

Process Capability Example

A chemical manufacturer produces a lubricant formulation for a customer according to a viscosity specification of between 100 and 150 mN s m^{-2} . The latest series of production batches have been shown to have a mean viscosity of 140 mN s m^{-2} with a standard deviation of 5.0 mN s m^{-2} .

- (a) Calculate the ***process capability index*** and the ***process performance index*** for the lubricant production process.

- (b) State what the consequences of these values would be for the manufacturer. Suggest ways of managing the situation.