Answer on Question #67532 - Economics - Accounting

Margetis Inc. carries an average inventory of $750,000. Its annual sales are $10 million, its cost of goods sold is 75% of annual sales, and its average collection period is twice as long as its inventory conversion period. The firm buys on terms of net 30 days, and it pays on time. Its new CFO wants to decrease the cash conversion cycle by 10 days, based on a 365-day year. He believes he can reduce the average inventory to $647,260 with no effect on sales. By how much must the firm also reduce its accounts receivable to meet its goal in the reduction of the cash conversion cycle?

Answer:

Summarize raw data in the table:

Indexes	Original	New
Inventory	$750,000	$647,260
Annual sales	$10,000,000	$10,000,000
Days/year	365	365
COGS/sales	75%	75%
Payables deferral period (PDP)	30 days	30 days
Rec collection period (DSO) =	2 ICP	
Cost of gooods sold	$7,500,000	$7,500,000
Inv Conv Period (ICP)	36.5 days	31.5 days
DSO (calculated)	73 days (36.5*2)	68 days (69.5+30-31.5)
Receivables (A/R)	$2,000,000 (73 * (10,000,000 / 365)	$1,863,014 (68 * (10,000,000 / 365)
CCC = DSO + ICP – PDP =	79.5 days (73 + 36.5 – 30)	69.5 days CHECK on CCC
Decrease in CCC	10 days	
New CCC		69.5 days (79.5 – 10)

Reduction in A/R = Orig. A/R − New A/R = $2,000,000 - $1,863,014 = $136,986