

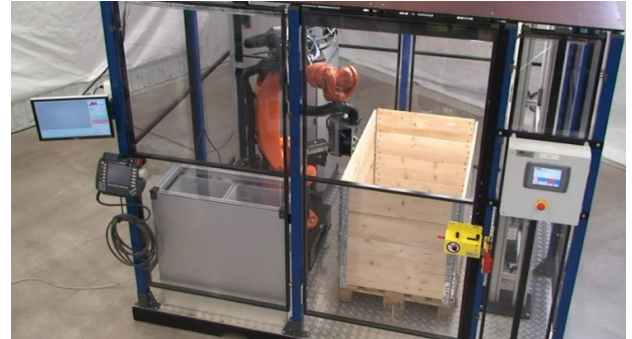
Product Sheet

Mechanical

Cell foot print:	1800 x 2300 mm
Robot:	KUKA KR16
Max bin size:	Euro pallet (1200x600x1000mm) 4 pallet frames
Tool unit:	SCAPE Standard Tool Unit with build-in FireWire camera, red LED ring light and multiple grippers
Gripper:	Multiple grippers, free selection from 2-finger, 3-finger, suction or magnetic
Cell Capacity:	2 parts / bins

Part Configuration

Geometry:	Simple to complex
Layout inside bin:	Structured, semi-structured or random
Recognition training:	Virtual offline training from CAD
Max weight:	8 Kg
Gripping training:	Multiple grip modes as per part geometry



Software

SCAPE Controller OS:	Windows XP (32 bit)
Recognition:	Full 3D (6 D.O.F) using SCAPE Recognition Engine
Collision control:	Throughout the bin-picking cycle
Place position control:	Part place orientation computed in real time during pick
Robot - SCAPE communication:	TCP-IP, RS 232 managed by SCAPE Communication Server
User Interface:	SCAPE Workcell Manager (GUI) or external PLC or both
Robot cell calibration:	SCAPE Workcell Studio

Cycle Time

Image acquisition:	< 3 sec
3D recognition:	0 sec
Grip part:	< 4 sec
Place part:	< 3 sec
Overall average:	Approx 12 sec

Application Area

Machine tending	Feeding
Assembly	Inspection
Packaging	Sorting

Optional

Stationary cameras for image acquisition
Precision post pick orientation control