# **MYDATA Option Descriptions**

The following information describes some of the various options available for Mydata PnP equipment.

## 1. Midas Head –

The Midas head was introduced into this equipment beginning in 2001 and used for increasing speed and accuracy. This spring loaded tools were also introduced with the Midas head as well as the Line Scan Vision system. Note: this option is only available on MY series machines.

## 2. Hydra Head –

The Hydra was first introduced in the 1990's on TP model machines rated at 14,400CPH. This version of this Hydra head was very crude, prone to failure. A second (revised head) was introduced in the late 90's which significantly improved the reliability, but required manual removal and replacement of tool tips. A third revision (Hydra 2D) was introduced in 2000 and the rated speed was increased to 21,000 CPH for parts up to 8mm squared. The most recent versions of the Hydra, available on E series machines are known as Extended Range machines. The E designation meant that the machine could now automatically change Hydra tool tips and also increased the package size to 14mm squared. These changes to the machines had also replaced the Hydra Camera with the Line Scan Vision system thus giving the Hydra head the ability to place 0201 components at a significantly increased rate of speed. Note: the 14.4k option was available on a limited number of TP machines. The 21k option is only available on the MY series machines.

## 3. Line Scan Vision –

Line Scan otherwise known as LVS was introduced shortly after the Midas head. The LVS system introduced greater accuracy and speed across a greater range of parts. Note: this option is only available on My series machines.

### 4. Agilis Feeders and Magazines -

The Agilis feeders were introduced in 2001 in two parts. The feeders themselves were only available in 8mm

White for components from 0402 to 0805

Yellow for components from 0603 to 1206

Red for components from 1206 to tantalum B case

The M8 Magazine introduced in conjunction with the Agilis feeders still operated with sprocket wheels but the significant improvement was the feeder itself. Note: The original Agilis M magazines are capable of running on any Mydata machine.

## 5. Agilis Linear Magazine -

The Linear Magazine was introduced in both the 8mm and 12/16mm format. The machines required the Magazine Control Unit, known as the MCU to operate these magazines. Therein lays the confusion with the Agilis and the Agilis linear magazine. The Linear magazine has greater control in speed and auto correction that does not exist in the M8 or non-linear magazine. Along with the Linear Mag the 12 and 16mm Agilis feeders were also introduced. These feeders each came in 2 formats. The first was fixed and the second allowed for adjustment of the cover tape peel back. The cover tape peel back is defined as how far the cover tape is peeled over to fully expose the component. Note: This option does require the MCU as well as newer versions of TPSYS software. Most TP series machines do not have this option.

## 6. TEX unit –

The TEX (Tray Exchange Unit) allows for the machine to hold 32 Jedec trays. In order for a machine to run the TEX unit TPSYS version 2.1 is required as well as Motion Control Card (MOT Card) revisions up to MOT3. Without these 2 minimum requirements a TEX will not operate on a machine.

#### Release Dates of machines -

1998 - The MY series machines original release date occurred in 1998. These original machines are equipped with the Z/Fi head instead of the Midas and also only capable of running the 14.4k Hydra.

1999 – Beginning in 1999 the MY series machines completely replaced the TP series. 1999-2000 – In late 1999 the MIDAS head and Line Scan Vision system was

introduced as an option. These options require TPSYS 2.0 minimum.

2001 - The Hydra 21k option was released TPSYS 2.2 is required. In late 2001 the Hydra ATE (Automatic Tool Exchanger) was introduced requiring TPSYS version 2.3 2002 – The more dependable Hydra 2D was released.

2004 – The ALM (linear magazines) are released TPSYS 2.4 is required.

2005 – The new Linear Y wagon (T series) is released.