PROPER AIRFLOW ON COFFEE ROASTERS:

AIRFLOW IS THE LIFE OF YOUR COFFEE ROASTER. IF YOUR AIRFLOW IS NOT CORRECT YOU CAN DAMAGE YOUR MACHINE AND EVEN VOICE WARRANTY PLUS IT CAN EFFECT THE QUALITY AND TASTE OF YOUR COFFEE.

THERE ARE SEVERAL PURPOSES ACHIEVED BY PROPER AIRFLOW:
AIR FLOW IS VITAL FOR GAS ROASTERS TO KEEP THE FLAME BURNING
AIRFLOW PULLS THE SMOKE AND CHAFF OUT OF DRUM
AIRFLOW BECOMES THE MAIN SOURCE OF HEATING DURING MOST OF THE ROASTING PROCESS

IT IS VITAL THAT YOU HAVE CORRECT AIRFLOW WHEN YOU SETUP YOUR ROASTER FROM THE START AS WELL AS KEEPING THE LINES CLEAR AND PROPERLY VENTILATED DURING THE ROASTING PROCESS.

LISTED BELOW ARE SOME WAYS TO TEST YOUR AIRFLOW ON YOUR VARIOUS TYPE ROASTERS:

AIRFLOW WITH ELECTRONIC AIRFLOW BC ROASTERS:

WHILE A DIAL OF 0-100 SUGGESTS A WIDE SPREAD OF AIRFLOW, WE RECOMMEND THE USE OF 3 SETTINGS:



- + Low
- + MEDIUM AND
- + HIGH

Don't get hung up on dial numbers. Instead, use a simpler approach by employing a cigarette lighter to determine settings. Let's do that.

1. PULL OUT THE TRIER SPOON FROM THE TRIER CHUTE.

2. PUT THE LIGHTER UP TO THE CHUTE. WHENTHE FLAME BENDS INTO THE CHUTE AT ABOUT A45 DEGREE ANGLE, THIS IS LOW. NOTE YOUR DIALSETTING.

HOT AIR CONTROL:

3. Next, find medium fan Airflow. Light the flame and when the flame bends heavily into the chute, this is medium. Note your dial setting.

4. FINALLY, FIND HIGH FAN AIRFLOW. LIGHT THE FLAME AND WHEN IT LIGHTS BUT EXTINGUISHES, THIS IS HIGH. NOTE YOUR DIAL SETTING. DON'T GO ABOVE THIS SETTING.

PROPER AIRFLOW ON COFFEE ROASTERS:

Now that we have the settings, how is airflow used? This is how we use airflow when we roast.

1. LOW. FROM "CHARGE" TO END OF DRYING, USE AN AIRFLOW SETTING OF LOW. THIS PERMITS THE ROASTER TO BRING THE CORE TEMPERATURE OF THE BEANS UP TO THE SAME TEMPERATURE AS THE OUTSIDE PORTION OF THE BEANS. THIS ALSO DRIES THE BEAN AND SETS YOU UP FOR A SUCCESSFUL ROAST.

2. MEDIUM. FROM END OF DRYING TO ABOUT 30 SECONDS BEFORE FIRST CRACK. ANTICIPATE 1ST CRACK: LOOK AT THE SEAM (BEGINS TO OPEN) AND EXAMINE THE BEANS UNDER THE LIGHT. YOU WILL SEE THE SLIGHTEST SMOKE COMING OFF THE BEANS.

3. HIGH. FROM 30 SECONDS BEFORE FIRST CRACK TO END OF ROAST, OPEN THE AIRFLOW TO HIGH. GET THAT SMOKE OUT OF THE ROASTER. DON'T GO ABOVE THE SETTING FOR HIGH THAT YOU HAVE DETERMINED BY THE USE OF LIGHTER. "MORE" IS NOT BETTER. WE DON'T WANT TO MOVE OUT AROMATICS, JUST THE SMOKE.

ROASTERS WITH MANUAL DIAL DAMPERS: (2018 BC MODELS, ALL PHOENIX MODELS AND THE SEDONA MODELS)



IF YOU ARE USING THE NEW 2018 BC ROASTERS WITH MANUAL DIAL DAMPER (MDDS SYSTEM) OR A PHOENIX OR SEDONA MODEL YOU CAN TEST AIRFLOW AS WELL. KEEP IN MIND THAT THE MANUAL DIAL DAMPER ACTUALLY OPENS OR CLOSES THE EXHAUST PIPE SO IF YOU ARE UPGRADING FROM AN ELECTRONIC ROASTER TO THE MDDS SYSTEM YOU WILL LIKELY NEED TO INCREASE THE SETTINGS ON YOUR

AIRFLOW GATEWAY:

MDDS SYSTEM:

SOME BC ROASTERS HAVE A NEW AIRLOW GATEWAY IN THE NECK OF ROASTER AND YOU CAN PERFORM THE LIGHTER TEST AT THAT POINT. BUT FOR ROASTERS THAT DO NOT HAVE THE AIRFLOW GATEWAY

AIRFLOW.



PROPER AIRFLOW ON COFFEE ROASTERS:

IN NECK OF ROASTER YOU WILL NEED TO REMOVE THE TRIER SPOON FROM UNIT TO PERFORM THIS TEST.

(NOTE: ON THE 2018 BC MODELS 1-5 YOU MUST TURN THE

1. LIGHT A LIGHTER UP TO THE AIRFLOW OPENING AND TURN DIAL OF AIRFLOW TO THE POINT THAT AIR PULLS THE FLAME ABOUT 45% TOWARD OPENING. NOTE THE NUMBER ON YOUR DAMPER AS THIS WILL BE THE LOW SETTING.

2. TURN AIRFLOW OPEN TO THE POINT THAT FLAME BENDS HEAVILY INTO CHUTE. THIS SHOULD BE NOTED ON THE DIAL AS MEDIUM.

3. TURN DIAL ON AIRFLOW UNTIL FLAME IS PULLED INTO CHUTE AND EXTINGUISHES. THIS IS HIGH AIRFLOW. NOTE NUMBER ON DAMPER.

THEN FOLLOW THE INFORMATION ABOVE ON HOW TO USE AIRFLOW.

PROBLEM SOLVING AIRFLOW:

SOMETIMES YOU CAN HAVE OR GET AIRFLOW PROBLEMS BY THE WAY YOU SETUP EXHAUST PIPES OR HAVING TOO MANY ANGLES IN PIPES OR PIPES THAT ARE TOO LONG NOT ALLOWING FAN TO PUSH AIR AND SMOKE OUT OF DRUM. ALSO BY NOT KEEPING AIRWAYS CLEAN THIS WILL RESTRICT AIRFLOW AND COULD DAMAGE ROASTER. BY PERFORMING A SIMILAR TEST AS ABOVE YOU CAN DETERMINE IF YOU AIRFLOW IS HINDERED SO AS TO CORRECT ISSUE.

TAKE THE TEST ABOVE WITH AIRFLOW ON AN TURN UP EITHER THE ELECTRONIC CONTROL ON THE ELECTRONIC AIR REGULATION KNOBS ON A BC ROASTER RECORDING THE PULL OF AIR INTO DRUM WITH FLAME OF LIGHTER AND RECORD THESE NUMBERS FOR LOW, MED., HIGH. SEND THIS DATA TO <u>TECH@BUCKEYECOFFEE.COM</u> FOR THEIR ANALYSIS. IF IT IS A NEW SETUP AND THERE ARE ISSUES THEY WILL TRY TO DETERMINE HOW TO CORRECT EXHAUST PIPES OR ADD A BOOSTER FAN. IF IT IS AN OLDER SETUP THEY WILL LIKELY ASK YOU TO CLEAN YOUR PIPES AND SEND PICTURES OF THE FANS AND OTHER AREAS TO ENSURE AIRWAYS ARE OPEN. ALSO IF YOU HAVE A MANUAL DIAL DAMPER THIS SHOULD BE CLEANED MONTHLY.

REMEMBER ALL TECH RELATED ISSUES SHOULD GO TO THE TECH PAGE OF OUR WEBSITE OR EMAIL <u>TECH@BUCKEYECOFFEE.COM</u> INCLUDING YOUR MODEL ROASTER AND ACCOUNT NUMBER.

TECH@BUCKEYECOFFEE.COM