

TABLE 2. DESIRABLE TEMPERATURES AND HUMIDITIES FOR INDUSTRIAL PROCESSING (Continued)

INDUSTRY	PROCESS	TEMPERATURE DEGREES FAHRENHEIT	RELATIVE HUMIDITY PER CENT
FUR.....	Drying of furs.....	110	
	Storage of furs.....	28 to 40	25 to 40
HOSPITAL.....	Operating Room.....	75 to 80	50 to 70
INCUBATORS.....	Chicken.....	99 to 102	55 to 75
	Human baby ^a		
	Room.....	75 to 88	59 to 65
	Incubator.....	76 to 100	59 to 65
LABORATORY.....	General analytical and physical.....	60 to 70	60 to 70
	Storage of materials.....	60 to 70	35 to 50
LEATHER.....	Drying of hides.....	90	
LIBRARY.....	Bookstorage (see discussion in this chapter)	65 to 70	38 to 50
LINOLEUM.....	Printing.....	80	40
LUMBER.....	Drying.....	180	30
MATCH.....	Manufacturing.....	72 to 74	50
	Storage of matches.....	60	
MUNITIONS.....	Fuse loading.....	70	55
PAINT.....	Drying of lacquers.....	60 to 80	25 to 50
	Drying of oil paints.....	60 to 90	25 to 50
	Brush and spray painting.....	60 to 80	25 to 50
PAPER.....	Binding, cutting, drying, folding, gluing.....	60 to 80	25 to 50
	Storage of paper.....	60 to 80	35 to 45
PHOTOGRAPHIC.....	Development of film.....	70 to 75	60
	Drying.....	75 to 80	50
	Printing.....	70	70
	Cutting.....	72	65
PRINTING.....	Binding.....	70	45
	Folding.....	77	65
	Press room (general).....	75	60 to 78
	Press room (lithographic).....	60 to 75	20 to 60
	Storage of rollers.....	60 to 80	35 to 45
RUBBER.....	Manufacturing.....	90	
	Dipping of surgical rubber articles.....	75 to 80	25 to 30
	Standard laboratory tests.....	80 to 84	42 to 48
SOAP.....	Drying.....	110	70
TEXTILE.....	Cotton— carding.....	75 to 80	50
	combing.....	75 to 80	60 to 65
	roving.....	75 to 80	50 to 60
	spinning.....	60 to 80	60 to 70
	weaving.....	68 to 75	70 to 80

^aApplication of Air Conditioning to Premature Nurseries in Hospitals, by C. P. Yaglou, Philip Drinker, and K. D. Blackfan (A.S.H.V.E. TRANSACTIONS, Vol. 36, 1930).

TABLE 2. DESIRABLE TEMPERATURES AND HUMIDITIES FOR INDUSTRIAL PROCESSING (Continued)

INDUSTRY	PROCESS	TEMPERATURE DEGREES FAHRENHEIT	RELATIVE HUMIDITY PER CENT
TEXTILE.....	Rayon— spinning.....	70	85
	twisting.....	70	65
	Silk— dressing.....	75 to 80	60 to 65
	spinning.....	75 to 80	65 to 70
	throwing.....	75 to 80	65 to 70
	weaving.....	75 to 80	60 to 70
	Wool— carding.....	75 to 80	65 to 70
	spinning.....	75 to 80	55 to 60
	weaving.....	75 to 80	50 to 55
TOBACCO.....	Cigar and cigarette making.....	70 to 75	55 to 65
	Softening.....	90	85
	Stemming or stripping.....	75 to 85	70

paper is independent of the relative humidity of the surrounding air. Low alkaline concentration spray water may be used in an air washer to neutralize the acid condition. Such an air washer must be especially constructed to resist corrosion.

BANANA RIPENING

Ripe bananas are very perishable and for this reason men who deal in them must depend mainly upon control of the ripening speed as a means of regulating their daily supply of the fruit. Knowledge and experience are required in regulating the ripening treatment and to control the ripening speed. An accurate appraisal must be based upon a careful examination of the fruit when received to determine its condition, and periodically, thereafter, to determine the rate of ripening.

Fast ripening may be accomplished in from three to four days after the green fruit is placed in a ripening room by adjusting the temperatures of the room until the pulp temperature reaches about 70 F. In warming up cool fruit, quick heating is recommended, and it is good practice to use sufficient heat to raise the average fruit temperature at the rate of 2 to 3 deg per hour. After the first 24 hours, the room should be held at 68 F until the fruit is colored and then reduced to 66 F and held at this temperature. A high relative humidity of from 90 to 95 per cent should be maintained until the bananas show color when it may be reduced to about 80 per cent. High humidity is important during the warming period. No ventilation should be used until the fruit has colored, after which, ventilation at a rate not to exceed four changes per hour may be used to assist in reducing the humidity and to freshen the air in the room. If the fruit shows slow or uneven ripening characteristics, one or two applications of ethylene gas of approximately 1 cu ft per 1000 cu ft of room space may be used.

Medium speed ripening of bananas in from five to seven days may be accomplished by holding the fruit at 64 F. The humidity and ventilation control should be the same as for fast ripening. A treatment with ethylene gas will seldom be necessary. For slow ripening in from nine to ten