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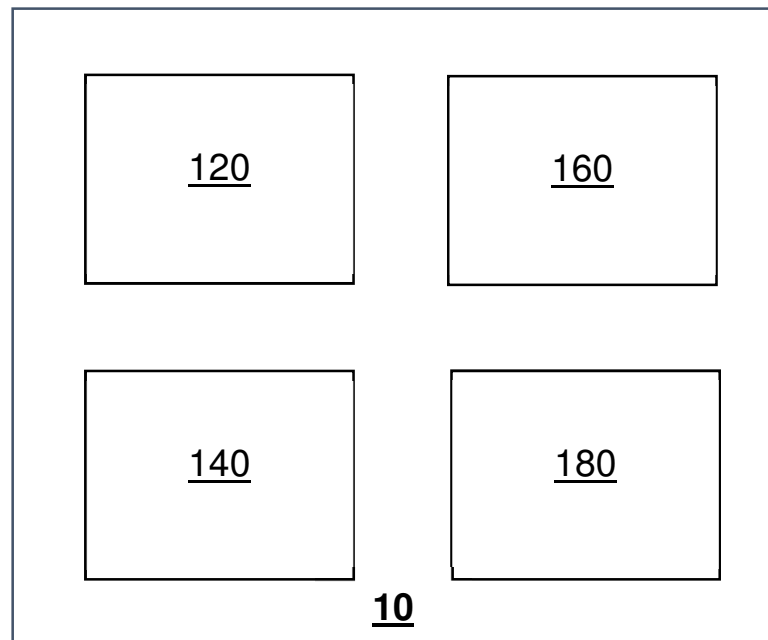


Fig. 1a

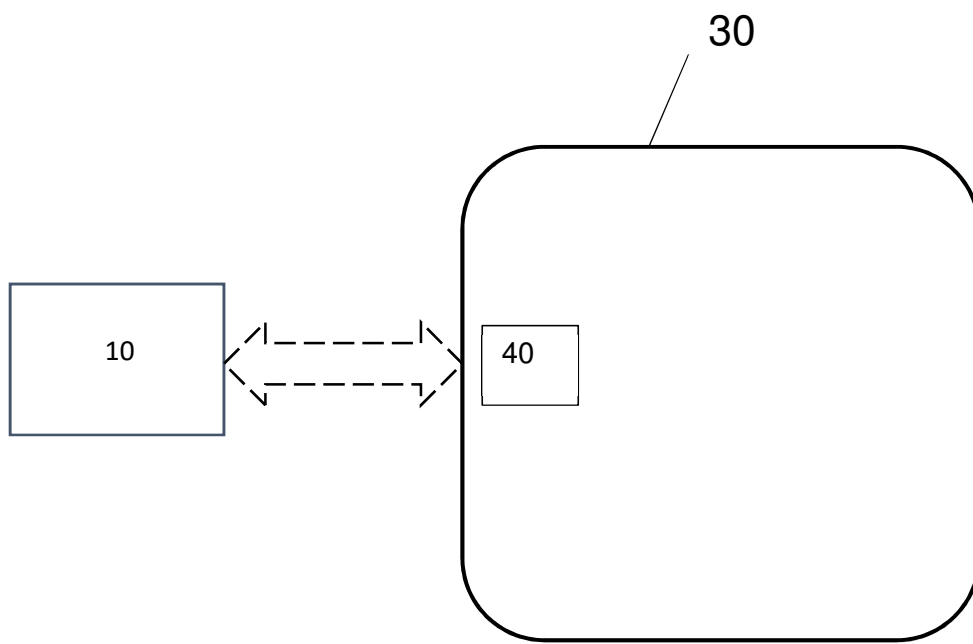


Fig. 1b

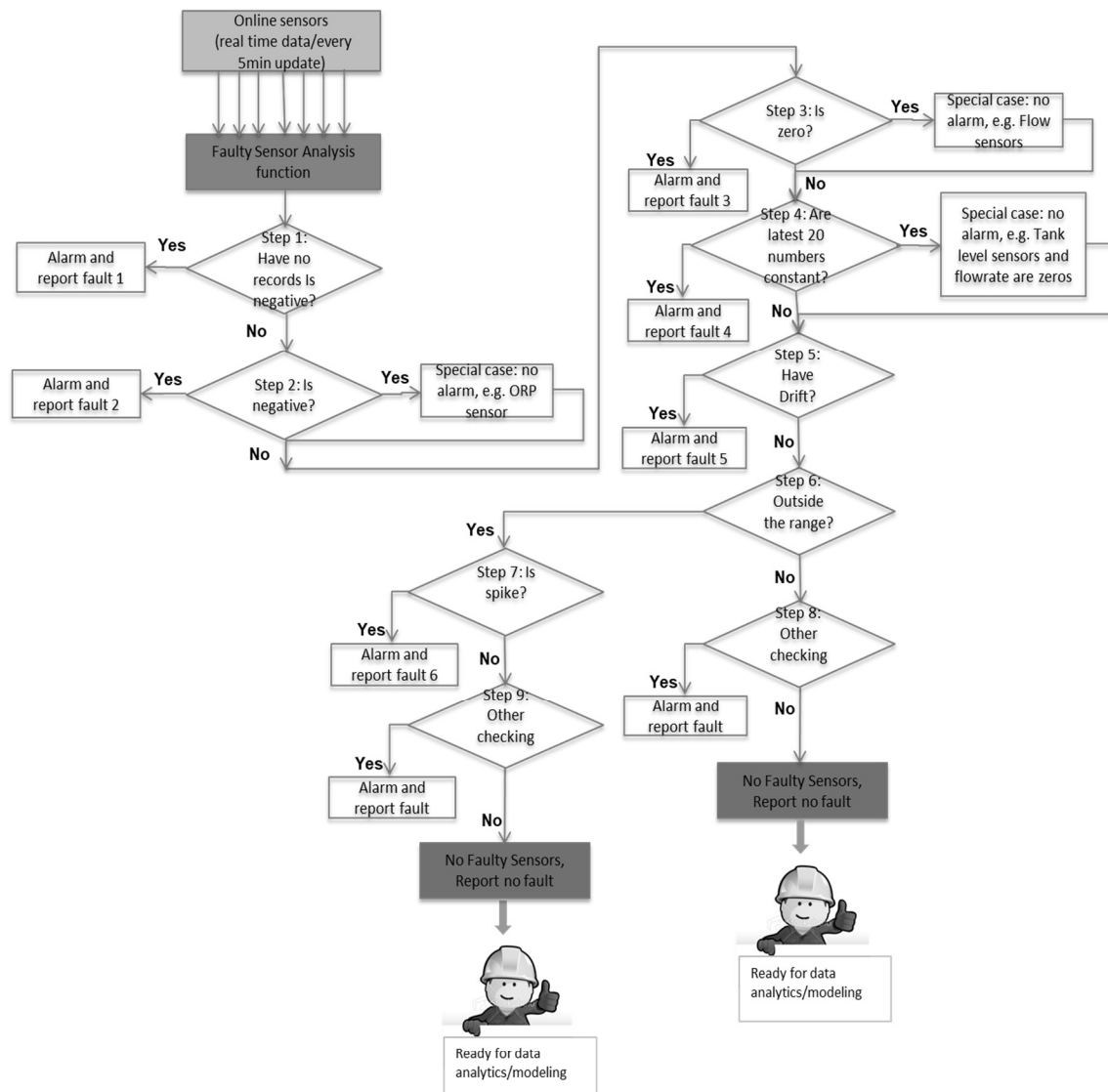


Fig. 2

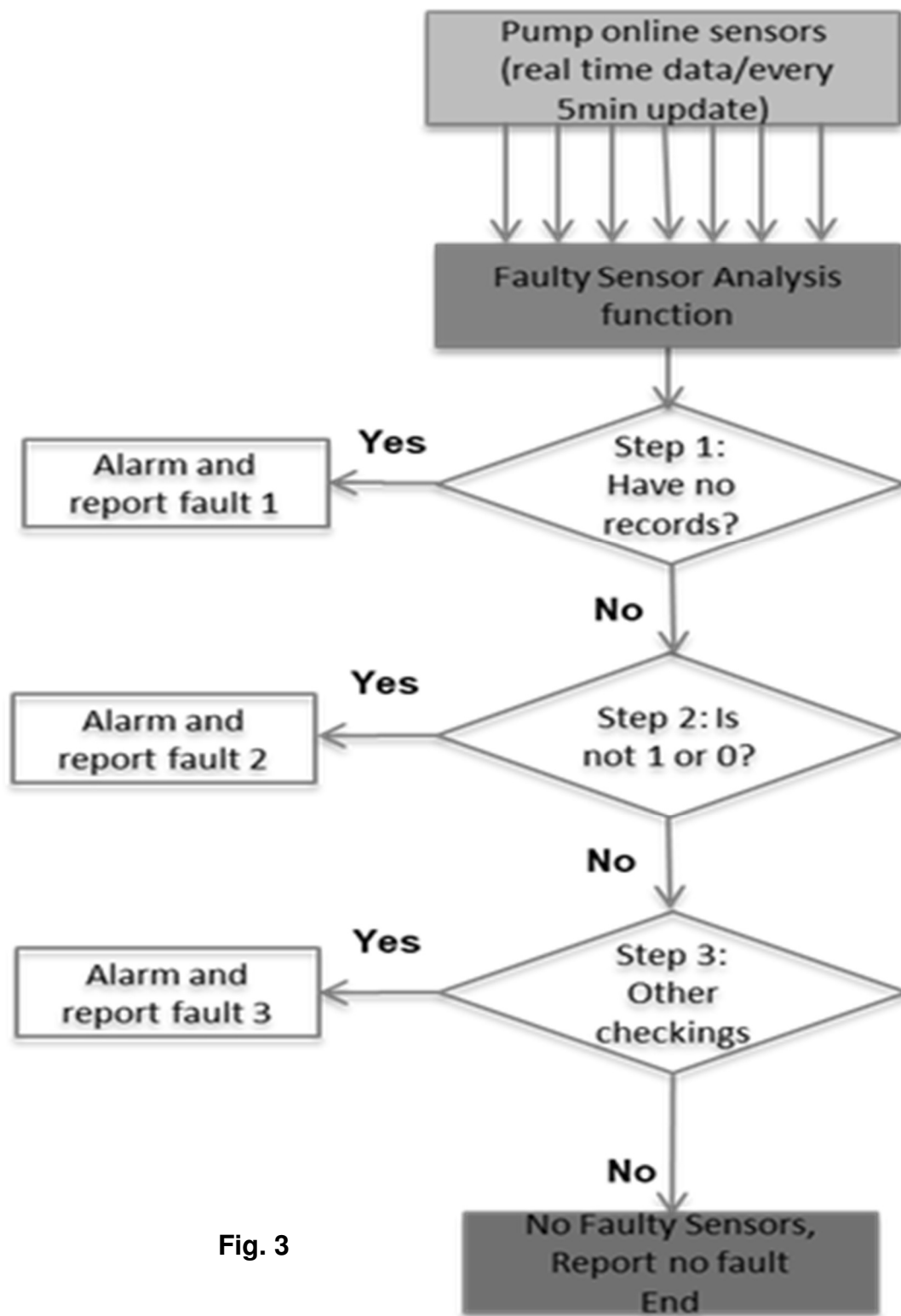


Fig. 3

Effluent COD	
Parameters checked	
Statistical relationship between effluent COD vs Influent + system COD	Change in COD/TOC ratio, <i>Differences</i> in COD quantity
	<i>Difference</i> in COD quantity, COD removal efficiency, Lab vs analyzer.
	<i>Differences</i> in COD, Lab vs analyzer, <i>Difference</i> in conductivity
	<i>Difference</i> in COD quantity, COD removal efficiency, Lab vs analyzer, <i>Differences</i> in conductivity.

Effluent TP	
Parameters checked	
Statistical relationship between effluent TP vs Influent + system TP	Quantity of TP removed/Quantity PFC
	<i>Differences</i> in conductivity
	<i>Differences in TP removal efficiency</i>
	Lab vs analyzer data
	<i>Difference</i> in COD quantity, COD removal efficiency, Lab vs analyzer, <i>Differences</i> in conductivity.

Step	If	Reason
1.	C3 > 20%	The test date COD/TOC is lower than the averaged past 30 days average TOC/COD ratio by 20%.
2.	C8 > 20%	The COD quantity from plant A is 20% higher than the COD quantity in the plant A effluent
	F2 = 1	
	Else, F2 = 0	

Fig. 4



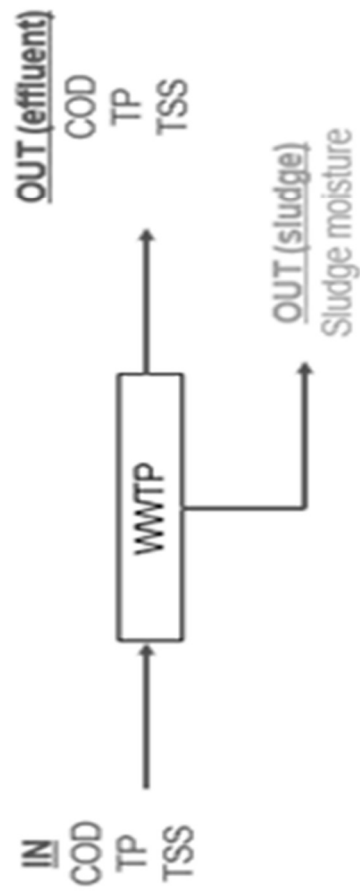
$$\sum \text{IN}_{\text{DAILY}} = \sum \text{OUT}_{\text{DAILY}} + \Delta \text{Accumulation}$$

$$\sum \text{IN}_{\text{DAILY}} \geq 1.05 \times (\sum \text{OUT}_{\text{DAILY}} + \Delta \text{Accumulation})$$

OR

$$\sum \text{IN}_{\text{DAILY}} \leq 0.95 \times (\sum \text{OUT}_{\text{DAILY}} + \Delta \text{Accumulation})$$

Fig. 5



$$\sum \{ \text{Sludge Disposed} \times (1 - \text{sludge moisture}) \}_{\text{daily}} = \sum (\text{Generation from COD, TP, TSS removal})_{\text{daily}}$$

$$\sum \{ \text{Sludge Disposed} \times (1 - \text{sludge moisture}) \}_{\text{daily}} \geq 1.2 \left(\sum (\text{Generation from COD, TP, TSS removal})_{\text{daily}} \right)$$

OR

$$\sum \{ \text{Sludge Disposed} \times (1 - \text{sludge moisture}) \}_{\text{daily}} \leq 0.8 \left(\sum (\text{Generation from COD, TP, TSS removal})_{\text{daily}} \right)$$

Fig. 6