

SOLUTION 3.2

Limiting factor: 200,000 kg of direct materials.

Materials needed to manufacture the company's demand:

$$(10,000 \times 10) + (12,000 \times 8) + (3,000 \times 15) = 241,000 \text{ kg} > 200,000$$

Products must be ranked according to their contribution per kg of direct materials:

	PRODUCT A	PRODUCT B	PRODUCT C
Demand	10,000 units	12,000 units	3,000 units
Selling price per unit	€140	€125	€150
Variable cost per unit	€80	€64	€120
Contribution	€60 per unit	€61 per unit	€30 per unit
Direct materials per unit	10 kg per unit	8 kg per unit	15 kg per unit
Contribution per kg	€6 per kg	€7.63 per kg	€2 per kg
Ranking	2nd	1st	3rd
Units to manufacture	10,000	12,000	266

12,000 units of product B (96,000 kg of direct materials) and **10,000 units of product A** (100,000 kg of direct materials) should be manufactured. With the remaining 4,000 kg of materials, **266 units of product C** should be manufactured.

