

# Flame Treating 45

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## SPECIFICATIONS

WELL KNOWN AND PROVEN FLAME TREATING MACHINE, THE DUBUIT 45 IS EQUIPPED AS STANDARD WITH TOOLING TO ENABLE TREATMENT OF MOST KINDS OF OBJECT SUCH AS CYLINDRICAL, CONICAL, OVAL AND FLAT. CYLINDRICAL AND CONICAL BOTTLES ARE ROTATING 6 TIMES IN FRONT OF 2 TRACKING BURNERS. THIS COUPLED WITH OUR TRIPLE ROW BURNERS, ENSURES A VERY HIGH DEGREE OF TREATMENT WHICH IS ESPECIALLY IMPORTANT FOR UV INK PRINTING BUT WHICH ALSO ENSURE EXCELLENT ADHESION WITH CONVENTIONAL INK.

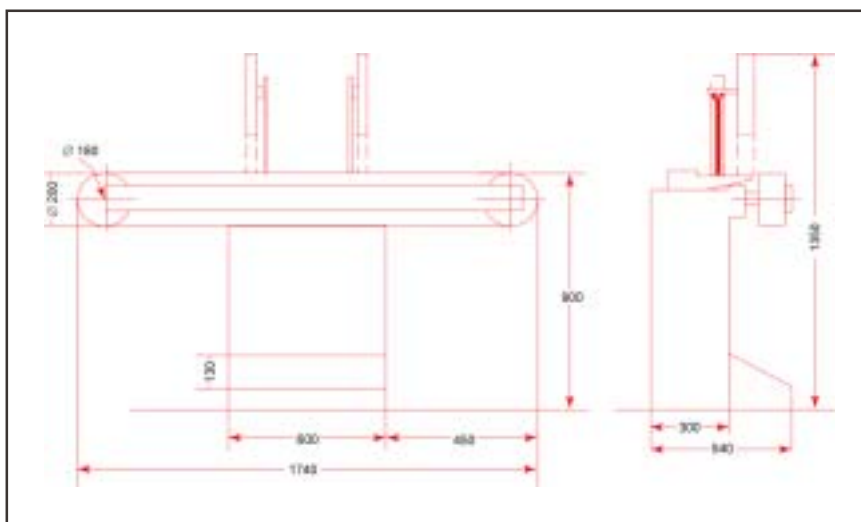
## TECHNICAL DATA

POWER	0.3	kW
POWER SUPPLY	380 V. 50 Hz	
	SINGLE PHASE (STANDARD)	
	OR OTHER PER REQUEST	
CONVEYOR SPEED	15-25	M/MIN.
AIR CONSUMPTION	7 TO 12	NM <sup>3</sup> /H
GAS CONSUMPTION	0.4 TO 1	NM <sup>3</sup> /H
OUTPUT	UP TO 3000	OBJECTS/H
DIMENSION OF MACHINE	1740 x 540 x 1350	MM

## SIZE OF OBJECTS

UNIVERSAL FLAMING MACHINE FOR BOTTLES OF ALL SHAPES. BURNER CAN BE ADJUSTED AS PER OBJECT'S SIZE WHICH MAXIMUM HEIGHT OR WIDTH OF TREATED SURFACE IS 300 MM AND MAXIMUM DIAMETER IS 350 MM.

## DRAWING



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## OPERATION SET UP

### SELECTOR SWITCH



- ON = TURN ON ELECTRIC POWER SUPPLY.
- OFF = TURN OFF ELECTRIC POWER SUPPLY.
- 0 = CLOSE SOLENOID VALVE (= NO GAS FLOWS TO GAS VALVES).
- 1 = OPEN SOLENOID VALVE (= LET GAS FLOWS TO GAS VALVES, THEN ADJUST GAS VALVES FOR PROPER FLAME AT BURNERS).
- 2 = AUTOMATIC FUNCTION TO OPEN SOLENOID VALVE WHEN PRESS [ON] SWITCH, AND TO CLOSE SOLENOID VALVE WHEN PRESS [OFF] SWITCH.

### SET UP PROCEDURE

1. CLOSE ALL VALVES (2 PILOT VALVES, 2 GAS VALVES, 2 AIR VALVES).
2. AT [OFF] SWITCH AND [0] POSITION, TURN PILOT VALVE (DO ONE SIDE FIRST), TO OPEN A LITTLE GAS WILL FLOW TO PILOT TIP AT BURNER, LIT AT PILOT TIP FOR LITTLE FLAME. DO THE SAME ON THE OTHER PILOT VALVE.
3. AT [OFF] SWITCH AND TURN SELECTOR SWITCH TO [1] POSITION (FLAME AT PILOT TIPS STILL LIT), THEN OPEN GAS/AIR VALVES (OF ONE BURNER AT A TIME) BY TURNING GAS VALVE TO OPEN A LITTLE AND FOLLOWING WITH AIR VALVES AT PROPORTIONAL OPENING, FLAME WILL APPEAR ON BURNER. ADJUST GAS AND AIR VALVES FOR NEEDED FLAME LENGTH (BOTTLES SHOULD BE CLOSE ENOUGH FOR GOOD FLAMING BUT NOT TOO CLOSE FOR EXCESSIVE HEAT AND DAMAGE). CORRECT GAS/AIR MIXTURE WILL GIVE DEEP BLUE FLAME. DO THE SAME SET UP FOR THE OTHER BURNER.
4. AT [OFF] SWITCH AND TURN SELECTOR SWITCH TO [2], THIS WILL SWITCH TO AUTOMATIC FUNCTION AND SOLENOID VALVE CLOSES GAS/AIR FLOWING TO BURNERS BUT GAS/AIR VALVES OPENING SETTING STILL EXIST AND PILOT TIPS STILL HAVE TIME.
5. AT THIS STAGE, WHEN PRESS [ON] SWITCH MACHINE WILL RUN AND BURNERS WILL AUTOMATICALLY LIT AND GIVE FLAME AS SET, WHEN PRESS [OFF] SWITCH, MACHINE WILL STOP AND FLAME AT BURNERS WILL DISAPPEAR (BUT PILOT TIPS STILL HAVE FLAME). THIS WILL SAVE UTILITY DURING TEMPORARY STOPPING PERIOD.

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6. FOR DIALY OFF, PRESS [OFF] SWITCH AND CLOSE ALL VALVES. IF DO NOT WANT TO RESET GAS/AIR VALVES NEXT DAY, JUST PRESS [OFF] SWITCH, CLOSE PILOT VALVES AND CLOSE GAS/AIR VALVES AT TANK AND MAIN AIR LINE INSTEAD.

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## INSTALLATION

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A. CONNECT THE ELECTRIC IN ELECTRICAL CIRCUIT BOARD.



B. BRING COOKING GAS LINE TO CONNECT AT GAS INLET CONNECTED TO SOLENOID GAS.



C. AIR REGULATOR AND WATER FILTER. TURN KNOB TO LET AIR SUPPLY IN AND SET PRESSURE (NORMALLY 4 KG/CM<sup>2</sup>).

D. TURN ON ELECTRIC POWER SUPPLY BY PRESS SELECTOR SWITCH AT [ON].

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## E. MACHINE SPEED ADJUSTMENT



1. MOTOR BASE IS SUPPORTED WITH ADJUST-ABLE SPRING-LOADED BOLT. ADJUST SPRING CUSHION EFFECT BY FASTENING THE NUT, BUT NOT TOO TIGHT. DO NOT TOTALLY LOCK THE NUT.



2. LOOSEN THE NUT, THEN CHANGE CONVEYOR SPEED BY MEAN OF USING ANOTHER PAIR OF ALIGNED STEP PULLEY SLOTS.

## F. BURNER ADJUSTMENT



1. FIRST, INSTALL VERTICAL SUPPORTS AND BURNERS ON LEFT AND RIGHT SWINGING ARMS.



2. ADJUST FLAME OF PILOT TIP AT BURNER BY ADJUST AT PILOT VALVE.

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3. BURNER CAN BE ADJUSTED FOR FLAME HEIGHT BY MOVING THE VERTICAL STEM UP OR DOWN, THEN LOCK IT.

## G. FOR CYLINDRICAL AND CONICAL OBJECT ADJUSTMENT



1. TAPERED TYPE MANDRELS (STANDARD) FOR CYLINDRICAL BOTTLE FLAME TREATMENT.



2. FOR CYLINDRICAL AND CONICAL FLAMING, COUPLINGS AT BOTTOM OF MANDRELS ARE TOUCHING WITH BRAKE LINING THUS TURNING THE MANDRELS. THIS WAY OBJECTS (CYLINDRICAL BOTTLES, BUCKETS, DRUMS) ARE TURNING AROUND IN FRONT OF THE FLAME.



3. FOR SMALL CYLINDRICAL BOTTLES USING TAPERED TYPE MANDREL (STANDARD), THE BRAKE LINING WILL BE INSTALLED INSIDE (CLOSE TO BURNERS). FOR BIG CYLINDRICAL OBJECTS (BUCKETS, DRUMS), THE BRAKE LINING WILL BE INSTALLED OUTSIDE (AWAY FROM BURNERS).

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## H. FOR FLAT OBJECT ADJUSTMENT



INFEED END OF STAINLESS STEEL CONVEYOR. GUIDES (LEFT AND RIGHT) CAN BE USED IF NEEDED NORMALLY FOR FLAT BOTTLE FLAMING.



I. ALUMINUM SHIELD IS BEING USED TO PREVENT ACCIDENTALLY DAMAGE FROM LONG FLAME (DURING ADJUSTING GAS/AIR MIXTURE) AND/OR EXCESSIVE HEAT SPREADING TO GAS/AIR MIXTURE VALVES, HOSE, ETC.



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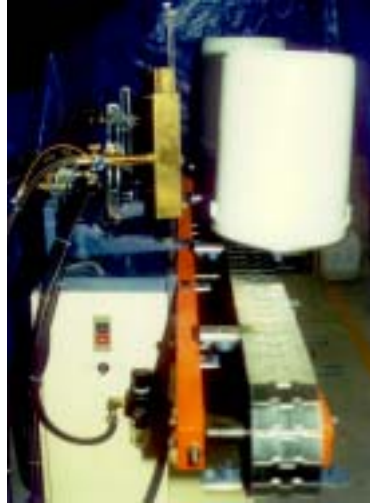
## MACHINE 45 IN DIFFERENT OBJECT

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### CYLINDRICAL OBJECT



SMALL CYLINDRICAL



LARGE CYLINDRICAL

### CONICAL OBJECT



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## FLAT OBJECT



STANDING FLAT OBJECT



LAYING DOWN FLAT OBJECT

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## ELECTRICAL DIAGRAM

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POWER  
POWER SUPPLY

0.3 KW  
380 V. 50 HZ  
SINGLE PHASE (STANDARD)  
OR OTHER AS PER REQUEST