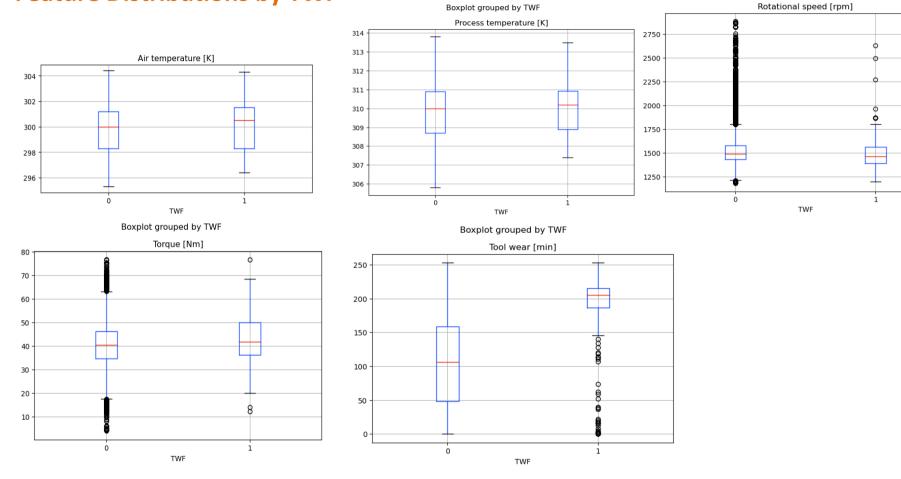


- rotational speed: highest scattering of values (0) between 1250 and > 2750 rpm
- tool wear: widest range of values, between 55 and 175 min



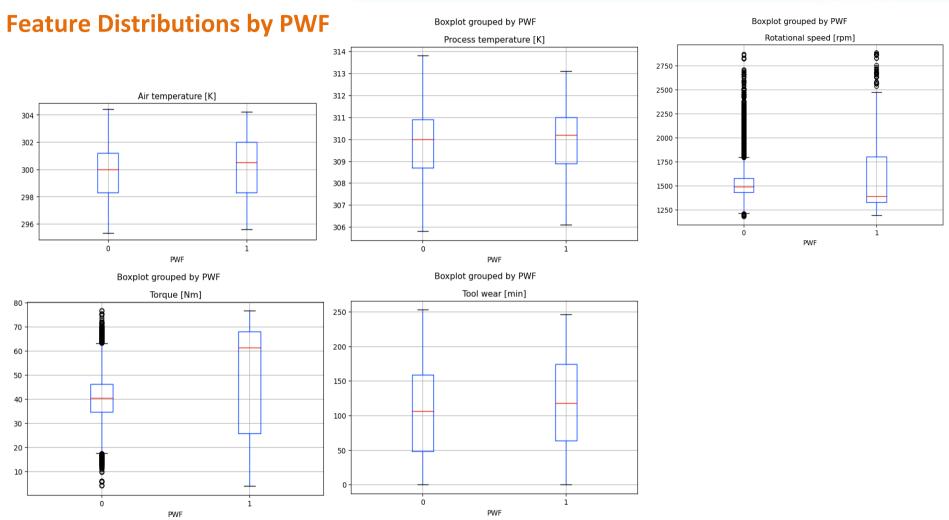
Boxplot grouped by TWF

## **Feature Distributions by TWF**



- torque: highest scattering of values (0) between 5 and < 80Nm
- tool wear: widest range of values (0), between 55 and 160 min

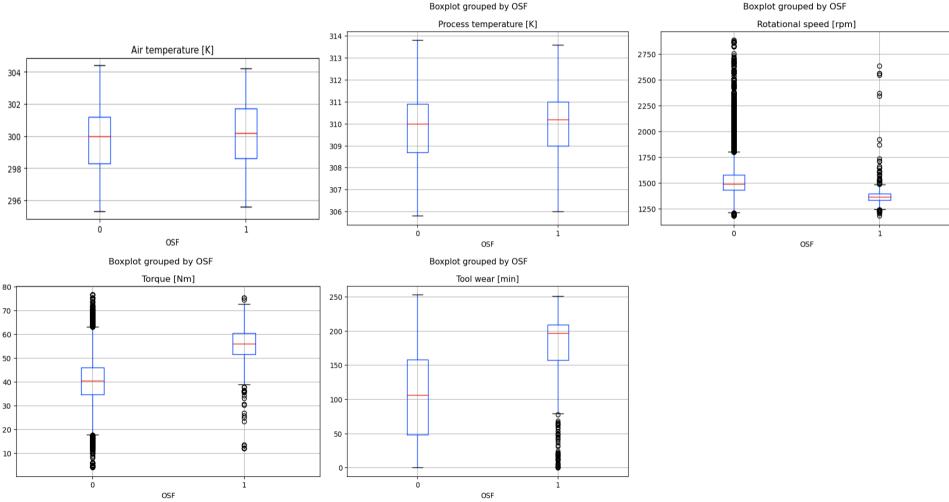




- rotational speed: highest scattering of values (0) between <1250 rpm and >2750rpm
- torque: widest range of values (1), between 26 and 68 Nm



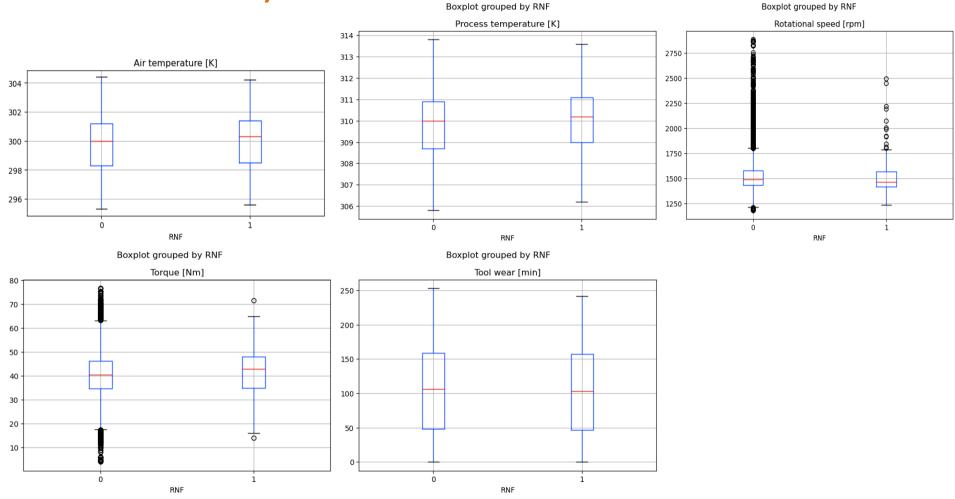
## **Feature Distributions by OSF**



- rotational speed: highest scattering of values (0) between <1250 rpm and >2750rpm
- tool wear: widest range of values (0), between 50 and 160 min

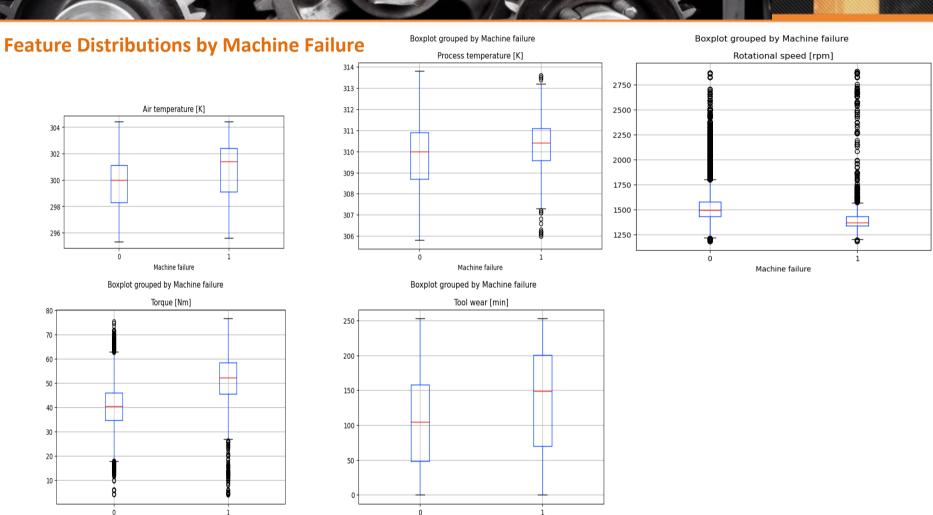


## **Feature Distributions by RNF**



- torque: highest scattering of values (0) between <5 and < 80Nm
- tool wear: widest range of values (1), between 49 and 155 min





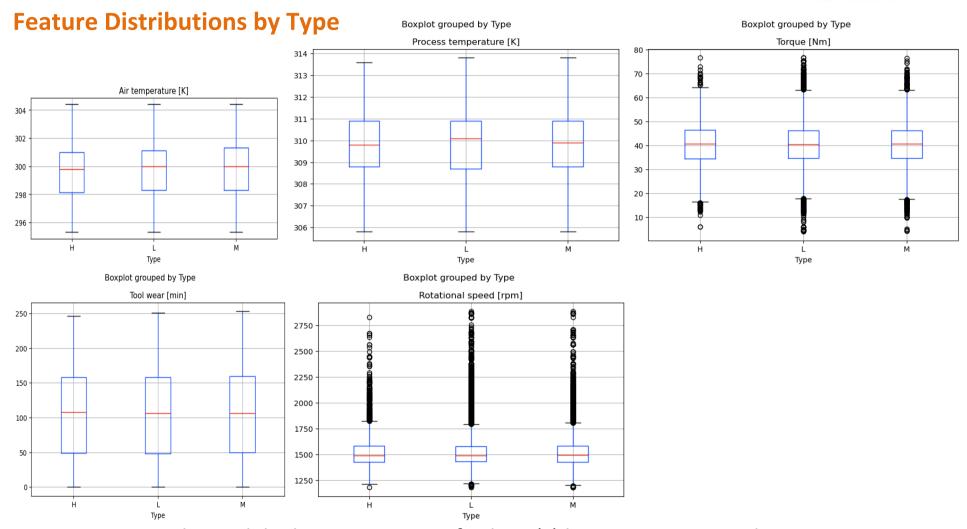
rotational speed: highest scattering of values (1) between <1250 and >2750 rpm

Machine failure

tool wear: widest range of values (1), between 60 and 200 min

Machine failure





- rotational speed: highest scattering of values (L) between <1250 and >2750 rpm
- tool wear: widest range of values (M), between 50 and 165 min