

# MEMORANDUM

**To:** Dr. Matt Ford  
**From:** Sean Ryan and Jeff Henry  
**Date:** April 10, 2006  
**Subject:** Emmons Business Interiors Order

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## Introduction

As requested, determining the plan of the upcoming six hundred unit order for Emmons Business Interiors (EBI) has been researched. The Investigation focused on the materials used and the lead time necessary to successfully deliver the order.

## Findings

**Results.** Using the Material Requirements Planning (MRP), we found that Emmons Business Interiors' order will be completed on time.

## Discussion

**Method.** The materials required, lead times, and quantities on hand were derived from The Operations Management Eighth Edition textbook. MRP tables and product trees were used to help illustrate the necessary lead times and the hierarchy of parts.

Table one is a summary of when each material should be released to the next level in the hierarchy.

**Table 1** Scissor Requirement Summary Schedule

Summary Table	1	2	3	4	5	6
Scissors					600	
Screw				600		
Top Assembly				540		
Bottom Assembly				600		
Bent Blade			250			
Bent Plastic Grip		600				
Straight Blade			400			
Straight Plastic Grip		600				

The design of the scissors for Emmons Business Interiors can be seen in the product tree. We show the product's structure and the quantity needed to assemble one pair of scissors (See Figure 1).

**Figure 1**

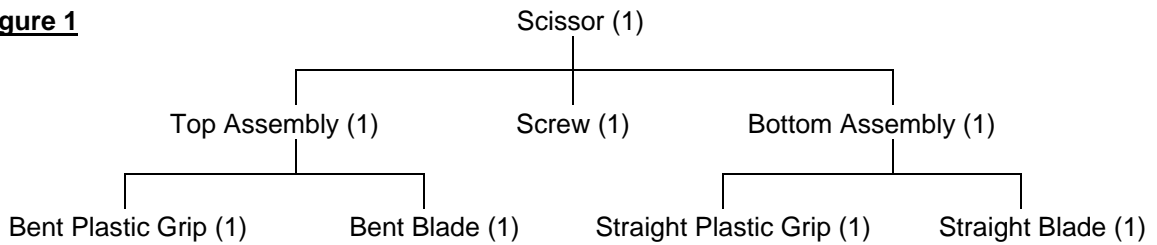


Table 2 shows the detailed MRP diagrams for each individual material needed to assemble one final product.

**Table 2** Material Requirement Schedule

<b>Scissors</b>	1	2	3	4	5	6
Gross Requirement						600
On Hand						0
Net Requirement						600
Planned Order Receipt						600
Planned Order Release					600	

<b>Screw</b>	1	2	3	4	5	6
Gross Requirement					600	
On Hand					0	
Net Requirement					600	
Planned Order Receipt					600	
Planned Order Release				600		

<b>Top Assembly</b>	1	2	3	4	5	6
Gross Requirement					600	
On Hand	40	40	40	40	40	
Net Requirement					560	
Planned Order Receipt					560	
Planned Order Release				560		

<b>Bottom Assembly</b>	1	2	3	4	5	6
Gross Requirement					600	
On Hand					0	
Net Requirement					600	
Planned Order Receipt					600	
Planned Order Release				600		

**Table 2 (cont.)**

<b>Bent Blade</b>	1	2	3	4	5	6
Gross Requirement				600		
On Hand	350	350	350	350		
Net Requirement				250		
Planned Order Receipt				250		
Planned Order Release			250			

<b>Bent Plastic Grip</b>	1	2	3	4	5	6
Gross Requirement				600		
On Hand				0		
Net Requirement				600		
Planned Order Receipt				600		
Planned Order Release		600				

<b>Straight Blade</b>	1	2	3	4	5	6
Gross Requirement				600		
On Hand				200		
Net Requirement				400		
Planned Order Receipt				400		
Planned Order Release			400			

<b>Straight Plastic Grip</b>	1	2	3	4	5	6
Gross Req.				600		
On Hand				0		
Net Requirement				600		
Planned Order Receipt				600		
Planned Order Release		600				

**Analysis.** Fiskars Brand, Inc. will complete the six hundred-unit order of scissors for Emmons Business Interiors. EBI should consider this company to purchase their supplies from. Fiskars Brand, Inc. has enough lead time and inventory to successfully complete the order on time. They also have extra time in case a delay in the production process occurs.

**Limitations.** Possible limitations that could produce problems for EBI are lead time sensitivity and changing the quantity they order from Fiskars Brand, Inc. Lead times may vary based on when Fiskars receives the supplies necessary for shipment to EBI. EBI may also have specialty orders that need to be filled quickly; that could throw off timing of other orders.