

STRAND ART PRODUCTS

Elizabeth M.A. Grasby revised this case (originally Niagara Art Products written by Christopher Bridgnell under the supervision of John F. Graham) solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.

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Peter Brady, owner of Strand Art Products (Strand), was reviewing a discussion he had just completed with the buyer of a large Canadian retail chain store. The buyer had indicated to Brady that if Strand was able to quote a price of \$37.49 per carton of 18 utility mirrors, the company would receive an initial order of 2,000 cartons (36,000 mirrors). Brady was anxious to accept the order, but he was unsure whether he could drop the price to \$37.49. In addition, he was concerned about the delivery requirements and the effect the order was going to have on overall cash flow.

STRAND ART PRODUCTS

Strand Art Products was a small, owner-managed business located in a medium-sized Ontario city, manufacturing decorative wall plaques, picture frames, mirrors and other related products. The majority of items manufactured were of medium-low quality and low price. Major customers included department chain stores, hardware and lighting stores, and breweries. Brady had owned Strand for several years, and during this time, he had earned a modest living. Cash flow was becoming a greater concern for the company because customers were habitually taking longer to pay and suppliers were demanding increasingly shorter credit terms.

THE ORDER

Brady had been negotiating the order with the retail chain store for over a month. His travelling costs to date totalled \$350. The product was a 9" × 12" utility mirror with a plastic frame that stretched around the edges of the glass and over the back and included a cut-out for hanging purposes. The buyer had hoped to launch the product in a back-to-school advertising flyer for use in students' lockers.

The previous week, Brady had quoted the buyer the following terms:

- \$41.99 per carton, 5%/15, n/60
- 18 mirrors per carton
- FOB supplier (shipping point)
- 10-week delivery (from date of order)

The cartons were to be labelled with the chain store's logo, and they were to have a tear-away flap for display purposes.

During these latest discussions with the buyer, Brady had learned that a price of \$37.49 per carton with a six- to eight-week delivery period (from date of order) would be required to secure the order. It was expected that an order of this size would take a maximum of three days to ship. Future orders would be based on the success of this promotional campaign.

PRODUCTION PROCESS

The production process required purchasing three major raw materials (plastic frames, mirror and cartons; see Exhibit 1), cutting the mirror into 9" × 12" pieces, installing the frames and packaging the finished product.

Strand employed a full-time glass/mirror cutter who spent about 75 per cent of his time cutting and doing related maintenance work on his equipment. The mirror he worked on was purchased from a local glass supplier in 48" × 96" sheets, called "lites." Mirror was made by painting silver on one side of the glass to create the reflective qualities. Brady estimated that this craftsman could cut 6,000 9" × 12" pieces per day and still have time to continue with the general duties he performed within the plant. Because all his other work was slightly ahead of schedule or could be rescheduled, the mirror-cutter would not have to work overtime to fill the new orders. His salary, as a member of a craft union, was \$27.75 per hour for a 40-hour week.

In addition to the mirror cutter, Strand employed non-unionized and low-skilled workers who also worked eight hours per day, five days per week and who were fully utilized at this time. In order to produce the utility mirrors, Brady would have to hire temporary employees at \$11 per hour to file the edges, heat and stretch the frames over the mirror, clean the glass, pack the finished product in the cartons and seal and stack the cartons. An engineering student had recently determined that the output varied directly with the number of workers, as follows:

Number of Workers on Team¹	Number of Cartons per Day
3	100
4	175
5	200
6	210

The utility mirror was one of many products Strand had produced at one time or another, but not with any major continuity. Strand did not have any inventories of mirror or plastic frames that could be used on this order. The cartons would have to be purchased specifically for this customer due to the required design features of the department store. The die cost (see Exhibit 1) was a one-time charge by the carton supplier for the tooling required to make the carton. Brady thought this charge should be depreciated over a five-year period.

¹ Excludes cutter.

The plastic frames were produced from an injection moulding manufacturer located in Eastern Ontario. The tooling required to produce the frames resided with the supplier but belonged to Strand. Six years ago, Strand had paid \$40,000 for the tooling, which was depreciated on a units-of-output basis using a one million-unit life.

Other miscellaneous raw material costs for glue, tape, etc. were estimated at \$0.08 per carton. Strand's factory overhead costs, which were not expected to change as a result of this order, were allocated to individual products at 200 per cent of direct labour.

DECISION

The price cut to \$37.49 was very severe, and Brady was quite concerned about the order's profitability. He also knew from experience that if delivery was late, not only would payment be delayed, but future orders would be in jeopardy.

EXHIBIT 1: RAW MATERIALS

Plastic Frames

- Made from polypropylene
- \$0.60/frame
- Two-week delivery
- Minimum order 5,000 frames
- Credit terms: 45 days

Mirror

- 48" × 96" of ¼" thick mirror
- \$1.25 per square foot
- Two-week delivery
- Credit terms: 45 days

Cartons

- One carton per 18 mirrors with chain store logo and tear-away flap for display purposes
- Price based on quantity

501–1,500 cartons	\$1.10/carton
1,501–2,999 cartons	\$1.00/carton
3,000+	\$0.90/carton
- \$2,000 die cost with first order only
- \$250 set-up costs with each order
- Five-week delivery
- Credit terms: C.O.D.