Pricing #1

Ethan T. Schmidt

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## What are the benefits fo the new pile pads?

The new pads are more durable, meaning that they need to be replaced less frequently, and are more efficient, meaning that they dissapate heat more effectively and cause the pile to crack less. Additionally, the manufacturing process allows for any diameter pad to be made form the same strip of metal.

## EVC of a new pile pad

#Total time saved IAW Kendrick test  
  
df <- data.frame("name" = c("Conv", "CMI"), "feet\_driven" = c(150, 200), "piles\_per\_set" = c(15, 300), "pads\_per\_set"= c(24, 6), "sets\_required" = c(20, 1), "set\_changes" = c(20, 1), "time\_per\_change"= c(20, 4), "cost\_per\_set" = c(150, 0))  
  
df["total\_change\_time"] <- df$set\_changes \* df$time\_per\_change  
total\_time\_saved <- df$total\_change\_time[1] - df$total\_change\_time[2]  
  
adj\_time\_saved <- (df$total\_change\_time[1] - df$total\_change\_time[2]) / (df$feet\_driven[1] / df$feet\_driven[2])  
  
cat("Total time saved: ", total\_time\_saved, "min")

## Total time saved: 396 min

cat("Adjusted time saved: ", adj\_time\_saved, "min")

## Adjusted time saved: 528 min

#Time savings in dollars  
df["total\_pads\_needed"] <- df$sets\_required \* df$pads\_per\_set  
cost\_per\_hour <- sum(102, 156, 24, 63, 30, 39) #excluding overhead  
  
EVC <- ((adj\_time\_saved/60) \* cost\_per\_hour) / df$total\_pads\_needed[2]  
cat("$",EVC)

## $ 607.2

## Price set for smallest pads

If the total cost of a new pad is $207.54 and the EVC of the new pad to the consumer is $607.2, CMI should charge at least $600 per single pad, with price braks for larger quantities; this saves all the comsumers at least some money, while justifying the overhead allocation costs to re-tooling the new pads.

# Additional Capacity  
mkt\_feet\_year <- mean(290000000, 390000000)  
feet\_per\_set <- 10000  
sets\_needed <- mkt\_feet\_year/feet\_per\_set  
pads\_per\_set <- 6  
pads\_needed <- sets\_needed/pads\_per\_set  
cat("Total Market Size in Pads:",pads\_needed)

## Total Market Size in Pads: 4833.333

capacity\_needed\_month <- pads\_needed/12  
cat("Total Capacity per Month:",capacity\_needed\_month)

## Total Capacity per Month: 402.7778

Although the market might need new pads, CMI will have a hard time convincing them; hwever, if they do, CMI will be able to command a very large market share. I recommend that CMI not purchase any additional capacity until they eceed a 50% market share and are continueing to grow.

Key influencers to target would be the *Construction Engineers* and the *Independent contractors* becasue botht hese groups ae knowledgeable enough about the industry to recognize the importance of the new pads and neither have a conflicting interest in keeping construction times higher or more piles used.