Section 7

# KIP AutoCAD HDI Driver

# 1.0 Overview and Features

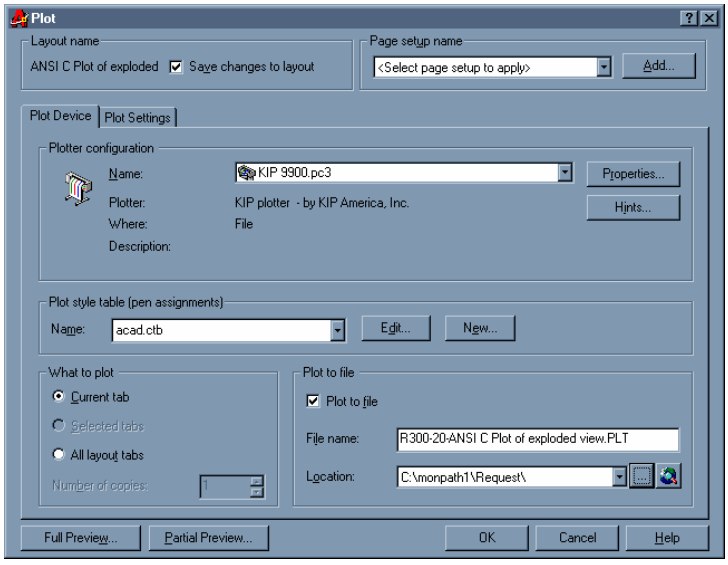
The KIP AutoCAD HDI has been designed to quickly and effectively print to the KIP printer directly from the AutoCAD application under the Microsoft Windows operating system.

The KIP driver functions under these versions of AutoCAD from AutoDesk:

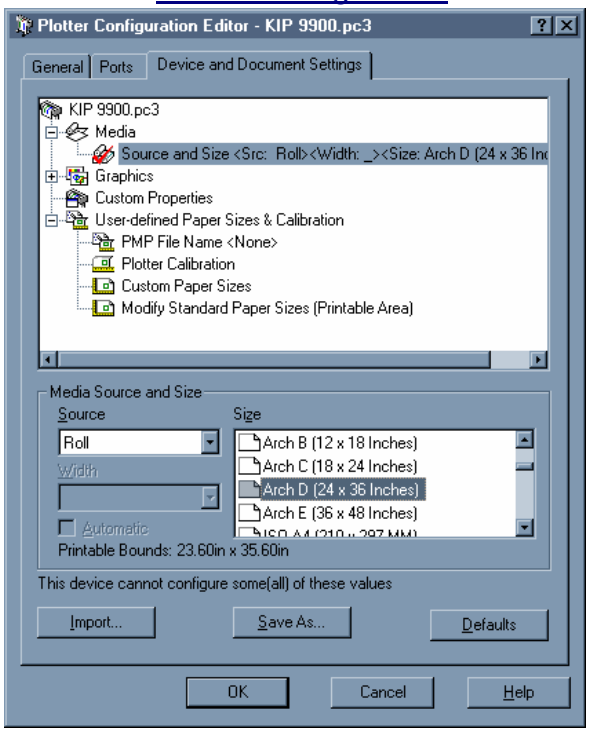
2000 / 2000i / 2002 / 2004 / 2005 / 2006

The following two screens are general to AutoCAD and may not be detailed within this User Guide. They select the device to print to, media size, pen configurations, and shading to list only a few functions. Please refer to the AutoCAD User Guides for more details on their features and functions.

Plot Screen

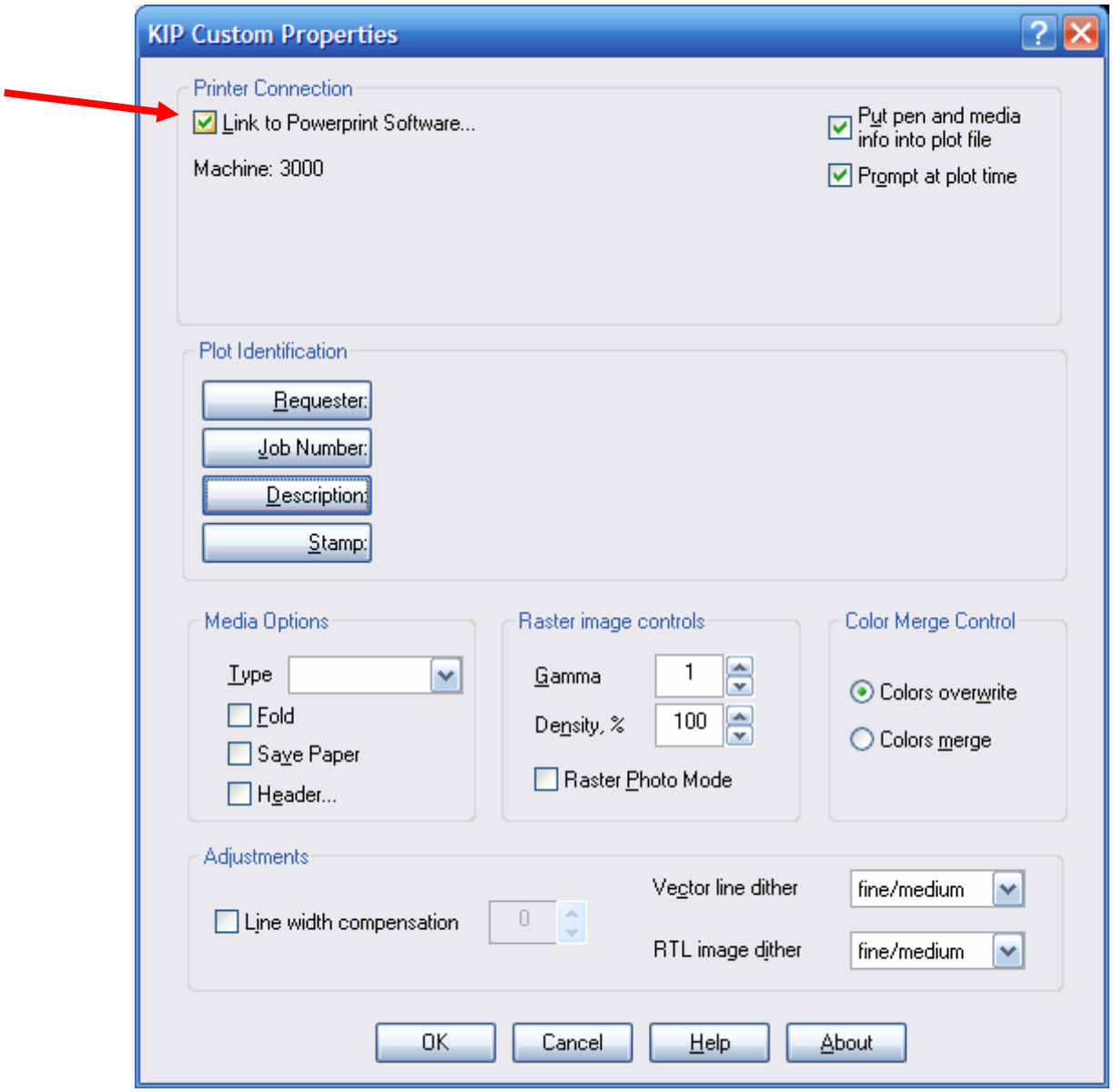



Plotter Configuration



Advanced features and functionality of this driver can work in tandem with **KIP Request** software for added power and flexibility, or as a stand-alone entity. Features when linked to KIP Request include stamping, folding, headers, advanced raster image controls, media type selections, real time printer status and job accounting right from within the AutoCAD application.

Within the “Plotter Configuration Screen” noted in the previous page is “Custom Properties”, please select *Link to Powerprint Request Software…*



# 2.0 Connection

## 2.1 Options

There are two methods to print from the KIP HDI driver to the KIP 3000:

1) Windows Printer Port
The Windows driver must be installed on the PC. This method spools images directly to the printer via the printer port. This is a very simple connection method with all available features and functions of the KIP HDI driver. This is the preferred method.

2) Plot to File
The output file must be manually submitted to the printer using KIP Request software. This method is not detailed in this guide.

## 2.2 KIP Request Link – Advanced Features

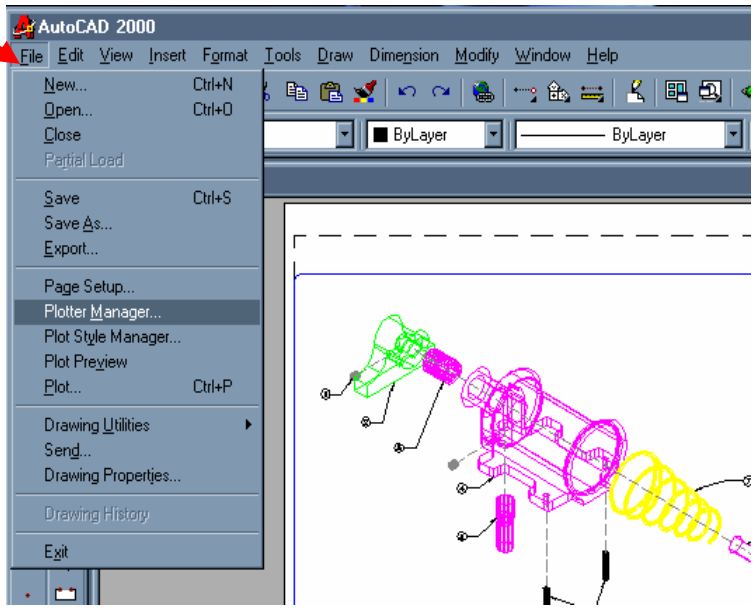
Users have the flexibility of linking to KIP Request to access advanced functions and features.

Allowing the KIP HDI driver to interface with KIP Request provides the most versatile and powerful printing solutions. KIP Request is a document submission tool that allows for complete and comprehensive control over printing / plotting.

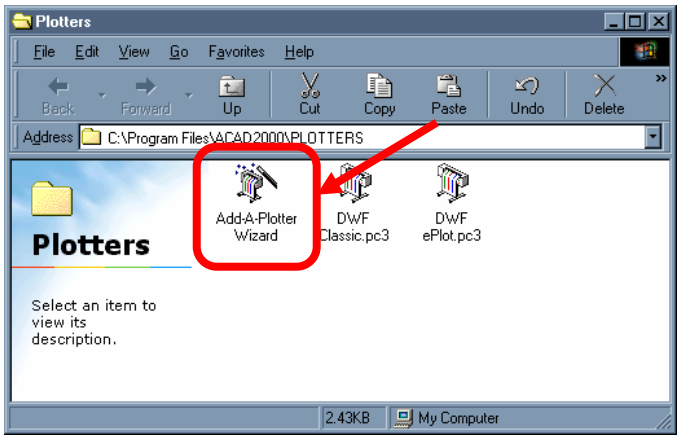
This software can operate on several remote workstations simultaneously. With KIP Request, users have the ability to obtain real-time printer/plotter status, submit collated job sets, password protect these submissions based on user and job information, apply custom made stamps, activate folding devices and modify job descriptions. The KIP HDI driver was designed to take advantage of, and dynamically link to, KIP Request, bringing many of these key features to the AutoCAD interface. It is recommended that the KIP HDI driver be configured in this manner. If you opt not to link with KIP Request, certain features of the KIP HDI driver will not be available to you (i.e. real-time printer status, password protected pull-down menus, on-the-fly stamping, and automated spooling). This document assumes that KIP Request is utilized and installed properly. Installation instructions and further documentation for KIP Request are found in the KIP Request Section of this guide.

# 3.0 Installation

1) Within AutoCAD, click on *File*, and then select *Plotter Manager.*

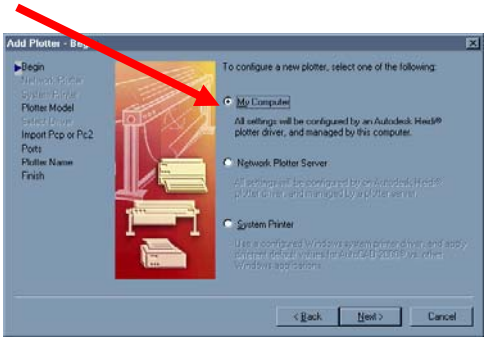



2) Under *Plotter Manager* double Click the *Add-A-Plotter Wizard* Icon.




3) The Wizard screen may start noting that AutoDesk has changed from the PCP and PC2 file formats to a PC3 file format and will offer another screen during the installation process to migrate your PCP and PC2 to PC3 files for use in the newer versions of AutoCAD.

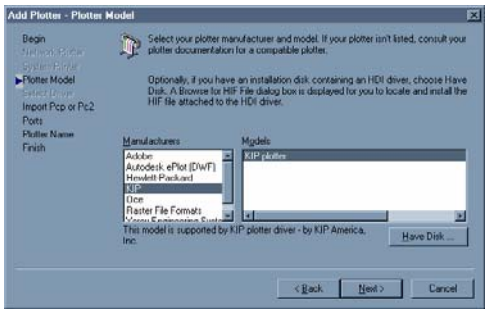
4) Choose **My Computer** to install the driver to your local computer.



5) Identify your plotter / printer model.

a)If KIP is in the list, simply select KIP from your list of manufacturers and click “Next.”

b) If KIP is not in the list, click the “Have Disk” button and you will be able to browse for the plotter driver from your **KIP Software CD**. The file you are searching for is located in the Drivers\KIP HDI folder and should appear as KIPx.hif.

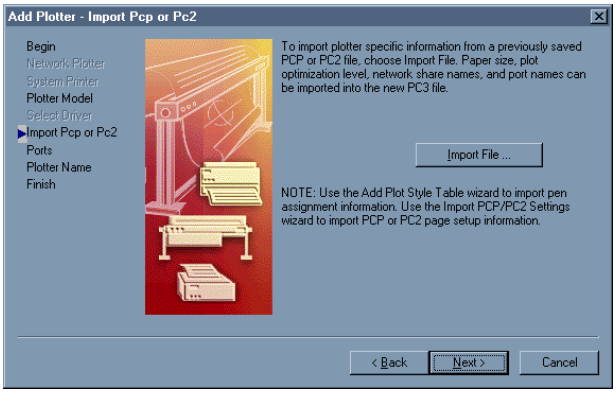



**Note**

KIP6.hif is used as the driver file for AutoCAD 2000
KIP7.hif is used as the driver file for AutoCAD 2000i and AutoCAD 2002
KIP8.hif is used for AutoCAD 2004, 2005 and 2006.

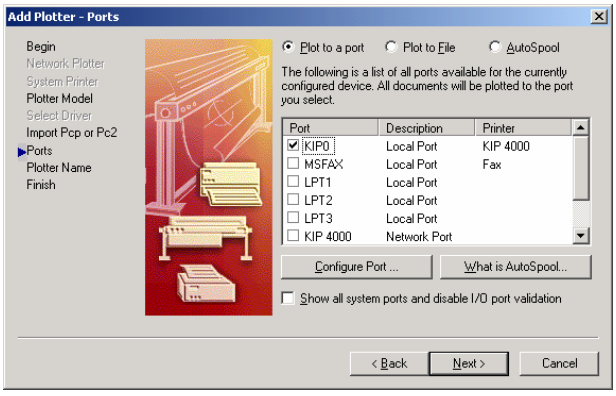
6) Once you have pointed to this file KIP will appear in the list and then select it from your list of manufacturers and click “Next.”

7) The next screen is the PCP and PC2 importation screen. This screen allows users of previous AutoCAD versions to import their PCP and PC2 files to the AutoCAD 2000 family PC3 file format for use in the AutoCAD 2000 product.
(as noted in step #3)




If the user does not wish to migrate or does not have any PCP or PC2 files, click the “Next” button and proceed with the installation.

8) Output Port Selection. Select **KIP0**, which is the Port created at the time the KIP Windows driver is installed.

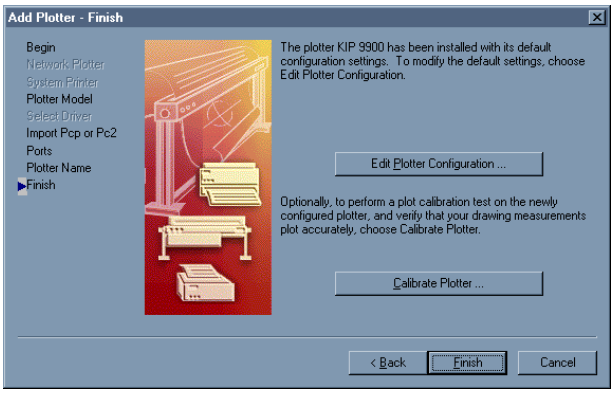



**Note**

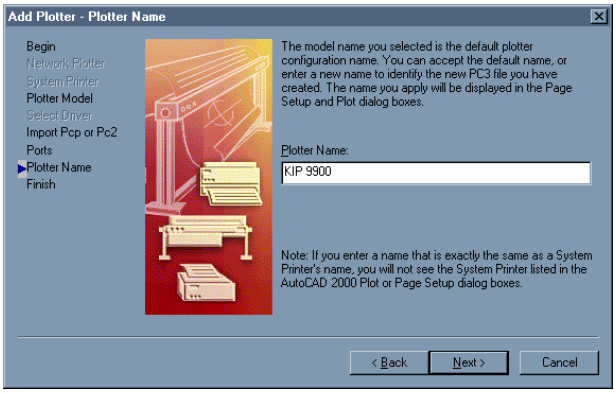
The KIP windows driver should be installed prior to the AutoCAD driver to use this port. If you choose not to use this method, select *Plot to File*.

9) Specifying the printer's name. Since all the KIP printers use the same driver, the user could set up a name for each KIP device. We recommend you use the nomenclature of your KIP machine to identify the printer's name.

Example: KIP 3000




10) To complete the installation, click the *Finish* button. Printer configuration will be done later and there is no need to "Calibrate Plotter" as the KIP printer was calibrated during installation by the technician.

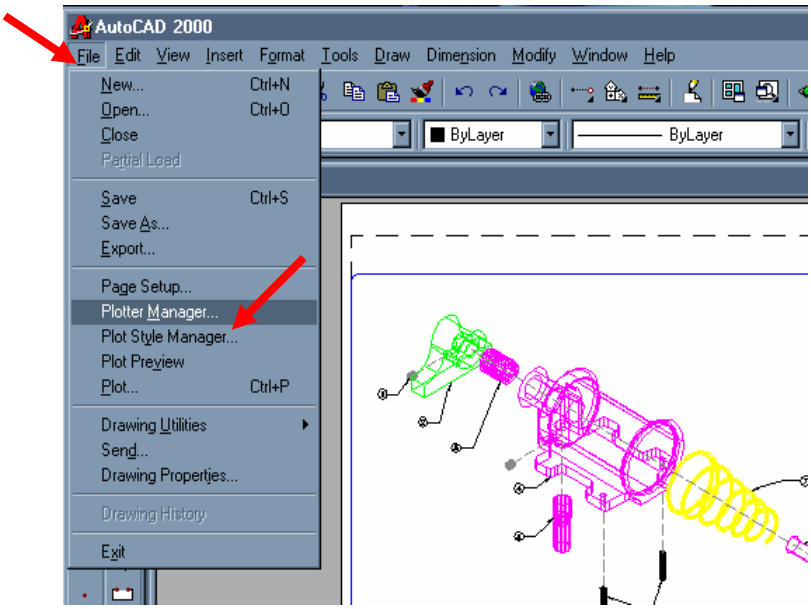



11) Once the installation is complete, please note the creation of the KIP 3000.pc3 file in the ACAD/Plotters folder.

# 4.0 Configuration

1) Click on *File*, and then *Plotter Manager*

2) Double-click on the .PC3 file of the KIP printer to open the Plotter Configuration Editor.

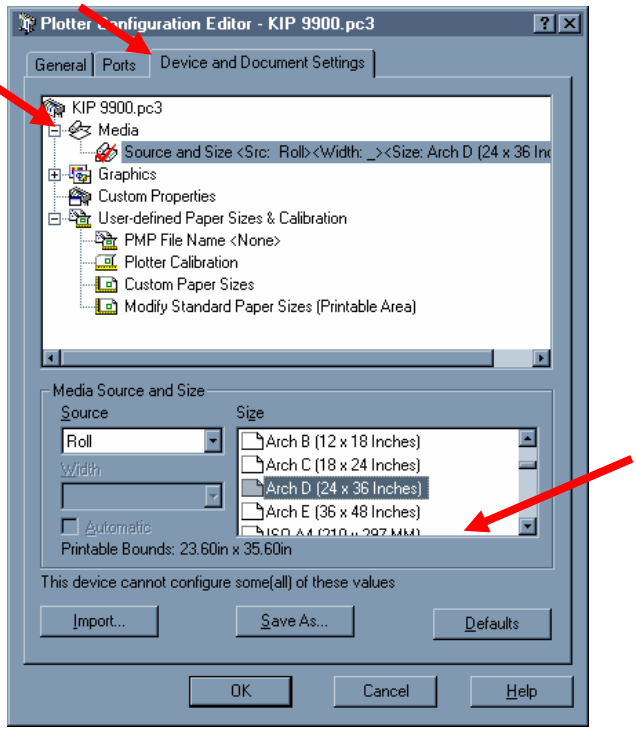



3) Navigate to the “Device and Document Settings” tab

## 4.1 Media

1) Click the “+” sign next to “Media”. This will open up the Media Options and allows the selection of the Media Source (which is “Roll’) and Media Size.

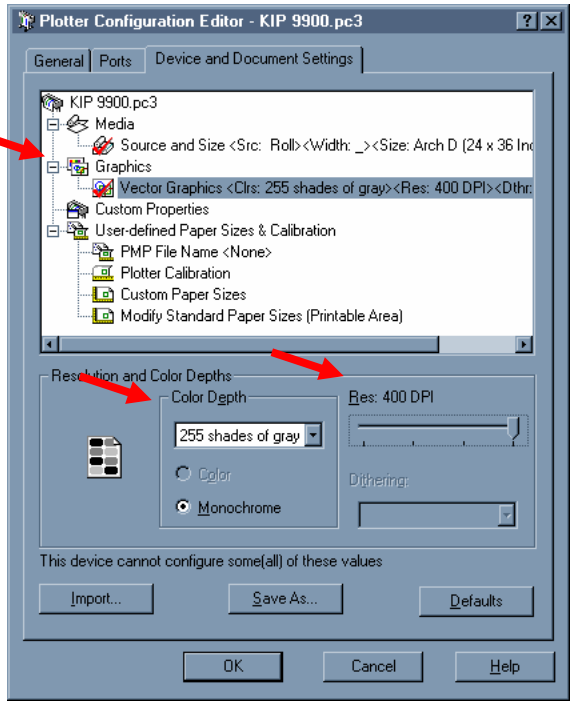
2) Select your media size to suit your image.



## 4.2 Graphics

1) Click the “+” sign next to “Graphics”. This will open up the Graphics options and allows the selection of the Color Depth (in this case “255 shades of gray” ) and the resolution.

   The KIP 3000 has 600DPI resolution.

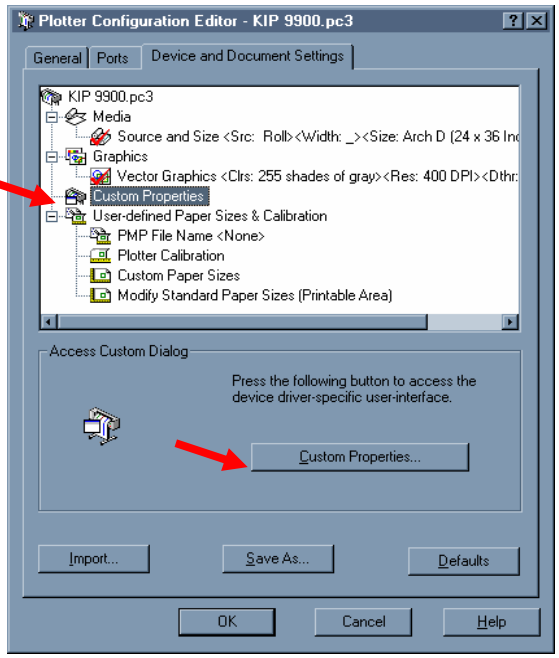



## 4.3 Custom Properties

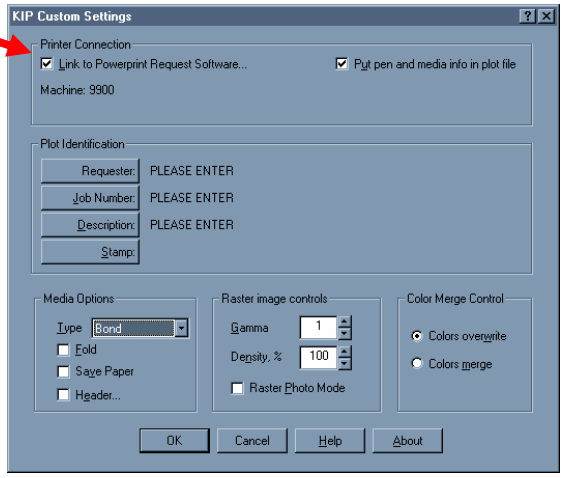
1) Click on *Custom Properties*

2) Then click on the button to see the KIP Custom Settings dialog box.

3) A number of the features of the KIP Request software have been directly integrated into the KIP HDI driver; these features are enabled by “linking” the HDI driver to the KIP Request software.

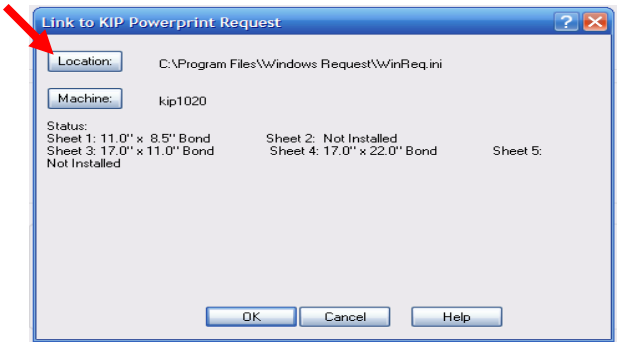


4) By clicking the “Link” to the KIP Request Software” checkbox, the user will be asked to locate the **KIP Request configuration** file (this is the file the HDI driver uses to employ the KIP Request features.)

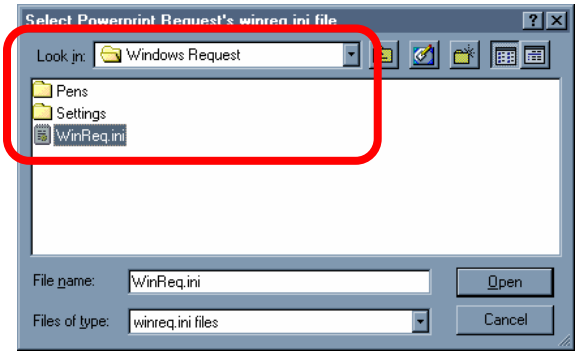



> **Note**
> KIP Request must be installed and configured to link these features to this HDI driver. Please see the Request section of the User Guide.

1) The following dialog box requires the user to locate the winreq.ini file. Click on the “location” button at this point.

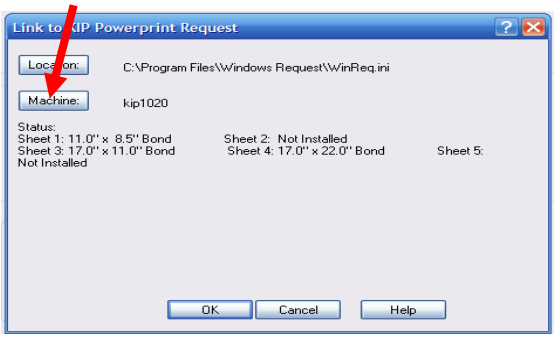


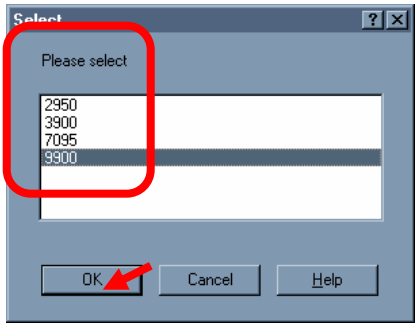

2) It will point to the default location, which is C:\Program Files\Windows Request.



3) Click the *Hardware* button, to list of all of the machine models connected in Request and select which machine to link. Please note that the models listed are dependent on those used in Request.

4) Select OK

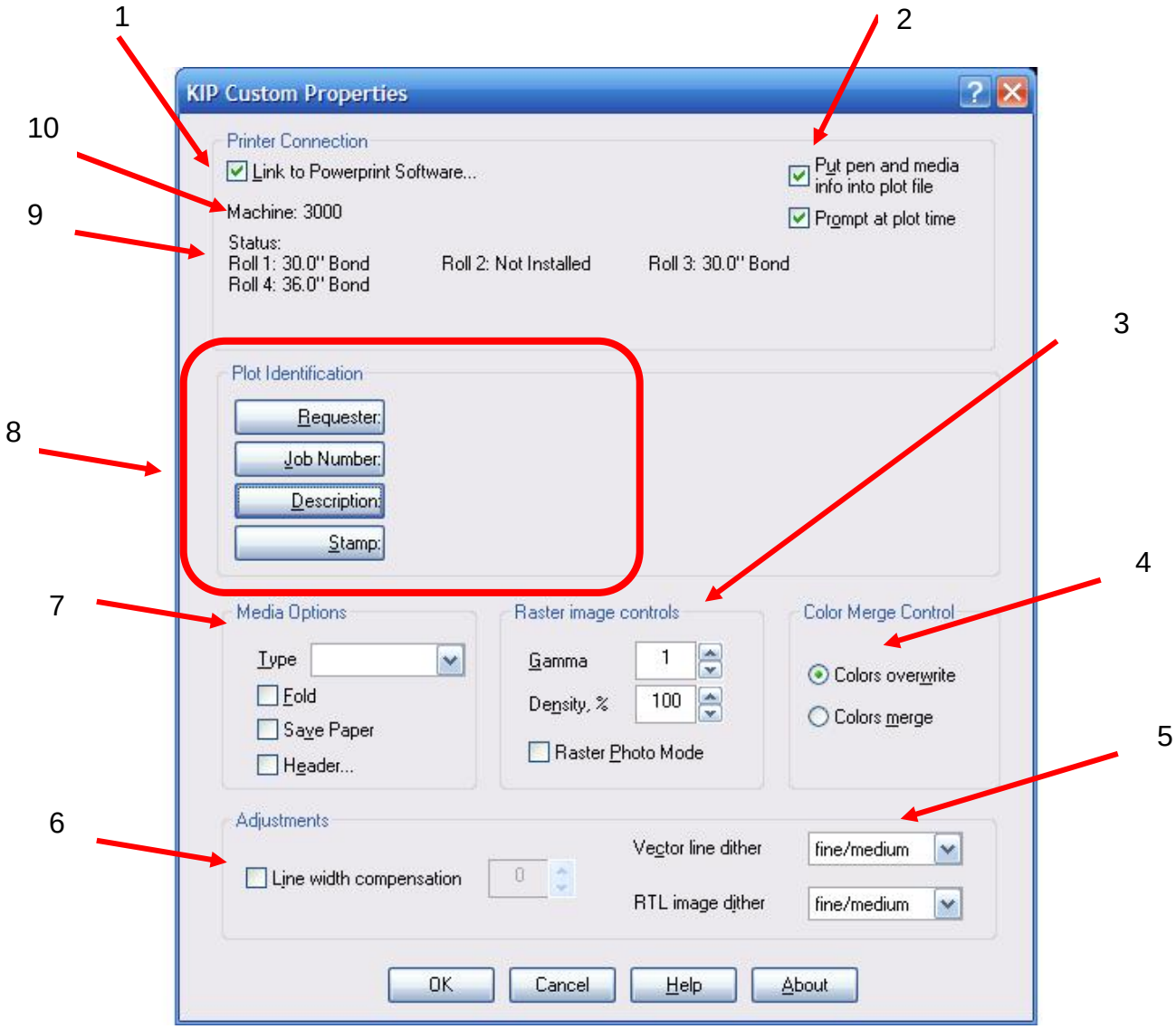



5) Click on “OK” to finish the linking of the HDI to KIP Request.

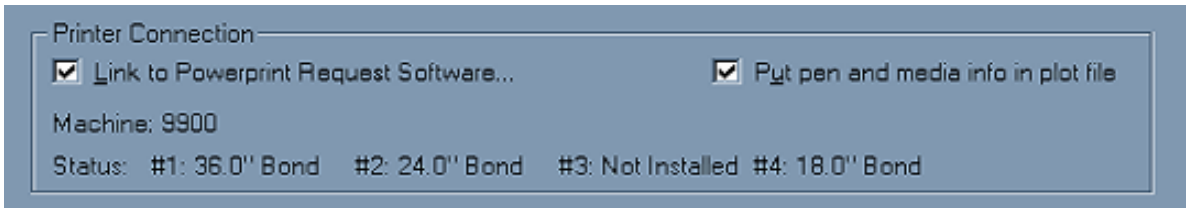
6) The KIP custom settings dialog box should display “Real Time Status” from the KIP printer. Users have the ability to track printing from the AutoCAD application by Requester, Job Number, and Description. Users also have the ability to add a stamp to their document from the KIP HDI driver.

# 5.0 Custom Settings



| No. | Name | Function |
|---|---|---|
| 1 | Link to KIP Request | Enables advanced features on *Custom Properties* |
| 2 | Put Pen and Media info in plot file | Places all media and advanced pen information inside the file to overwrite and default settings. |
| 3 | Raster Image Control | Adjustment for raster embedded images. Gamma and density controls. |
| 4 | Color Merge Control | Line Merge and color overlay control. |
| 5 | Dither Patterns | Controls dither patterns for vector lines and raster embedded images |
| 6 | Line Width Compensation | Controls overall line thickness or thinness |
| 7 | Media Options | Selects the tope of media, folded output (optional), media save and printed header. |
| 8 | Plot Identification | Used for accounting / job tracking and header information. Preset stamps from KIP Request can also be selected. |
| 9 | Status | "Real-Time" printer status. Includes installed media. |
| 10 | Machine | Displays currently select printer model |

# 5.1 Printer Connection




### 5.1.1 Link to Request Software

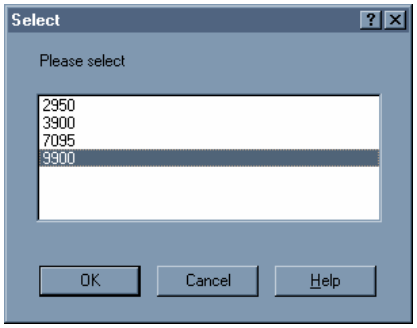
This button should be selected to utilize the advanced features of the Custom Properties screen. It links the AutoCAD Driver to the Request Software.

### 5.1.2 Put Pen and Media Info into File

Includes all print file header information necessary for proper processing on the KIP IPS controller. This includes the media types and sizes, merge control and the Raster Image control to override the default settings in the printer.

### 5.1.3 Machine

Displays currently installed printing devices. Installations with multiple printers can select the specific printer as noted in the installation section.



### 5.1.4 Status

This region shows the current:

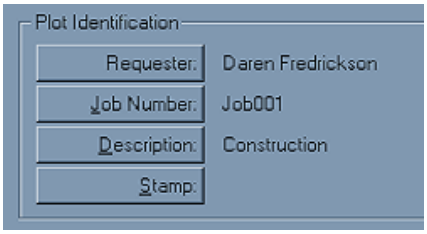
- roll width and type
- any misfeeds
- toner requirements
- standby mode of the printer

This is an active communication with the printer. Therefore the status is shown at the desktop of the user rather than visiting the printer which may be located at a distance from the user's PC.

## 5.2 Plot Identification

The following features can be used in environments where job costing or department allocations are required for prints on the KIP 3000. They can also be useful for print identification and print distribution as this information can be placed in a header.

Please see the Appendix for advanced naming variables.




### 5.2.1 Requester / User Name

This button allows the user to select a predetermined User Name from a drop down list or manually type the name. This field may be configured to be mandatory and also password protected as set in the KIP Request application.( see KIP Request Software Guide ) The drop down and passwords themselves are also configured in the Request Software. *%Username* may be used as an environment variable.

### 5.2.2 Job Number

This button allows the user to select a predetermined Job Number from a drop down list or manually type the job number. This field may be configured to be mandatory and also password protected as set in the Request application.( see KIP Request Software Guide ) The drop down and passwords themselves are also configured in the Request Software.

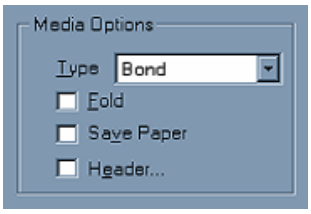
### 5.2.3 Description

This button allows the user to select a predetermined Description from a drop down or manually type a description. This field may be configured to be mandatory and also password protected as set in the Request application.( see KIP Request Software Guide ) The drop down and passwords themselves are also configured in the Request Software.

### 5.2.4 Stamp

This button allows a stamp which is predetermined in the Request Software to be placed on the print(s). The creation and placement of the stamp is again preformed in the request application.(see KIP Request Software Guide)

## 5.3 Media Options




### 5.3.1 Type

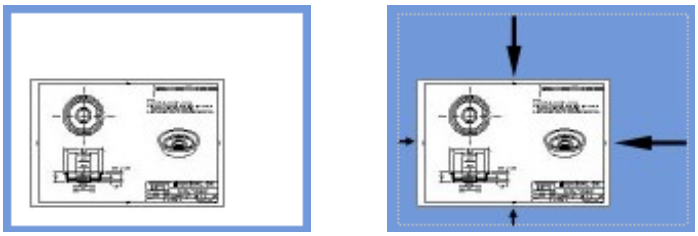
This drop down list has the listed media types that may be installed in the KIP printer. They include **Bond, Vellum and Film**. Please note the *Status* region to confirm the media currently installed. If a media selected for a print is not currently installed, the printer will “hold the job” and wait for the media type to be satisfied prior printing the job.

### 5.3.2 Fold

Uses the fold patterns configured on the KIP IPS when selected. Please note that the optional folder must be installed for this action to occur.

### 5.3.3 Save Paper

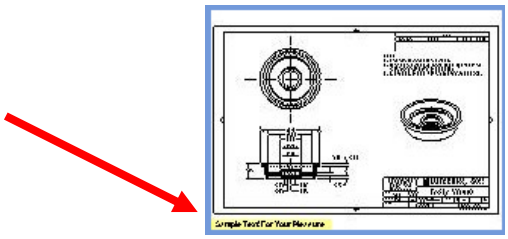
If the media size selected is larger than the  image size, this button will prevent excess media (wasted) from being consumed in the print process. This occurs in the length of the print.  This does not affect image output.



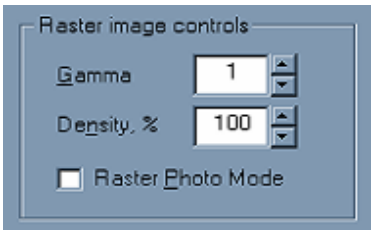
Note: If the Printer is set to “Closest“ the nearest roll width installed will be used to even further reduce media waste. (more than one roll width must be installed of the same type)

### 5.3.4 Header

A text header can be placed on the paper for print identification. The information placed in the **Plot Identification** will be printed on the print



## 5.4 Raster Image Control

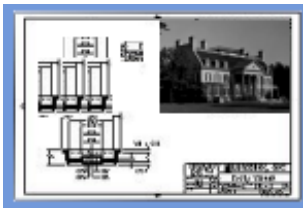


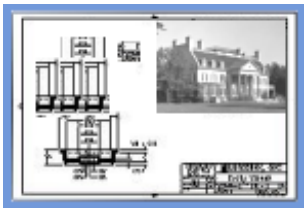

### 5.4.1 Gamma

This value sets the gamma level of embedded raster images on the print file. Gamma is the overall contrast of the image.

### 5.4.2 Density

This value sets the density of the image without affecting lines or shades in a print (the vector data). This can be used to enhance photos or other raster images placed within a drawing. A higher value will have a greater density.



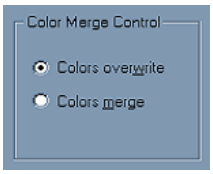


### 5.4.3 Raster Photo Mode

This button is used to print the shading effects of a raster image. Some raster images are meant to be 100% solid (no tones such as a line). Others are pictures or drawings where shades are required. Select Photo Mode to print the raster image as shades rather than 100% solid. Embedded Excel or Word documents should have this un-selected for optimum output.

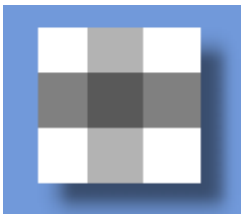
## 5.5 Color Merge Control

Color merge is the prevention or selection of a third color (or shade when printer on the KIP 3000) where layers of a drawing overlap.




Color Overwrite

Color Merge



## 5.6 Adjustments


### 5.6.1 Line Width Compensation

Controls line weights on a global basis. Values can be from -4.0 to +4.0. A higher value will result in all lines increasing in thickness. A lower value will result in all lines decreasing in thickness.

### 5.6.2 Vector Line Dither

Controls dithering patterns for grayscale line entities. Values are from Fine (Tight) to Coarse (Wide) dither patterns.

> **Note**
> Does not control vector fill areas. This should be set at the KIP IPS

### 5.6.3 RTL Image Dither

Works in conjunction with *Raster Image Control.* If Raster Photo Mode is enabled, then RTL Image dither can be controlled. Values are from Fine (tight) to coarse (wide) dither patterns. Photographic images work best with a more coarse setting while embedded text documents from Word or Excel work best with a Fine setting.

# 6.0 Appendix

## 6.1 Accounting Features- Variables

Specialized names or masks can be used for the accounting data fields in the Custom Properties of the KIP AutoCAD Driver (Requester, Job Number, and Description)

Both the Requester and Job Number fields by default are recorded into the KIP Controller Accounting log. The Job Number field can then be the key field used to query Production Reports directly from the KIP Unattend software. The KIP Controller log can also be imported into any program that can read ASCII data.

Specialized Mask Names and Rules

These customized names can be assigned to the mask elements using all normal methods.

Dwgname and dwgpath are the only two variables that can be set.

Example:
AutoCAD reports original file path of drawing named "R300-20.DWG" and the path that the file is stored in as:

C:\Program Files\AutoCAD 2006\drawings\R300-20.DWG

If mask item is set to:
Dwgname logged is “R300-20”
Dwgpath logged is ‘C:\Program Files\AutoCAD 2006\drawings\R300-20.DWG”

dwgpath=x\x\x\x\x where = sign and following is optional mask to select path elements.
x replaced by # includes that element of path to be used in accounting data.
dwgpath=x\#\x\x logged is ‘Program Files’
dwgpath=x\#\# logged is ”Program Files\AutoCAD 2006”