

## CHAPTER 20: Statistical Methods for Quality Control

### Learning Objectives

After reading this chapter and doing the exercises, you should be able to:

1. Learn about the importance of quality control and how statistical methods can assist in the quality control process.
2. Learn about acceptance sampling procedures.
3. Know the difference between consumer's risk and producer's risk.
4. Be able to use the binomial probability distribution to develop acceptance sampling plans.
5. Know what is meant by multiple sampling plans.
6. Be able to construct quality control charts and understand how they are used for statistical process control.
7. Know the definitions of the following terms:

producer's risk	assignable causes
consumer's risk	common causes
acceptance sampling	control charts
acceptable criterion	upper control limit
operating characteristic curve	lower control limit