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Digital Systems

PyroBond 4

Innovative Adhesion Technology

The **PyroBond 4** is a tabletop flame pretreatment unit designed for rapid application of flame and Pyrosil to drinkware and other cylindrical or tapered objects. The electromechanical carousel does not require compressed air, making the unit a portable and small footprint machine for tight manufacturing environments.

- MULTI STATION PYROSIL/FLAME TREATMENT
- PYROSIL SAVING FEATURES
- AUTO BLANK DETECTION
- QUICK CHANGEOVERS & SETUP
- INCREASES PRODUCTIVITY

THE PERFECT COMPANION TO OUR

REVOLUTION
360T

HIGH SPEED ROTARY UV-LED PRINTER



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AGI #14973
PPAI #487287



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The **PyroBond 4** is a tabletop flame pretreatment unit designed for rapid application of flame and Pyrosil to drinkware and other cylindrical or tapered objects. The electromechanical carousel does not require compressed air, making the unit a portable and small footprint machine for tight manufacturing environments.

With (4) cup stations, each adjustable to account for varying substrate sizes and shapes, the **PyroBond 4** is versatile in the range of products it can treat. The burner manifold is easily adjustable to match the curvature of tapered objects as well, resulting in an even application of flame and Pyrosil.
(3) independently controlled burners adjust to accommodate short, medium, and tall objects to prevent waste.

The unit comes standard with a stainless steel shell and a stainless steel table included. With stainless steel construction, the **PyroBond 4** is easy to maintain and keep a clean working environment. The table puts the unit at an ideal working height of 40" for continuous operation. The shelf provides easy access to fuel and Pyrosil canisters as well as self-containment.

PYROBOND 4 TECHNICAL SPECIFICATIONS

(4) Station Carousel	Adjustable stations to many substrate sizes and shapes
Pyrosil Canister Capacity	600mL
Max Pretreatment Height	Up to 7" pretreatment area
Flame Treatment Area	Diameter: 2.0" to 5" with standard base
Standard Substrate Size	Diameter: 2.0" to 5" with standard base Up to 12" tall substrates with standard construction
Interface	4" Color HMI
Environment	Temperature: 18° to 27°C (65° to 80°F) Humidity: 40 - 70% (Recommended) Dust: Equivalent to normal office level
Floor Dimensions	Table: 34" H, 36" W, 24" L Flame Unit (On top of table): 6" H base, 34" W, 22" L (Protective cage extends to 21" overall height) Weight: Approximately 50 lbs.
Electrical	Input: 110 Volts AC, 5A; 24 Volt and 5 Volt DC for controls and motors

EDITABLE PARAMETERS:

- TABLE ROTATION RATE: CONTROLS THE FLOW OF PARTS PER HOUR
- SUBSTRATE ROTATION RATE DURING FLAMING: RESULTS IN EVEN APPLICATION OF FLAME AND PYROSIL
- # OF CUP ROTATIONS DURING FLAMING: MAINTAINS THE CORRECT APPLICATION OF PYROSIL
- # OF HEADS TO BURN DURING FLAMING: ONLY THE AREA NEEDING TREATMENT IS FLAMED
- ANGLE OF BURNERS: ACCOUNTS FOR ANGLE OF TAPERED SUBSTRATES

PYROSIL CONSERVING FEATURES:

- PILOT RUNS OFF A SEPARATE PROPANE LINE
- BURNERS USING PYROSIL ARE ONLY ON WHEN A CUP IS IN PLACE AND TURNING
- UNIT CAN BE SET UP TO RUN FLAME ONLY, WITHOUT PYROSIL, WITH A FLIP OF A SWITCH
- NEXT CUP SENSING: IF THE NEXT OBJECT IN SEQUENCE TO PRETREAT IS NOT PRESENT, THAT STATION WILL BE SKIPPED AND THE CAROUSEL WILL CONTINUE TO ROTATE UNTIL IT SEES AN OBJECT TO FLAME



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Our **PyroBond4** flame adhesion pre-treatment unit features many cost-saving advantages such as only firing when a cup is presented. Keep costs low by treating only the area that you want to treat with exact control over the number of heads to be utilized. Get a minimum of 1,500 and up to 2,000 cups per Pyrosil cartridge at only 7.5-10¢ a cup!

Pyrosil will pre-treat a number of materials such as:

GLASS

Glass comes from the factory with a coating that must be removed.

Pyrosil permanently bonds to the glass and creates a surface for the ink to bond to.

Our **PyroBond4** does this in one application.

Glass drinkware pre-treated with Pyrosil has a dishwasher durability of up to 200 washes.

After pre-treating glass with Pyrosil, a glass primer such as our "DUV Primer for Glass" is needed.

PAINTED / POWDER-COATED PRODUCT

Pre-treatment of Pyrosil increases adhesion for ink to bond to.

STAINLESS

Pyrosil pre-treatment is essential for ink adhesion on stainless, as stainless comes from the factory with a coating of oil that must be burned off.

After pre-treating stainless with Pyrosil, a primer such as our "P4" primer is needed.

Our **PyroBond4** can also be used as a flame-only pre-treatment applicator, bypassing the use of Pyrosil with a simple flip of the switch and operates on your choice of natural gas or propane.

A recent Pyrosil usage study determined that on average (1) **PyroBond4** unit can feed up to (4) of our **Revolution 360T** high-speed rotary printers with the **PyroBond4** outputting an average of 400-1,000 pre-treatment cups per hour.

Example cup output based on the number of heads utilized shows:

(1) Head + 4 x Cup Turns: 1,422 Cups

(2) Heads + 4 x Cup Turns: 407 Cups

(3) Heads + 4 x Cup Turns: 168 Cups

TOTAL: 1,997 Cups (for approximately \$150)

*Per (1) 600ml/330g of Kartusche MGK/Refill Cartridge Pyrosil Coating



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