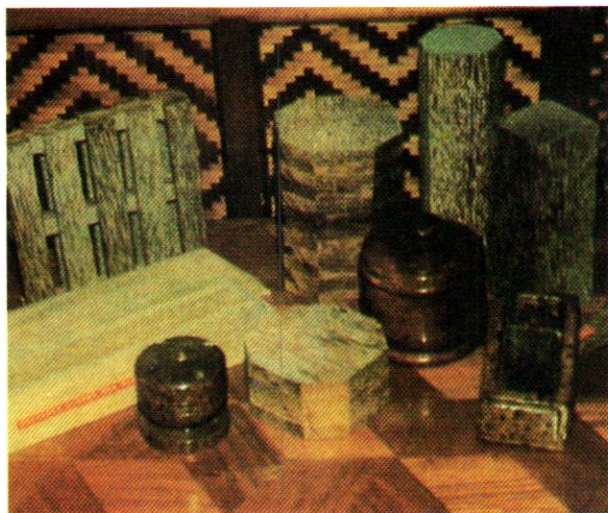


Cocowood-based Wares and Cocowood Craft

The Products

Jewelry boxes, flower vases, pen holders are just some of the few high-value added products that can be processed from coconut wood.



The Market

Cocowood wares are known not only in the Philippines but also abroad. Although these products can compete in both local and foreign markets, most manufacturers target the latter.

The Technology

The cocowood wares and cocowoodcraft technology was developed because of the increasing cost and diminishing supply of traditional wood species. Studies at the Philippines Forest Products Research and Development Institute have proven that cocowood:

- * is 50-75 percent cheaper than the traditional wood;
- * has very good to excellent matching properties;
- * can be processed using simple machines with special blades (i.e. carbide tipped saws)
- * can make finished products that display a unique appearance

Resource Requirements

A. Materials

1. Round cocowood (8 meters from the stump).
2. Moisture content (MC) of the cocowood:
 - * 12-14 percent MC for the local market
 - * 8-10 percent MC for export
3. A furnace-type dryer will be used for drying and/or seasoning.

The Estimate Volume of Cocowood Needed to Produce a Specified Product:

Product	Average Monthly Production	Estimated Bd. ft./mo.
Ash Tray	150	120
Cigar Box	75	90
Flower Vase	100	120
Jewelry Box	75	90
Name Plate	150	120
Pen Holder	150	50
Paper Weight	150	25

To produce the above products, the estimated total volume needed per month is about 615 bd. ft. or 10-15 coconut trees with an average diameter of 15 in.

B. Equipment

Particulars		Estimated Cost (P)
1	1 unit furnace-type lumber dryer 1,000 bd. ft. capacity	150,000.00
2	1 unit radial arm saw 3 hp., 220v w/carbide-tipped 10 blade diameter	85,000.00
3	1 unit table saw (fabricated) 2 hp., 220v w/carbide-tipped 12" blade diameter	20,000.00
4	1 unit mini-jointer ¾ hp., 220v, 1 ph.	12,000.00
5	2 units lathe machine (fabricated) 1 - ½ hp., complete w/ tools	60,000.00
6	1 unit bandsaw w/ 14" diameter flywheel 1.5 hp., 220v, 1 ph.	70,000.00
7	1 set compressor, spray gun, air pressure regulator	19,500.00
8	2 units orbital sander 92 x184 mm. 180 watts, 20,000 rpm. W/ dust collector	7,500.00
9	1 unit chainsaw	30,000.00
10	1 unit portable router	13,500.00
11	1 set hand tools, gadgets, jigs, working tables, clamps, etc.	20,000.00
Total		487,500.00
<i>*Based on Jan. 1996 prices</i>		

C. Manpower

The factory will require about 12 personnel for administrative activities and manufacturing the products mentioned earlier.

D. Project Site and Factory Building

Lot Size

- * 1,000 sq. m., to accommodate the machines, equipment, offices and the kiln dryer and provide

space for air drying of lumber prior to kiln drying.

Factory Building

- * 10 m x 20 m (W x L)
Semi-concrete, U-Shape type of plant layout
- * Extended roofing to provide a shed for lumber dryer and storage area for the kiln dried lumber materials



Manufacturing Process

The "Series Production Flow Scheme" will be followed. The materials will undergo a series of distinct machine operations in sequential order. Each machine will be manned by designated operators. Sufficient materials will be made ready for a scheduled product to be processed in a particular day. These schemes assure the production of highly competitive products. □

