

HOW TO BUILD AND USE A BOWL DRYING KILN

I WOULD LIKE TO THANK TED RUDIE, EQUIPMENT MANAGER FOR THE [CHESAPEAKE WOODTURNERS](#) FOR ALLOWING ME TO USE DISCRPTIONS AND PHOTOGRAPHS AS PRINTED IN THE JANUARY ISSUE OF THE CHESAPEAKE WOODTURNERS NEWSLETTER.

ARE YOU TIRED OF WAITING MONTHS AND EVEN YEARS FOR DRY TURNING STOCK? NOW YOU CAN HAVE A STEADY SUPPLY IN JUST A FEW SHORT WEEKS.



A BOWL DRYING KILN CAN BE MADE FROM MOST ANY INSULATED ENCLOSURE WHERE AIR FLOW AND TEMPERTURE IS CONTROLLED. DISCARDED UPRIGHT REFRIGERATORS AND FREEZERS ARE ONE OF THE EASIEST TO BUILD. USUALLY THEY CAN BE AVAILABLE FOR LITTLE OR NO COST FROM AN APPLIANCE REPAIR CENTER.

IF PLACED OUTSIDE, IMMEDIATELY INSTALL A QUALITY LOCKING DEVICE.

CLEAN THE UNIT TO REMOVE ANY FOOD RESIDUE AND STAINS. OUTDOOR INSTALLATION WORKS BEST AS WOOD ODORS AND MOISTURE CAN BE A PROBLEM.



BEGIN BY DRILLING ½ INCH HOLES IN THE TOP SIDES AND BOTTOM. TED RECOMMENDS FOUR ON EACH SIDE AND EIGHT ON THE BOTTOM. BE SURE TO GO ALL THE WAY THROUGH TO ALLOW AIR CIRCULATION.



IF YOU ARE FAMILIAR WITH ELECTRICAL WIREING, A PROFESSIONAL CONTRACTOR WILL NOT BE NEEDED. LOCATE WHERE YOU WILL EXIT YOUR SHOP FOR THE ELECTRIC SUPPLY TO YOUR KILN. IF AN OUTSIDE RECEPTACLE IS AVAILABLE BE SURE IT IS A GFI CIRCUIT. MOUNT WATER TIGHT ELECTRICAL BOXES, ONE ON THE OUTSIDE OF THE KILN FOR A ON/OFF SWITCH, ONE ON THE INSIDE TOP FOR A THERMASTAT AND ONE ON THE BOTTOM FOR A HOODED LAMP. UF WIREING AND WATER TIGHT CONNECTORS ARE NEEDED THROUGH OUT THE INSTALLATION FOR SAFETY.

OPERATION

ROUGH TURN YOUR BOWL BLANKS AS YOU NORMALLY WOULD. COAT ONLY THE OUTSIDE END GRAIN WITH [GREEN WOOD SEALER](#). THIS LESSENS THE OCCURANCE OF MOLD AND MILDEW. TRIAL AND ERROR WILL DICTATE HOW MUCH AND WHERE AS YOU GAIN EXPERIENCE WITH YOUR KILN.



- START WITH A 40 WATT INCANDESCENT BULB,
- IN APPROXIMATELY ONE WEEK CHECK THE BLANKS WITH YOUR [MOISTURE METER](#). WHEN THE MOISTURE DROPS TO 14-16 PERCENT, CHANGE TO BULB TO 60 WATTS
- CHECK THE KILN IN ANOTHER WEEK, WHEN THE MOISTURE FALLS TO 12 PERCENT, CHANGE TO 75 WATTS.
- IN A WEEK OR SO THE MOISTURE SHOULD BE NEAR 6-8 PERCENT. AT THIS POINT, SHUT OFF THE KILN AND ALLOW IT TO COOL COMPLETELY.
- BRING THE COOLED BLANKS INTO YOUR SHOP, ALLOW THEM TO ACCLIMATE TO YOUR SHOPS ENVIRONMENT FOR ONE TO TWO WEEKS BEFORE FINISH TURNING.

KEEP IN MIND DRYING TIMES VARY FOR DIFFERENT WOODS AND BLANK THICKNESSES. OUTSIDE TEMPERATURES AND HUMIDITY ALSO PLAY A ROLE.

IF A BULBS BLOWS BEFORE THE COMPLETED CYCLE, START OVER AT 40 WATTS AND INCREASE DAILY TO WHERE THE LAST WATTAGE BLEW.

SINCE THIS ARTICLE APPEARED IN THE CHESAPEAKE WOODTURNERS NEWSLETTER, TED HAS INSTALLED REMOTE DIGITAL THERMOMETERS TO THE TOP AND BOTTOM OF THE KILN SO HE CAN OBSERVE TEMPERATURES WHILE HE IS WORKING IN HIS SHOP. I AM TOLD COMPLETE INSECT CONTROL CAN BE REALIZED AT 125 DEGREES FOR ONE WEEK FOR TURNINGS IN THE KILN.

TED IS AVAILABLE TO ANSWER QUESTIONS AT, trudie@rudieswoodwork.com HIS ARTICLE CAN BE FOUND AT, www.chesapeakewoodturners.com and www.rudieswoodwork.com/kiln.htm

LOU IS AVAILABLE TO ANSWER QUESTIONS AT, lou@lourudinski.com

RESOURCES:

MOISTURE METERS VARY IN PRICE STARTING AROUND \$20 AND GO UP FROM THERE. I PICKED ONE UP ON EBAY FOR \$22



[PSI Moisture Meter](http://www.pennstateind.com/store/MMETER.html)

<http://www.pennstateind.com/store/MMETER.html>



[Wagner Digital Pinless Moisture Meter MMC 205](http://www.woodcraft.com/product.aspx?ProductID=143611&FamilyID=4308)

<http://www.woodcraft.com/product.aspx?ProductID=143611&FamilyID=4308>



[Sonin 50211 Rapitest Pinless Analog Moisture Meter](http://www.amazon.com/Sonin-50211-Rapitest-Concrete-Moisture/dp/B0000224DA)

<http://www.amazon.com/Sonin-50211-Rapitest-Concrete-Moisture/dp/B0000224DA>



[Anchorseal Green Wood Sealer](http://www.woodcraft.com/product.aspx?ProductID=148773&FamilyID=20588)

<http://www.woodcraft.com/product.aspx?ProductID=148773&FamilyID=20588>