

Function¶meter List ● Standard configuration, ○ Optional configuration, × NA		SK1
Item	Model	SK1-65
Basic parameter	Tube cross-sectional shape	Round tube, square tube, rectangular tube, elliptic tube, long round tube, angle steel, channel steel, etc.
	Tube size range	Round tube : $\phi 6-\phi 120\text{mm}$ ($\phi 0.24-\phi 4.72\text{in}$) Square tube: $\square 6-\square 110\text{mm}$ ($\square 0.24-\square 4.33\text{in}$) Rectangular tube: $120\text{mm}(4.72\text{in}) \geq \text{Side length} \geq 6\text{mm}(0.24\text{in})$ angle steel, channel steel: longest side $\leq 80\text{mm}(3.1496\text{in})$
	Requirements for tubes	Diameter $< \phi 50\text{mm}(\phi 1.97\text{in})$: wall thickness $\geq 0.5\text{mm}(0.0196\text{in})$ Diameter $\geq \phi 50\text{mm}(\phi 1.97\text{in})$: Wall thickness $\geq 2.5\%$ of Diameters of tubes
	Max. tube length	6500mm(21ft)
	Max. tube weight	50Kg (110.23lb)
	Min. remnants	Zero waste material not selected $\geq 40\text{mm}(1.57\text{in})$ (With the support of the shortest remaining material per card, the accuracy varies.) Optional zero-waste material: Zero-waste material (No waste of materials)
	Dimensions	9563mm*1294mm*2055mm (31.375ft*4.245ft*6.742ft)
	Overall weight	2390Kg(5269.12lb)
	Frount chuck cutting over	●
	Ultra-fast cutting process	●
	Composite rollers	●Bionic rollers (3) ●Flat idler roller (1)
Fast centering	●	
1 second centering	×	

Intelligent function	Time savings	Automatic adjustment of oxygen pressure	●
		Cutting parameter auto-match	●
		Processing intelligence adaptation	●
		Automatic focusing of laser head	●
		Laser cutting process database	●
		No manual drawing	●
	Quality cutting	Over edge protection	●
		Active obstacle avoidance	●
	Cost savings	Gas-saving steady flow nozzle	●
		Smart anomaly alarm	●
		Smart warning	●
		Smart maintenance reminder	●
	Service	BodorCloud Service	●
Bodor AI		●	
WIFI internet connection		●	
Performance	Positioning accuracy	$\pm 0.03\text{mm/m}$	
	Repositioning accuracy	$\pm 0.03\text{mm/m}$	
	Max. chuck rotating speed	260r/min	
	Max. no-load moving speed	150m/min (492.13ft/min)	
	Max. acceleration	2.7G	
Processing precision	$\Phi 20\text{mm}$ roundness	$\leq 0.15\text{mm}$ (0.0059in)	
	$\square 20\text{mm}$ square diagonal size difference	$\leq 0.20\text{mm}$ (0.0079in)	
	$\square 20\text{mm}$ Square hole center deviation	$\leq 0.2\text{mm}$ (0.0059in)	
Configurat	Optical system	Laser source	BodorPower
		Laser head	BodorGenius T
	Mechanical system	Chuck drive types	Pneumatic chuck
		Linear rails	Bodor
		Rack	Bodor
		Servo motor and driver	Bodor
		Control system	BodorThinker Tube

Configuration	Electrical system	Nesting software for tube cutting	● BodorNest Tube V1.1
		File format	2D format: DXF、DWG; 4D format: IGS、IGES、STEP、STP; G Code;
		Display size	21.5 inches
	Peripheral system	Water chiller	●
		Dedusting device	Centrifugal fan
Optional items	Automatic loading device	○ S-Trans1-65	
	Auxiliary loading device	○ S-Loader1-65	
	High-precision chuck	●	
	Standard chuck	×	
	Bevel Cutting	○	
	Servo-flipping unloading rack	×	
	6-meter Servo-flipping unloading rack	○	
	Servo follower roller	●	
	Large Enclosing Canopy	●	
	Automatic adjustment of N2 pressure	35.7kW/49.1A	
	with 3kW laser source	16.04kW/38.42A	