



TAYLOR TECH INC.
www.taylortechinc.com



DIE SORTER SYSTEM - TECHNICAL SPECIFICATIONS



DTS-1 single head Die Sorter

System Performance	
Throughput	up to 4800 UPH
Placement Accuracy (die to die)	+/- 15µm
<small>Results may vary depending on process</small>	+/- 1° θ
Supported product dimensions	
Die size limits (X,Y)	0.1-45.0mm - range is limited by optics and illumination choice, see below
Size range (X,Y)	10:1 with 7x optical zoom Optional 15:1 with 12.5x zoom
Effective illumination area	Standard up to 30mm ² Optional large light box and camera mount upgrade - Effective area up to 45mm ²
Minimum die thickness (Z)	12µm (depending on aspect ratio)
Aspect Ratio (X:Y)	30:1
Configurations and carrier dimensions	
Input	Manual load up to 200mm wafer frames Optional auto load up to 200mm wafer frames from cassettes Optional 300mm input upgrade With wafer frame input standard one wafer size conversion kit included Optional additional wafer frame conversion kits for different wafer sizes Manual stretcher for manual load Programmable automatic stretcher (included with optional auto load) Standard laser bar code reader for wafer map download Optional 2D and QR bar code reader for wafer map download - SR series, camera type Optional hoop ring/grip ring adapter plates Optional bowl feeder input instead of wafer table
Die transfer	Single head Optional inverter
Output	Standard array of 2", 3" or 4" waffle packs or Gel-Paks Or standard manual load wafer frame output up to 200mm Optional auto load wafer frame output Optional 300mm output upgrade Optional 300mm input and output upgrade combined Laser bar code reader for output mapping Optional 2D and QR bar code reader for output mapping - SR series, camera type
Optional Tape & Reel Output	Tape width from 8 to 24mm Programmable tape index pitch Level wind supply reel Optional reject die removal / replacement system
Computer specifications	
Operating system	Windows 10
Main PC system	Both vision and main PC combined in one system
Vision PC system	Intel Core i5, 4GB RAM, 500GB HDD
Inspection capability	
Vision inspection capability	Surface defects, chipping and cracks, bump inspection, foreign material detection, dimension measurement, laser marking defects, OCR text or QR code recognition & mapping
Camera resolution	Standard 640x480 Optional 1024x1400 or higher MP camera options available depending on required defect size
Bottom side inspection	Optional
6S inspection	Optional
Optional Cleanroom Mini-Environment Enclosure	
Cleanroom class:	US Federal Standard 209E Class 100 (ISO 14644-1 Class 5) Ducted exhaust ports for connection to facility exhaust Includes bar ionizer on input and output side
ESD:	Standard fan ionizer Optional bar ionizer on input and output side
Machine Data	
Width:	1118mm
Depth:	965mm
Height:	1956mm
Air supply (minimum):	6 bar (85 PSI) 140l/m (5cfm) clean & dry
Vacuum:	Factory vacuum or internal venturies
Electrical requirements (configured based on customer requirements):	110 VAC +/- 10% single phase 20 Amps 208/230 VAC +/- 10% single phase 10 Amps
Suitable for cleanroom environment	Class 10,000