function [W,G,Jth\_T2,Jth\_SPE]=ICA\_nomal(X,Y)

% clc

% data=xlsread('nomal\_data.xlsx');

% Y=data(17,:);

% X=data(1:50,:);

%求均值

Y\_mean=mean(Y,2);

X\_mean=mean(X,2);

%求标准差

Y\_std = std(Y,0,2);

X\_std = std(X,0,2);

%数据标准化

[mY,nY]=size(Y);

[mX,nX]=size(X);

Y=(Y - repmat(Y\_mean,1,nY))./repmat(Y\_std,1,nY);

X=(X - repmat(X\_mean,1,nX))./repmat(X\_std,1,nX);

X = transpose(X);

%标准模型

[W,B,z,Q,x\_mean,x\_var] = fastica(X,mX,16,1000,'newton',1-(1E-9));

y=X\*W';

%求控制线

G=inv(Q)\*(W'\*(inv(Q)))'\*W;

e=y-y\*G';

for i=1:nX

I2(i)=y(i,:)\*y(i,:)';%故障诊断I2贡献值

SPE\_1(i)=e(i,:)\*e(i,:)';

end;

alpha=0.95;

[f1,x1,u1]=ksdensity(I2);%I2单变量核密度估计

ConInt1=ComCon(f1,x1,alpha);

Jth\_T2=ConInt1(2);

Jth\_SPE=ksdensity(SPE\_1,alpha,'function','icdf');

end