

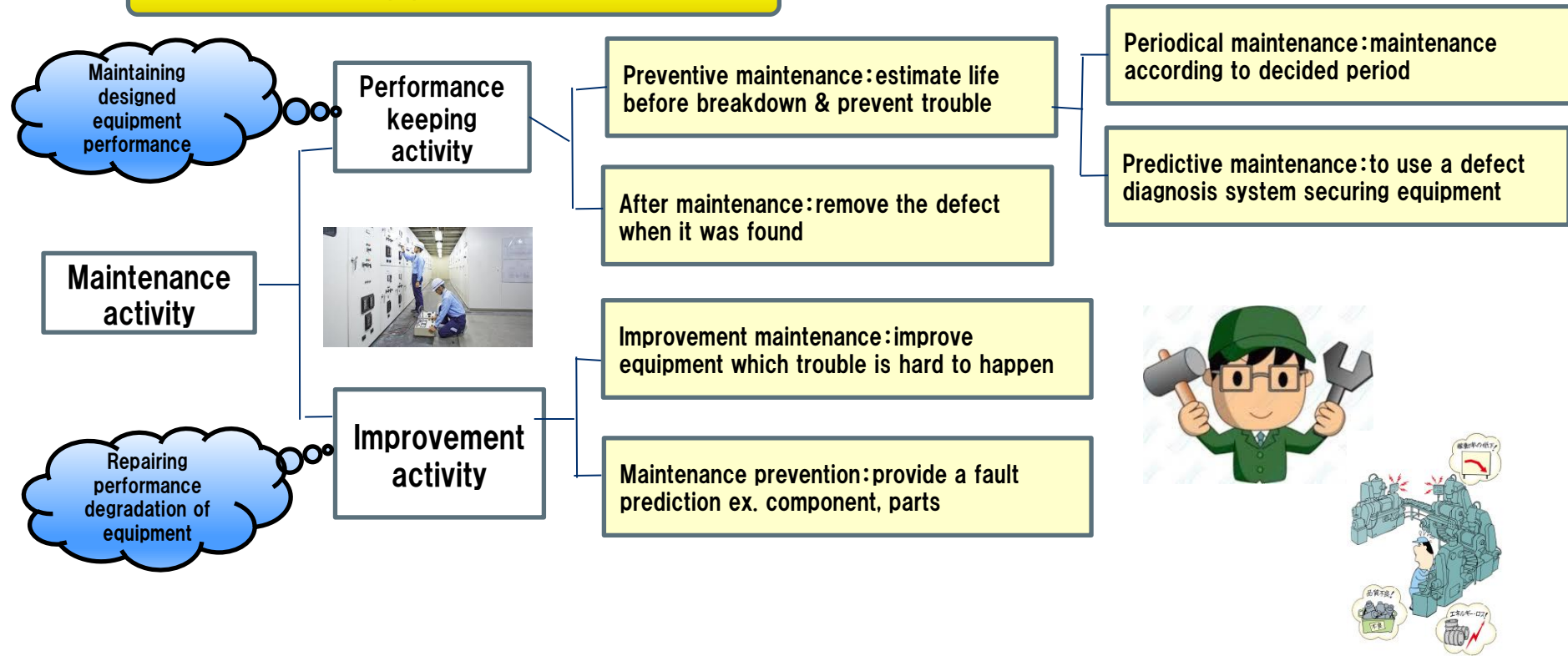
**Equipment
Management**

1) :Equipment maintenance: to take advantage of equipment capacity

What is Equipment maintenance?

The day-to-day regular activity of degradation prevention, measurement, recovery of equipment for the purpose of keeping the performance of equipment.
That consists of check, inspection, maintenance, repair, replacement.

Classification of Equipment maintenance activities



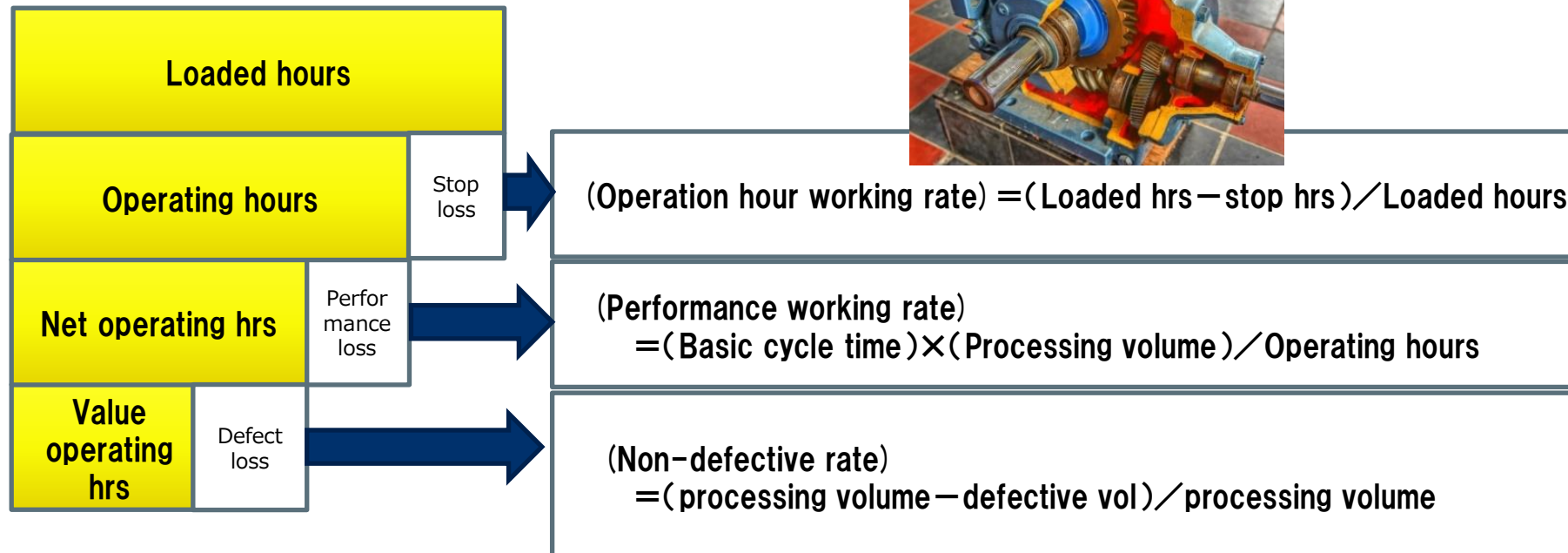
2) OEE Overall Equipment Efficiency : index for understanding the degree of efficient use of equipment

$$\text{OEE} = (\text{Operation hour working rate}) \times (\text{Performance working rate}) \times (\text{Non-defective rate})$$

Stop loss

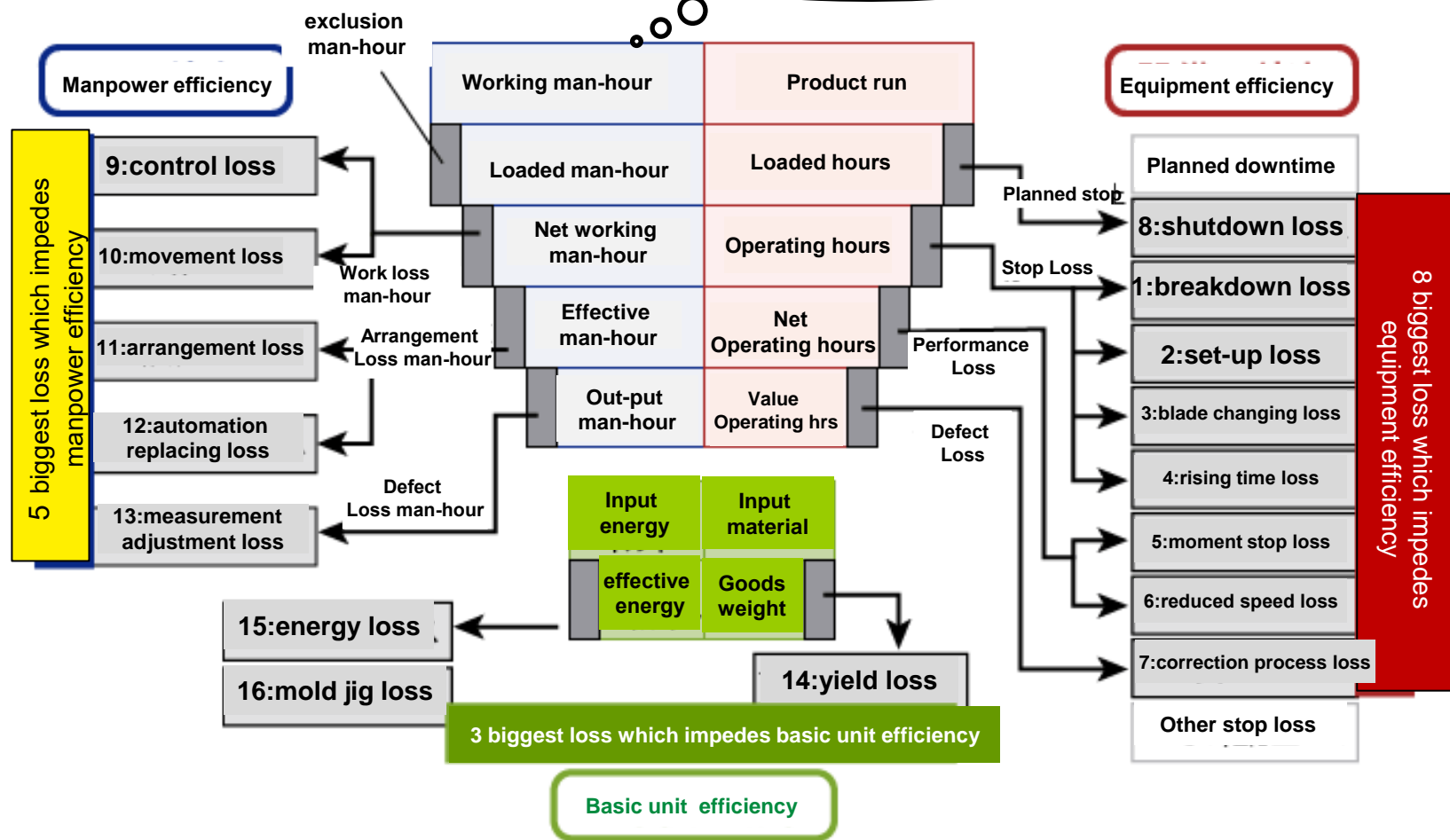
Performance loss

Defect loss



4) 16 biggest loss in Equipment

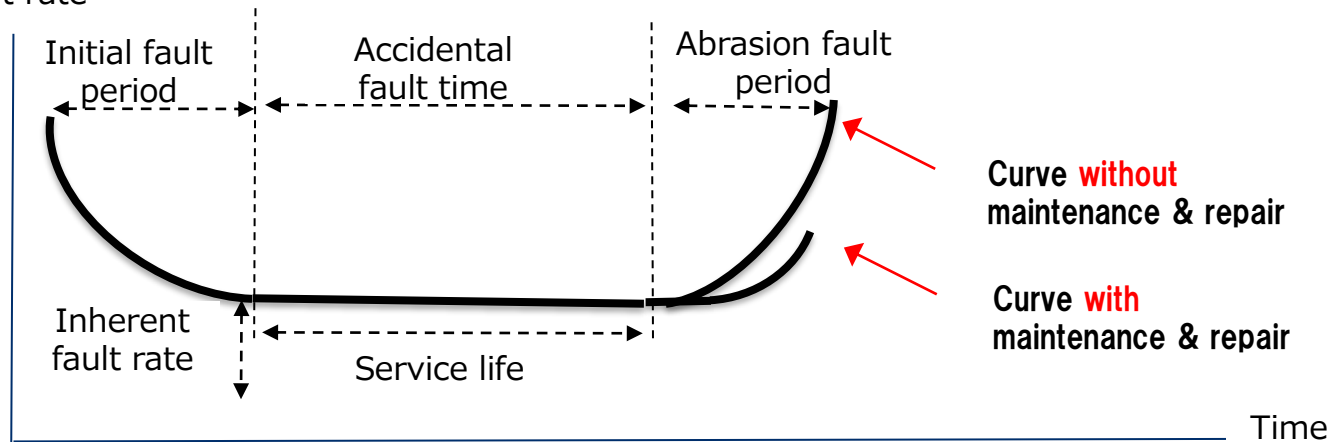
To pursue the production efficiency impeding factors, it is effective to challenge to reduce 16 biggest loss thoroughly. Thereby we can reduce costs and improve business result.



6) Bathtub curve (Equipment longevity curve) :this curve is a graph showing 'time' in a vertical direction, and 'fault rate' in a lateral direction, which resembles bathtub shape.

Schematic view of Bathtub curve

Fault rate



Performance degradation causes

Obsolescence:Relative falling in value of technological level or economic value due to technological progress

Deterioration:The change that strength or the performance of equipment falls to by driving and use

