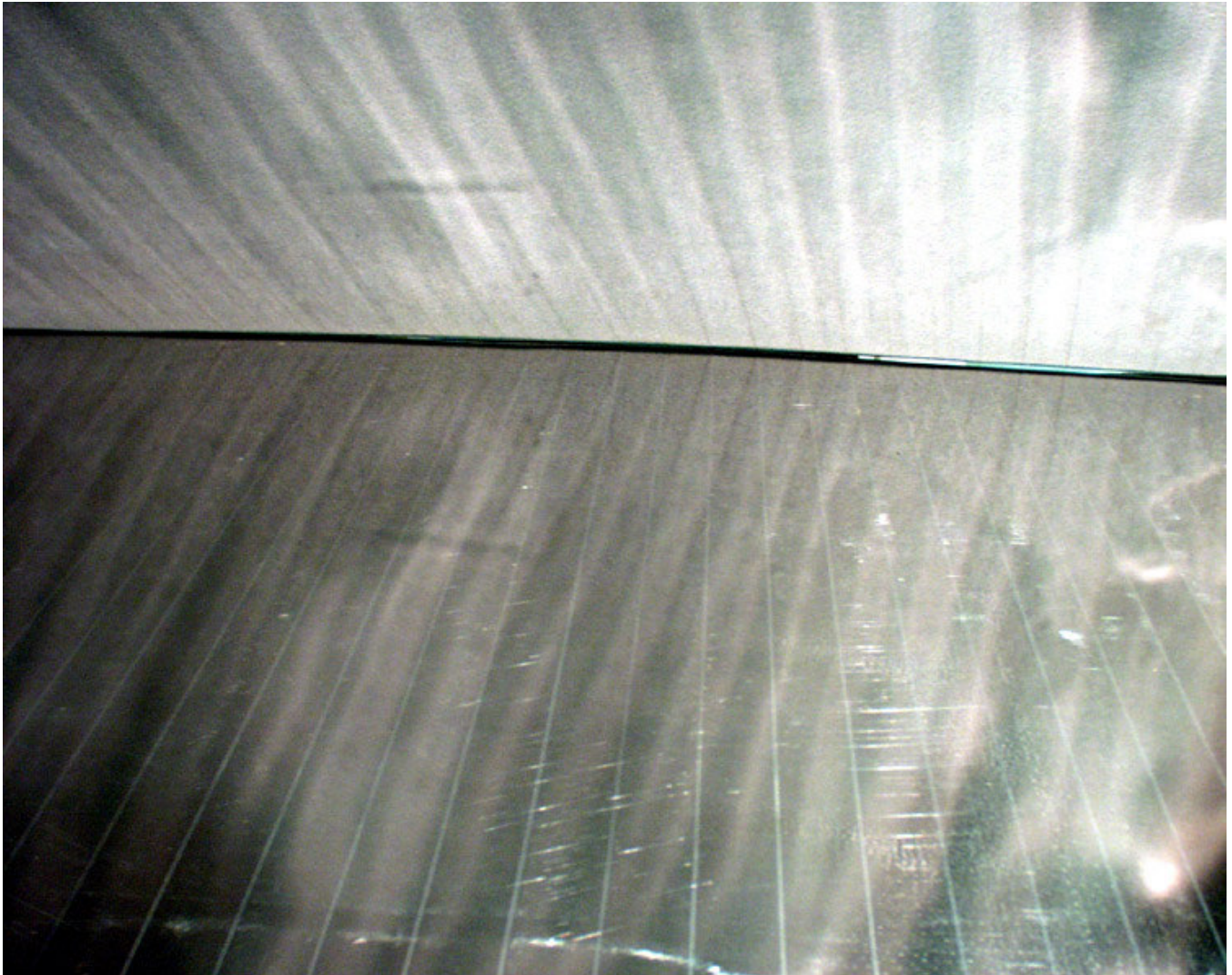




DIFFERENTIAL TINPLATE PRINTER PROGRAM 3000

THE EVOLUTION OF TINPLATE PRINTING

PROGRAM II – REMOTE POSITIONING SYSTEM





DIFFERENTIAL TINPLATE PRINTER PROGRAM 3000

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REMOTE POSITIONING SYSTEM OVERVIEW

What is the Remote Positioning System (RPS)?

The RPS is a system of pneumatic controls allowing operators to quickly and accurately bring differential tinplate printers back into correct printing position after printer maintenance or print pattern changes. The system controls printing pressure (the pressure of the print roll against the strip), the movement of the printer into and out of printing position, and fine print adjustment (between the transfer roll and the print roll). The RPS virtually eliminates the "guesswork" from printer adjustment by quantifying printer position settings (visual pressure displays) while simultaneously enabling the operator to adjust the printer from either the printer station or a second location (usually the inspection station). The RPS shortens print changeover time, reduces scrap, minimizes reliance on highly specialized personnel, and contributes to a safer working environment.

How does the RPS work?

Air pressure is used:

1. to move the printer into and out of printing position (air cylinders move the skewing base or platform on which the printer is mounted),
2. to control the pressure of the printer against the strip, and
3. to control the pressure between the transfer roll and die/print roll.

Four air cylinders, two controlling the horizontal pressure of the printer against the strip via control of the skewing base, and two controlling the pressure between the transfer roll and die roll, are read and regulated from either of two control panels. Panel "A" and Panel "B" each contain four duplicate electronic readouts and pressure controls for the four air cylinders. If an adjustment is made to air cylinder pressure on one panel, the change is reflected in the second panel. If adjustments are made at the inspection station, changes are conveyed electronically to the printer station. Print pressure is maintained by constant low air pressure (there is no longer a mechanical stop to control pressure).

The RPS modification replaces the original manual adjusting screws that were designed to control print pressure. The modification also replaces the manual adjustment screws on some printer models that control transfer roll to die/print roll pressure (two adapter plates and two air cylinders are used).

INSTALLATION REQUIREMENTS

To assist with the evaluation of an installation, the following information is requested on the printer(s) to be modified:

1. Serial number.
2. Model number.

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3. Date of purchase.
4. Photographs of printer.
5. Design of printer mounting base (drawing or picture).

For an RPS to be installed, the following requirements must be met.

1. The tinplate printer must allow for the adjustment of pressure between the transfer roll and the printing roll.
2. A skewing base equipped with ball-bushing bearings or some type of ball bearing design must be in place. It is the skewing base that is moved by the pneumatic cylinders of the RPS. Skewing bases/printer platforms that can only be adjusted manually (screw adjustments) are not suitable for use with an RPS.

There are a number of available options with respect to the RPS, depending on printer configuration and modifications that may have been made by the customer or installer. Each application should be reviewed independently in consultation with a Pannier engineer.

FREQUENTLY ASKED QUESTIONS

- Q. What if I am using more than one printer on the same line? Can the RPS be used on more than one printer?
- A. *Yes, a kit is available for modifying a second printer for use on a common skewing base.*
- Q. Will the RPS correct for deflection in the printer or die roll?
- A. *Yes, each air cylinder is adjustable independently.*
- Q. Can the RPS be used on printers other than Pannier printers?
- A. *No, the RPS can be used on Pannier printers only.*
- Q. Does the printer need to be returned to Pannier, or can modifications be made on-site?
- A. *The RPS system can be installed on-site by qualified personnel.*

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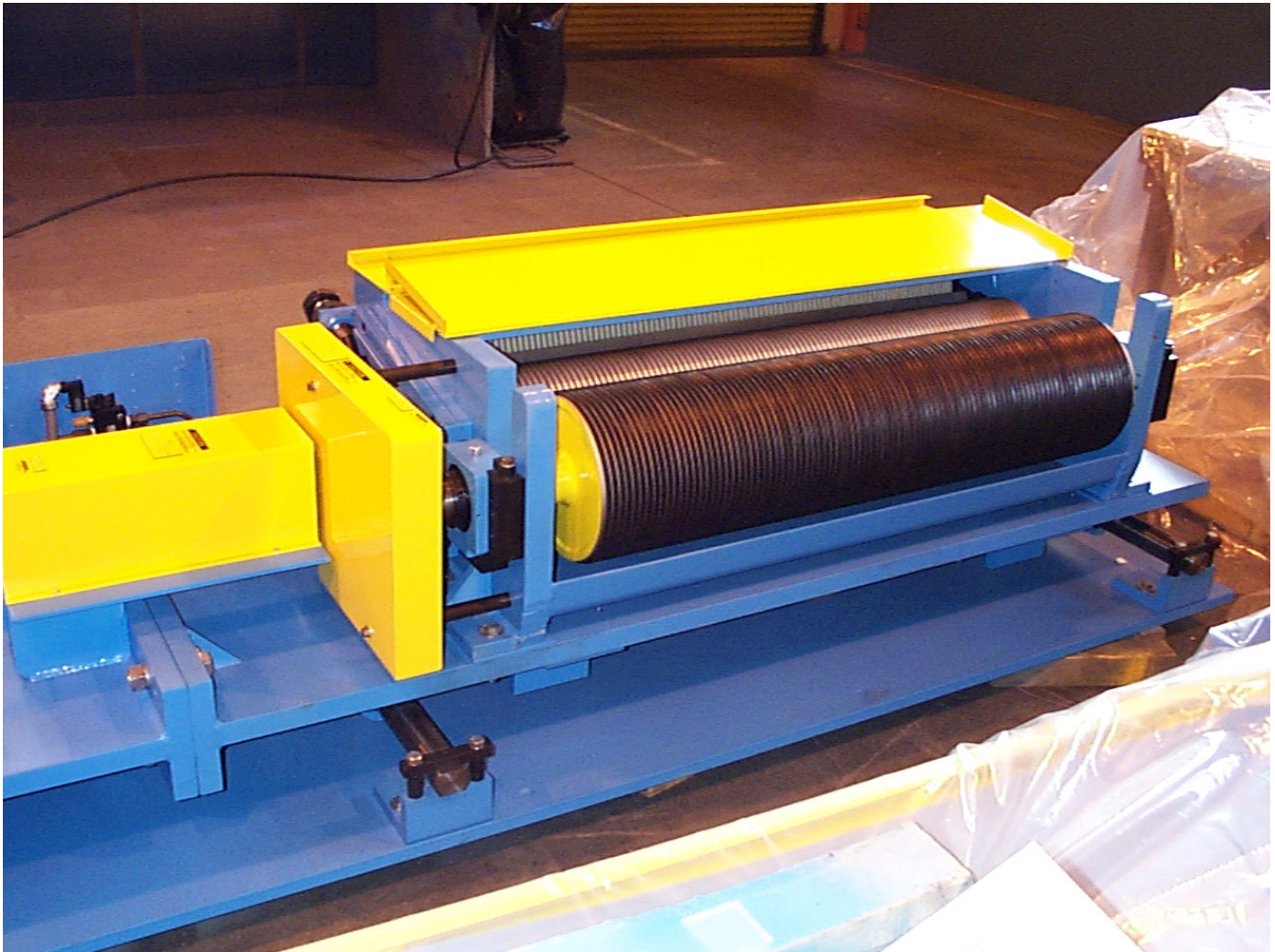
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DIFFERENTIAL TINPLATE PRINTER PROGRAM 3000 **PROGRAM II – REMOTE POSITIONING SYSTEM**



Differential Tinplate Printer with Exposed Print Roll and Die Bands

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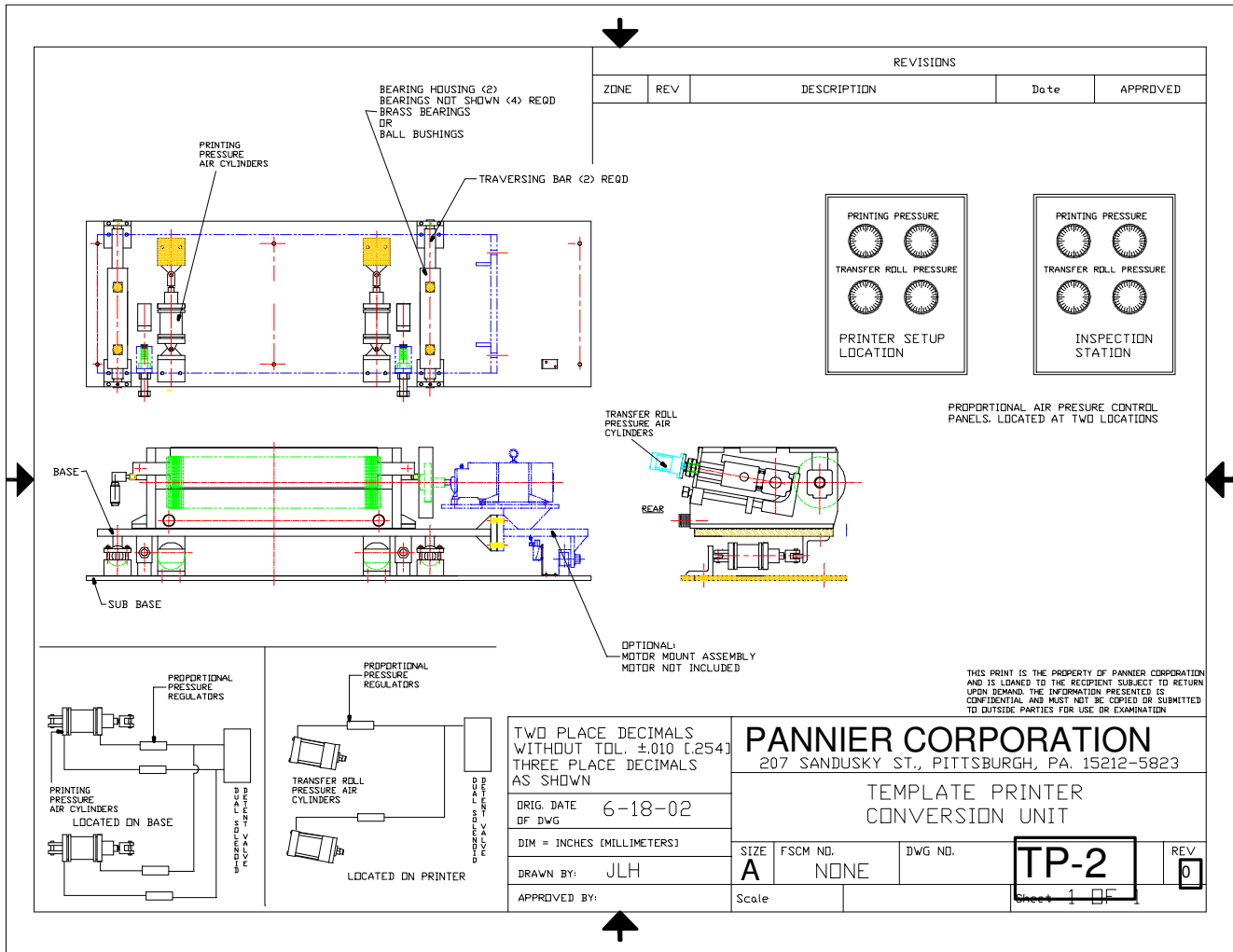
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General Arrangement Drawing: Remote Positioning System Components



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Three-roll printer with air cylinders for adjusting print pressure between the transfer roll and the die/print roll, and printer pressure against strip (printer is shown mounted on a skewing base).

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DIFFERENTIAL TINPLATE PRINTER PROGRAM 3000 **PROGRAM II – REMOTE POSITIONING SYSTEM**



RPS Central Control Box with Pressure Control Valves and Two Control Panels

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