Contents

1 qAnalyst

qAnalyst performs control charts for variables and attributes according to Douglas C. Montgomery *Introduction to Statistical Quality Control book*, Capability analysis for normal and non - normal distributions and Distributions Identification

1.1 Brake Capability Dataset

```
data(brakeCap)
#x-bar control chart
hadnessSPCxb=spc(x=brakeCap$hardness,
                            sg=brakeCap$subgroup,
                            type="xbar", name="hardness")
plot(hadnessSPCxb)
summary(hadnessSPCxb)

#r control chart
hadnessSPCr=spc(x=brakeCap$hardness,
                sg=brakeCap$subgroup, type="r", name="hardness")
plot(hadnessSPCr)
summary(hadnessSPCr)
#process in control
#ok for
#capability analysis
hadnessCap=capabilityNormal(x=brakeCap$hardness,
              sg=brakeCap$subgroup, lsl=39, usl=41,
              target=40.5, name="hardness")
summary(hadnessCap)
plot(hadnessCap)
```

```
data(brakeCap)
x=brakeCap$hardness
sg=brakeCap$subgroup
```

```
capObj=capabilityNormal(x=x, sg=sg, lsl=39,
     usl=41, target=40, name="example data")
summary.capability(capObj)
```