



10793 State Route 37 W
 Sunbury, OH 43074
 www.bry-air.com

Toll-Free: (877) 427-9247
 Phone: (740) 965-2974
 Fax: (740) 965-5470

Technical Resource Center

Typical Application Standards			
Application	Typical Conditions		Notes
	Temp °F	Humidity	
Aerosols	80	2 gr/lb dry air	Use hood over Freon charging nozzle and purge hood with very dry air
Brewing and Distilling			
Hops Storage	35	60% rh	To reduce mold growth on walls
Fermentation Rms		45% rh	
Filter Rooms		45% rh	
Grain Storage	60	40% rh	To reduce mold growth on walls
Baking			
Sugar Storage	80	35% rh	Dry Air to minimize defrost requirement
Icing and Glazing	80	35% rh	
Cookie Drying	65	20% rh	
Filled Cookie Setting	20-30		
Potato Chips	75-80	20% rh	
Candy			
Caramel Cooling	60	40% rh	Care should be exercised in the systems design to insure against recirculating air-borne sugar dust in the system
Bar Cooling	0	40%-50% rh	
Chocolate	90	13% rh	
Hard Candy Making	75	35% rh	
Hard Candy Packing	75	35% rh	
Sugar Storage	80	35% rh	
Concentrates			
Molasses Grinding		Less than 25% rh	Do not recirculate – Pre-cool and dry to 20-25 gr/lb
Honey Grinding		Less than 25% rh	
Instant Coffee Packing	80	20% rh	
Citrus Crystal Packing	80	15% rh	
Ferrous Cupola Dry Blast		40 gr/lb dry air	
Crystal Growing		Varies	Dependent on particular salt
Crystal Cutting		Varies	Dependent on particular salt
Coils-Electronic		Lowest possible 1-3 gr/lb dry air	Prevent moisture absorption by insulation
Coils - TV and X-Ray	72	15% rh	
Transformer Manufacturing and Rebuilding	80	5% rh	
Elec. Appliances	72	15%	In blankets and pads with Nylon sheathing or insulation, moisture causes shorting and change in electrical characteristics and moisture absorbed in sealed sheath heating elements can cause failure and even explosion
Lightning Arrestor (Assembly)	60	20% rh	



10793 State Route 37 W
 Sunbury, OH 43074
 www.bry-air.com

Toll-Free: (877) 427-9247
 Phone: (740) 965-2974
 Fax: (740) 965-5470

Technical Resource Center

Typical Application Standards				
Application	Typical Conditions		Notes	
	Temp °F	Humidity		
Switch Gear Assembly	68	20-24% rh		
Lamination	80	20% rh max	Paper, cloth or wood, glass fibers, etc. bonded with plastic, shellac, varnish or glue. Store material at 20%rh to insure good bond. Store finished goods at less than 80° F at 20% rh to prevent adhesion.	
Chinchilla Raising	32-35	18-25% rh	High humidity is a health hazard. Low temperature and humidity provide denser and better pelts.	
Matches	70	40% rh	For drying	
Paper Coating	80	20% rh	For paper storage prior to coating with wax, plastic, adhesive, etc. To insure bond (See lamination) (Limit paper to 4% moisture)	
Paint Spraying and Lacquering	80	50% rh or less	Control spray booth or cabinet to prevent blushing caused by moisture condensing on evaporative cooled surface (evaporation of paint or lacquer solvent) Do not recirculate.	
Paper & Fiber Molding	80	20% rh	Finished good storage to prevent sticky condition and loss of shape	
Printing & Binding	90	30% rh	Paper storage to prevent excessive moisture content (4-6% maximum) and resultant high static electric charge. Changes in moisture content between impressions causes poor register.	
Pharmaceuticals				
Ampoule Mfg.	80	30% rh	Hygroscopic Product	
Penicillin Packaging	80	5-15% rh		
Capsule Storage	75	35-40% rh	Gelatin softens and distorts at higher temperature and humidity	
Colloids	70	35% rh	Similar to hard candy	
Cough Syrups	80	40% rh		
Cough Drops	70	30% rh		
Effervescent	90	15% rh		
Extracts -			Powders or tablets	
Glandular	70-80	5-10% rh		
Liver	70-80	5-10% rh		
Tablet Coating	80	5-30% rh		
Tablet Compressing	70-80	10-30% rh		
Powder Storage	70-80	15-30% rh		
Powder Mfg	70-80	15-30% rh		
Powder Milling	80	35% rh		
Plastics, Nylon, etc.	80	3-15% rh		For drying and storage prior to molding
Plastics, Manufacturing Area for Thermo Setting and Moulding Compounds	80	25-30% rh		
TV-Radio Broadcasting	70	20% rh	Tape head life extension	



10793 State Route 37 W
 Sunbury, OH 43074
 www.bry-air.com

Toll-Free: (877) 427-9247
 Phone: (740) 965-2974
 Fax: (740) 965-5470

Technical Resource Center

Typical Application Standards			
Application	Typical Conditions		Notes
	Temp °F	Humidity	
Plastics, Laminated Built-up areas	70	20% rh	High efficiency filters required to eliminate dust and fumes
Parchment storage	70	35% rh	
Plywood	90	15-25% rh	Cold pressing
Rubber Products			
Dipped Goods	75-90	25-30% rh	Dew point of air must be below evaporation temperature of solvent
Cementing	80	25-30% rh	
Tire Cord	125	7% rh	For storage to prevent moisture absorption & resulting loss in adhesion with rubber
Glass Laminating	68-70	15-20% rh	To insure good long life bond
Explosives			
Gun Powder, Solid Fuels	35-75	10-50% rh	Range is great dependent on material, but storage is critical - e.g. - solid fuel power is calculated with consideration of time stored at given condition
Freezer Tunnel Vestibules	75	10-20% rh	Introduce air as curtain in front of tunnel opening
Pipe Galleries	40-80	40-50% rh	Maintain space dew point below piped fluid temperature to eliminate condensation. Maintain temperature to eliminate corrosion.
Telephone & Electrical Cable Wrapping	80	5 - 20% rh	Extra high voltage cable wrapping has no lower limit on moisture. Upper limit is about 5% rh.
Seed Drying & Storage	35-80	10-25% rh	Low temperature drying and low rh storage preserves germination potential
Food Drying Bins	95-105	2 gr/lb dry air	Spices - condiments
Transformer (Electric)	90	10-25% rh	
Transistors	72-75	25-40% rh	
Tubes - Radio			
TV - Lighting	90	15-25% rh	Drying inside coating - There is no minimum moisture level - The dryer the air - the better
Missiles	35 80	35% rh 25% rh	Purging and cooling Assembly
Fertilizer Storage	AMB	40-50 rh	Deliver air, 1-1/2 air changes/hour at 25% rh when corrected to ambient dry bulb.

The above applications represent a very small percentage of the needs and uses for dry air; the conditions cited are typical of past uses. Specific needs change, as do technology and manufacturing processes.

Your Bry-Air representative can determine appropriate values for a particular application.