRONIC
Pick & Place Robotics Reinvented

ISOCHRONIC's iSort Robotic Laser Automation System 3015 / 4020

provides the most advanced solution for automated loading, unloading and part sorting of modern Laser Cutting Machines:

- * Easy to operate through an intuitive state-of-the-art Human Machine Interface (HMI)
- * Optimized for the subsequent manufacturing process, the system offers flexible sorting and stacking options for the produced parts.
- * Isochronic's "smart" interchangeable robot grip head technology covers an expansive part size range, including complex parts.
- * Highest sorting throughput, reliability, robustness and easy maintenance.



Isochronic iSort Laser Automation System			iSort 3015	iSort 4020	Remarks
Sheet size	L x W	mm	3000 x 1500	4000 x 2000	
Sheet thickness (at full size)	D	mm	15	8	mild steel / depending on material
Maximum Part Weight		kg	560	560	higher payload available with 4 pick heads
Maximum Part Weight per Pickhead		kg	140	140	higher payload option available
Min. Part Size	L x W	mm	40 x 40	40 x 40	
System Footprint	L x W x H	m	5.0* x 7.6 x 5.1	6.0 x 7.6 x 5.1	*Length is modular extendable
Default headroom under the base axis		m	1.95	1.95	comfortable access
No. of Sorting-Heads			2 - 4	2 - 4	
No. of Sorting-Portals (Transfer Beams)			1 - 2	1 - 2	
max. Part Rotation			+/- 210°	+/- 210°	
X-axis dynamic			Vmax= 1.6 m/s Amax= 2 m/s ²	Vmax= 1.6 m/s Amax= 2 m/s ²	
Y-axis (Sorting Direction) dynamic			Vmax= 3 m/s Amax= 5 m/s ²	Vmax= 3 m/s Amax= 5 m/s ²	
Z-axis dynamic			Vmax= 2.3 m/s Amax= 5 m/s ²	Vmax= 2.3 m/s Amax= 5 m/s ²	
C-axis dynamic			Vmax= 30 rpm Amax= 380°/s ²	Vmax= 30 rpm Amax= 380°/s ²	
Automatic tool change system			1 per pick head	1 per pick head	maximum tool flexibility
Electrical Requirements			400V / 200A / 50Hz	400V / 200A / 50Hz	
Compressed Air			6 bars, oil / water free	6 bars, oil / water free	
Software (Job preparation)					
Import job data from nesting software					Wicam, Trumpf, Bystronic, Lantek, others
Program sorting-job in modern web-based GUI					
Auto-load previously programmed parts from database					
Software (Job operation)					
Automatic process synchronization with laser cutter					interfacing possible with most OEM lasers
Automatic process synchronization with material storage					material storage system interface (STOPA; Profilsys)
Manual control mode to operate as crane					for laser grate lifting / table exchange
Integration possible with most laser cutting systems					retrofit, upgrades and new installations
Optional integration with post-cutting processing such as deburring, rectifying					flexible integration in your production process
AGV / AMR integration with material logistic systems					flexible integration in your logistics processes
System Certification					CE Certification
Max. Noise emission			77 dB(A)	77 dB(A)	