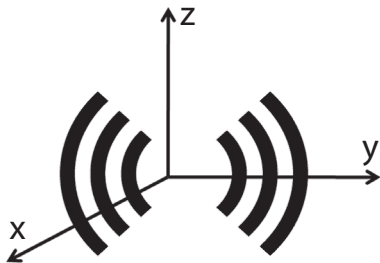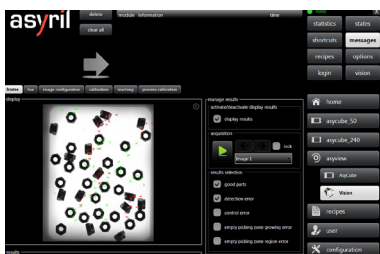asyril — Experts in Flexible Feeding Systems
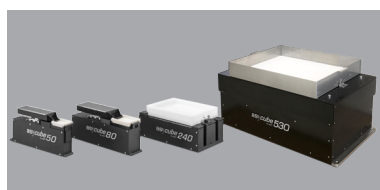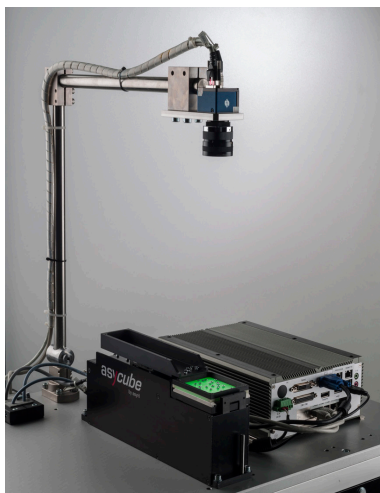
SmartSight

Intelligent Visual Part Detection System
for Asycube Flexible Feeders

3-Axis Vibration Technology
Innovation by asyril

Advantages
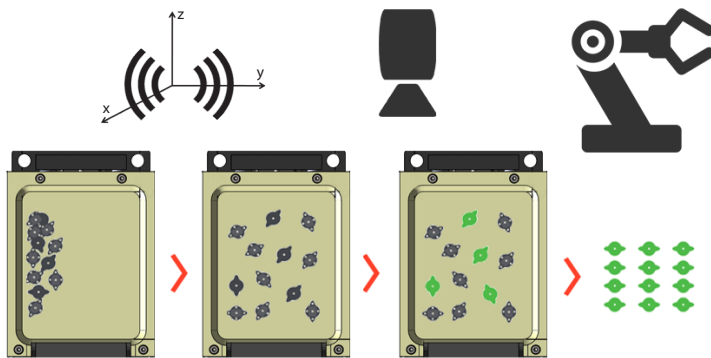
▸ **Fast integration :** direct output of part coordinates to the robot, fully automatic control of feeder vibrations and part detection

▸ **Quick setup and reduced development times :** get started immediately on your application

▸ **Attractive, highly competitive system costs** as up to 4 cameras and Asycube feeders can be controlled with a single SmartSight control unit

▸ **Software based on market standard :** proven industrial vision library

▸ **Intuitive teaching and configuration** with Asyril's control software

▸ **Compatible with any Asycube vibrating platform**

▸ **Compatible with any PLC & industrial robot brand**

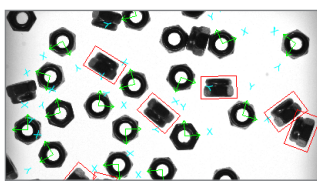**asyril** Experts in Flexible Feeding Systems

SmartSight

Intelligent Visual Part Detection System
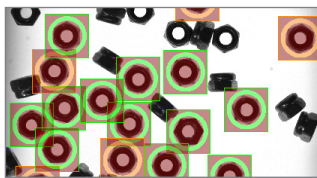## for Asycube Flexible Feeders

How it works

▶ SmartSight describes Asyril's intelligent visual part detection system, ensuring straightforward integration of any Asycube vibrating platform with any industrial robot brand. Comprising Asyril's powerful visual part detection software, an industrial control PC as well as an optimally configured vision kit including camera, lens and all necessary cabling, SmartSight makes the implementation of high performance flexible feeding systems straightforward.

▶ SmartSight automatically controls the part movements on the feeder (Asycube) as well as the part supply (hopper) based on the vision system feedback about the part locations and quantity.

1. Homogeneous parts separation and orientation using Asyril's innovative 3-Axis Vibration Technology

2. Detection of correctly oriented parts by asyril SmartSight vision system

3. Part pick from platform and assembly by robot

Application Example

Detection of part location, orientation as well as pitch-and-toss

Define part gripper geometry and exclusion zones to avoid collisions

Coordinates of accepted parts are easily output to any industrial robot

About Asyril

▶ Asyril develops, produces and markets high performance flexible feeding systems for parts and components from <0.1 up to 150 mm in size. Our innovative 3-axis vibration technology can handle bulk parts of any geometry and allows for extremely gentle part feeding.

▶ Asyril's key competences and extensive know-how encompass all three sub-domains of modern part feeding systems: vibration technology, industrial vision and precision robotics. This unique focus combined with our many years of experience enable us to deliver superior, innovative flexible feeding systems for today's and tomorrow automation challenges.

© Asyril SA - 07.2017

Specifications

FEATURES

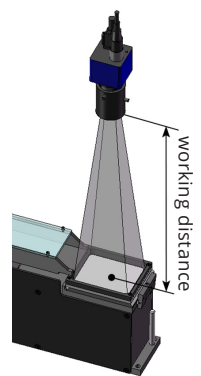|	
Compatible with all materials & component geometries	
Component position and orientation recognition (x, y , pitch/toss)	
Simple recipe changeover and new parts programming	
Integrated calibration procedure	
Power supply :	24 V
Communication :	TCP / IP

Working Distance

STANDARD RESOLUTION (1.4 MPX)

Feeder	Large Distance		Close Distance	
	[mm]	[~inches]	[mm]	[~inches]
Asycube 240	790	~31.1	490	~19.3
Asycube 80	830	~32.7	400	~15.7
Asycube 50	560	~22.0	270	~10.6

HIGH RESOLUTION (5 MPX)

Feeder	Large Distance		Close Distance	
	[mm]	[~inches]	[mm]	[~inches]
Asycube 240	830	~32.7	580	~22.8
Asycube 80	790	~31.1	420	~16.5
Asycube 50	560	~22.0	300	~11.8
Asycube 50, Small Field of View			380	~15.0

VERY HIGH RESOLUTION (9 MPX)

Feeder	Large Distance		Close Distance	
	[mm]	[~inches]	[mm]	[~inches]
Asycube 240	810	~ 31.9	565	~ 22.2
Asycube 80			550	~ 21.7
Asycube 50			400	~15.7

working distance

Options

Connect and control up to 4 Asycube feeders & cameras with a single control unit	
Alternative camera configurations	control part presence, position in gripper, deposition
Camera	standard resolution (1.4 Mpx) high resolution (5 Mpx, 9 Mpx)
Coaxial frontlight	backlight integrated in Asycube feeding platform
Calibration plates	for optics and robot

Contact

Asyril SA
Z.I. du Vivier 22
CH-1690 Villaz-St-Pierre
SWITZERLAND

scan to see the videos
www.asyril.com
sales@asyril.com
Tel +41(0) 26 653 71 90
youtube.com/AsyrilSA