December 27,2016

New high-speed smart modular mounter "RS-1" released
It combines a wide component compatibility and high-speed mounting performance

JUKI has launched its new High-speed Smart Modular Mounter, model RS-1. Equipped with a newly developed parallel 8 nozzle head, the RS-1 is capable of mounting a wide variety of parts and improving the mounting speed by up to 70%. The RS-1 will be available world-wide starting January 5, 2017

The RS-1 is robotic assembly machine for mounting electronic components on a "PCB" in the printed board mounting process. In addition to increasing the number of components mounted per cycle from six to eight, the RS-1 also includes a new mechanism to improve the mounting speed by automatically changing the recognition sensor height.

The RS-1 uses new high-speed component feeders to bring its maximum placement rate to 40,000 CPH (optimum). This is the highest plaecment rate in the single head mounter class.
Components from 0.2 mm × 0.1 mm to 74 mm square, 50 mm × 150 mm, with height up to 25 mm can be mounted by the RS-1. In addition to providing an enhanced motor on the θ (theta) axis of the nozzle, component range and speed have been improved by changing component centering to handle four parts simultaneously.

In recent years, with the diversification of needs for electronic products and the shortening of the life cycle, there has been an increased requirement for smaller production runs and higher flexibility. number of "production of various kinds of small quantities" and "variant variable production" which flexibly responds to market movements have increased, There is also a demand for mounting a wider variety of components. equipment that can flexibly deal with diverse items. It is often necessary to reconfigure production lines or

make changes to machine configuration to accommodate these production requirements.

This machine combines high speed with high flexibility and fast change over without costly downtime or line re-arrangement. The RS-1 and all of Juki's factory control software provide the speed and flexibility required by modern electronics manufacturing.

◆ **Features**

（1）**No head replacement, newly developed "Parallel 8 nozzle head" with auto-height component recognition sensor**

Automatically adjust the component recognition sensor of the mounter head from 1 to 25 mm in 5 stages according to the PCB requirements. High productivity is achieved without replacing the placement head, even for parts with different heights, from very small parts to large parts.

（2）**High placement capacity of 40,000 CPH**

The distance between the pickup and placement positions is shortened by adopting the new RF series electric feeder. Additional improvement is achieved by optimization of the component pickup / mounting operation. This results in a class leading maximum tact time of 40,000CPH (under optimum conditions).

（3）**Extensive component compatibility**

Components from 0.2 mm × 0.1 mm to 74 mm square, 50 mm × 150 mm, and the height of parts up to 25 mm can be mounted. Component range and placement speed have been improved by changing the image recognition to four-part simultaneous recognition and using high-speed motors on the θ (theta) axis of the nozzle. In addition, we adopted a new electric feeder that is smaller, lighter, and thinner. The feeder capacity has been increased to 112 per RS-1 to improve capability of a single machine solution.

（4）**Implementation of smart mounting process**

By combining RS-1 and JUKI production support systems "IS Lite" and "IFS-NX", it is possible to manage and optimize various operations and information related to production in the mounting process, and improve productivity and manufacturing quality. In addition, it reduces costs by efficiency improvement and smart implementation process.

◆ **Release date**

January 5th .2017