

Re: two factories, different profile, how to compare?

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- *From:* "John Kane" <jrkrideau@xxxxxxxxxx>
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peter.anderson.1969@xxxxxxxxxx wrote:

fellow experts,

lets say I have 2 factories. One in China, the other in Taiwan. Both are identical, containing the same machines, same brand, manufacture the same item. All factors are same except their age are different. This is because the factory in china started operation in 2005 while that in Taiwan started way in 1995.

As you know machines do breakdown, lets assume that there are 10 machines in each factories.

China – 10 machines, all are 1 years old
Taiwan – 10 machines, all are 10 years old

So now I want to compare the 2006 performance of both factories in terms of their breakdown trends. plotting their cumulative failure function, i found out that the curve belonging to Taiwan is much steeper than China. Meaning the rate of failure is much higher in Taiwan.

My engineers in Taiwan protest saying that the machines in taiwan are much older, therefore my way of comparing is not fair.

What in you opinion should I compare, such that everyone is satisfied that it is a fair comparison?

Many thanks!

Regards,
Peter

Well, it seems to me that the Taiwan engineers may have a point. I would expect a 10 year old car to be more likely to break down than a new one.

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Do you have any historical data on Taiwan? Breakdown rates at years 1 & 2 in Taiwan might be instructive.

I would also look for other variables other than just machines. Other considerations: Do you have equivalently trained operators and maintenance staff, what are the maintenance budgets, are the maintenance schedules comparable, and so on ?

John Kane, Kingston ON Canada