

# GOHDA SYSTEM

*sustainable wastewater technology  
from Japan*

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By MNK Corporation

# What is **GOHDA** System?

## Management Technology of Activated Sludge

- ① **Examination**··Analysis of current status
- ② **Diagnosis**·····Determination of cause(s)
- ③ **Treatment**····Measures and solutions
- ④ **Training for proper maintenance**

**The GOHDA system creates an  
environment favourable for activated  
sludge**

# **ADVANTAGES of GOHDA SYSTEM**

- \* Stable processing**
- \* Improvement in processing capacity**
- \* Building operators' confidence**

## **REDUCTIONS IN:**

- ① pH balancing chemical cost in pretreatment
- ② coagulant cost in the pretreatment stage
- ③ energy consumption by aeration equipment
- ④ coagulant cost via reduction of surplus sludge
- ⑤ disposal costs of industrial waste



# **Making A Favourable Environment for Activated Sludge**

**with NO use of :**

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- \* micro-organisms**
- \* chemicals**
- \* enzymes**

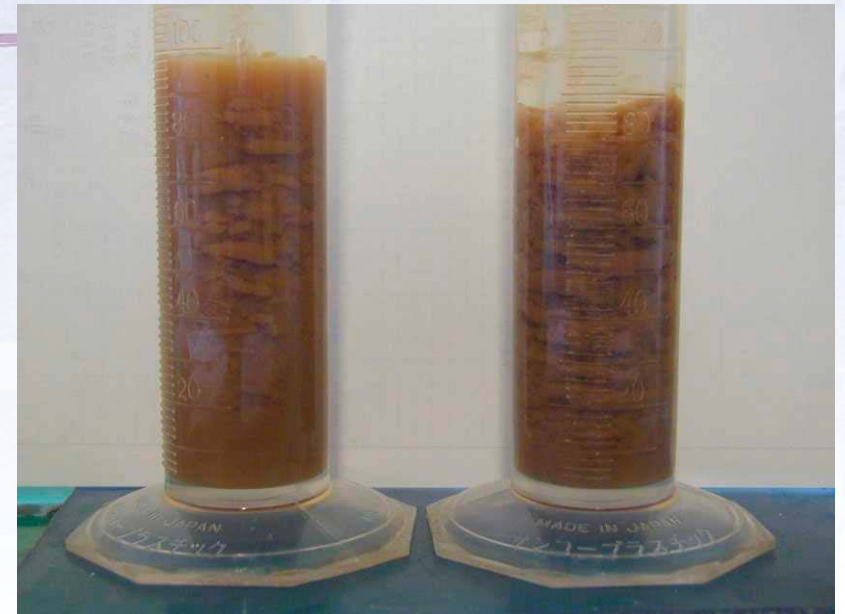
# ***EXAMINATION***

**Example 1. Observation of foam  $\Rightarrow$  BOD, SS**



**Example 2.**

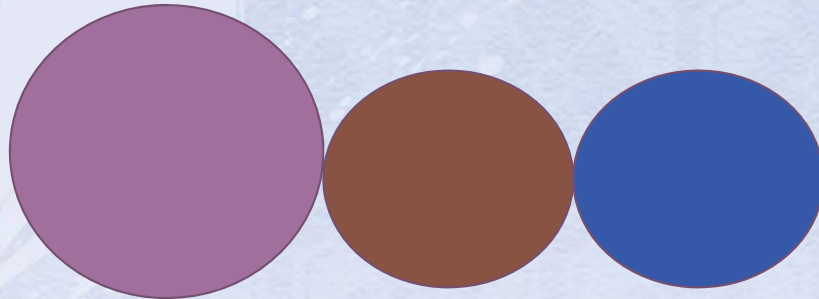
- Compare SV
- Measure DO
- Identify filamentous bacteria



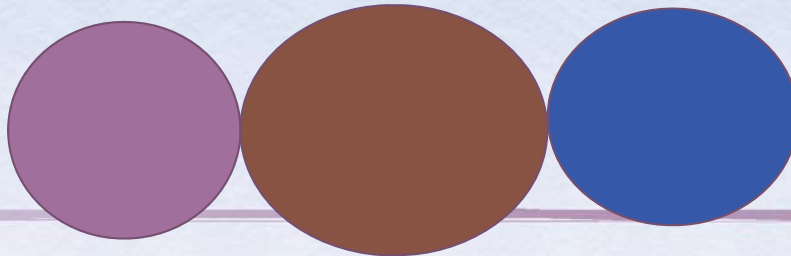


# ***DIAGNOSIS***

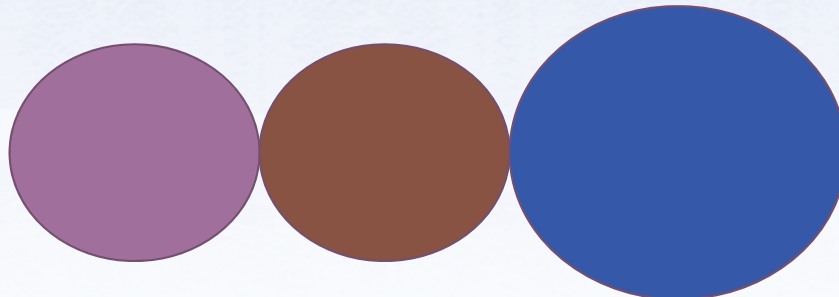
## **Ideal Environment**



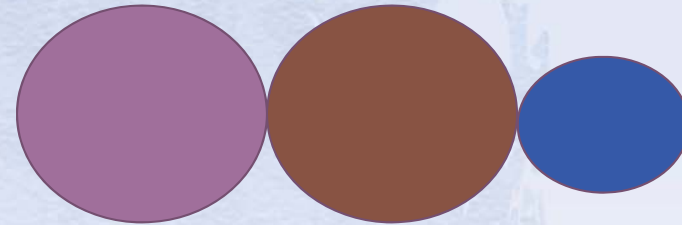
## **Overload**



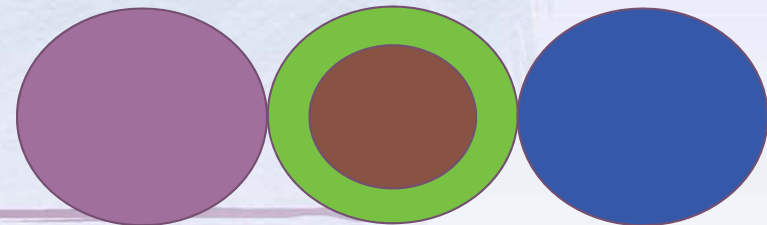
## **Excessive A.S.**



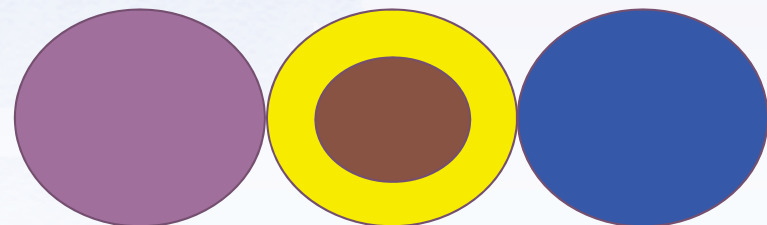
## **Excessive Oxygen**



## **Lack of oxygen**



## **Dominant filamentous bacteria & insufficient A.S.**



## **Excessive SS & insufficient A.S.**

# ***Treatment Solutions***

## **Example 1**

**Adjust the amount of oxygen**

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## **Example 2**

**Adjust the amount of  
activated sludge**

# **Most Favourable Working Environment for Activated Sludge**



***With the introduction of GOHDA:***

- **Low oxygen demand: DO 0.2~0.8mg/l**
- **Low surplus sludge: 30~70% down**
- **High treatment capacity: 15~30% up**



# **Thank you for your attention**

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