

SPECIFICATION SHEET



Automatic Online Analyzer for Total Nickel

HMA-TNI

HMA-TNI is an on-line colorimetric analyzer for total nickel in industrial wastewater.

Features

Low waste solution

The amount of waste solution is only 1.1L/month. (at 4H measurement interval)

Low reagent consumption

No need for reagent change for 1 month.

Auto range with automatic dilution

HMA-TNI has two measurement ranges (0.1 - 3, 0.4 - 10mg/L) which can be switched automatically depends on the concentration of total nickel.

Automatic backwashing sample filter

Automatic cleaning with each cycle

Automatic calibration

5.7 inch color LCD touch panel

Specification

Product name	: Automatic Online Analyzer for Total Nickel
Model	: HMA-TNI
Measurement method	: Dimethylglyoxime absorptiometry
Measurement Range	: 0.1 - 10mg/L
Repeatability	: Within $\pm 5\%$
Display	: 5.7 inch LCD display
Transmission out put	: 4 - 20mADC (Load resistance less than 600 Ω) 2 channels CH1; Measured Data CH2; Temperature of reactor or inside temperature of the panel (selectable)
Contact out put	: Transfer contact 2 points (220VAC 3A, 24VDC 3A) (1) Equipment Failure (2) Select one from followings (a) In measurement operation (b) Out of upper limit (c) Out of lower limit
Sample water conditions	: Consumption ; 1 - 3L/min Pressure ; 20 - 50kPa Temperature ; 0 - 50°C SS and colored components must be removed
Power requirements	: 220VAC ($\pm 10\%$), 50/60Hz



Power consumption	: 350VA(max.), 130W(Average)
Installation	: Ambient temperature ; 10 - 40°C Ambient humidity ; Less than 85%RH Indoor installation
Dimensions	: 600(W)x255(D)x900(H)mm
Weight	: Approx.50kg

Measuring Method

The Dimethylglyoxime absorptiometry method is adopted. The sample is pumped into the high temperature digestion unit and added the digestion reagent. Then total nickel is digested into dissolved Ni²⁺ ion. And oxidizing reagent and alkaline

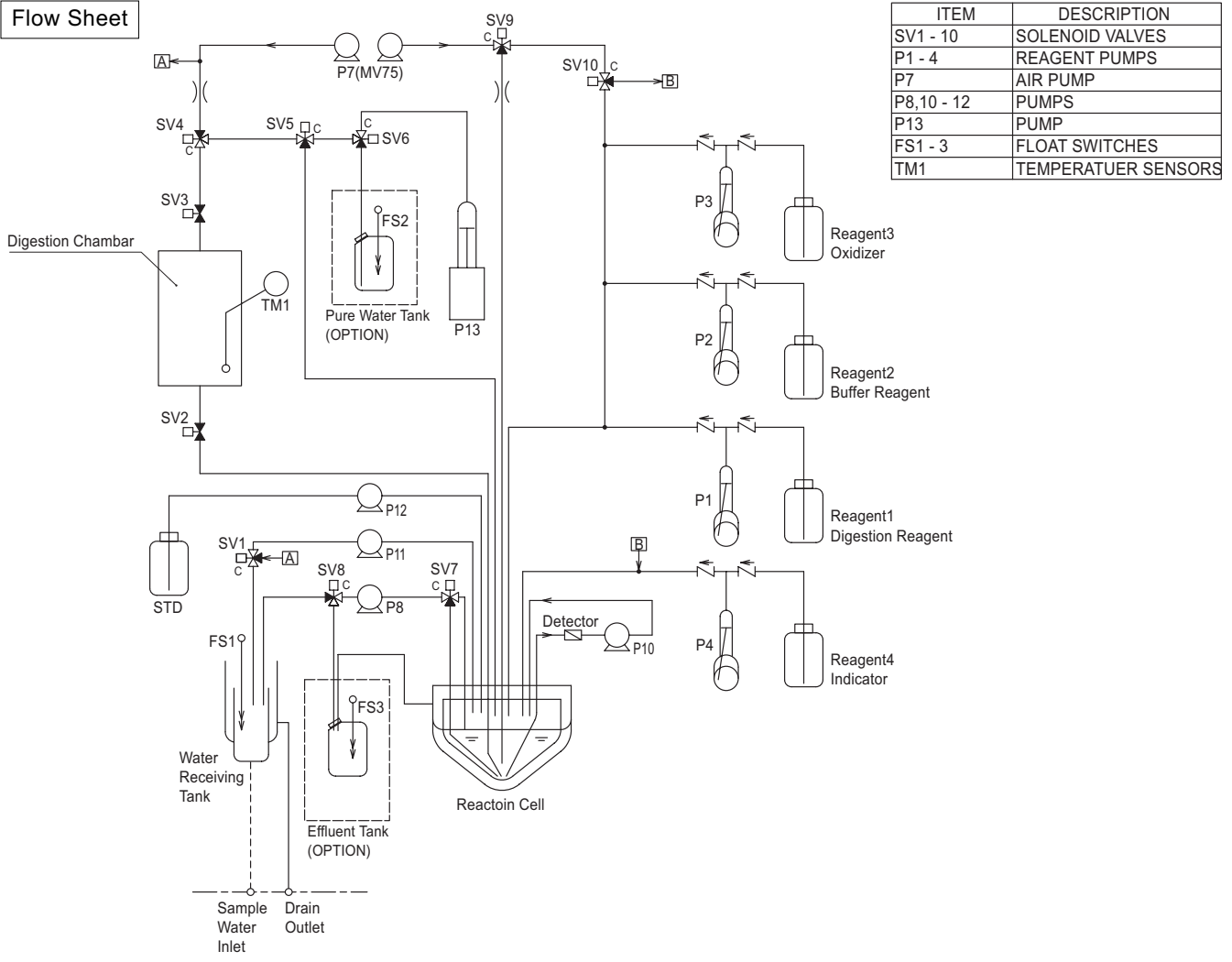
Dimethylglyoxime solution is added into the reaction cell. Then Ni²⁺ ions react with dimethylglyoxime to form an orange-brown-colored complex.

Concentration of total Nickel is calculated as Ni²⁺ based on absorbance at 470nm.

Options

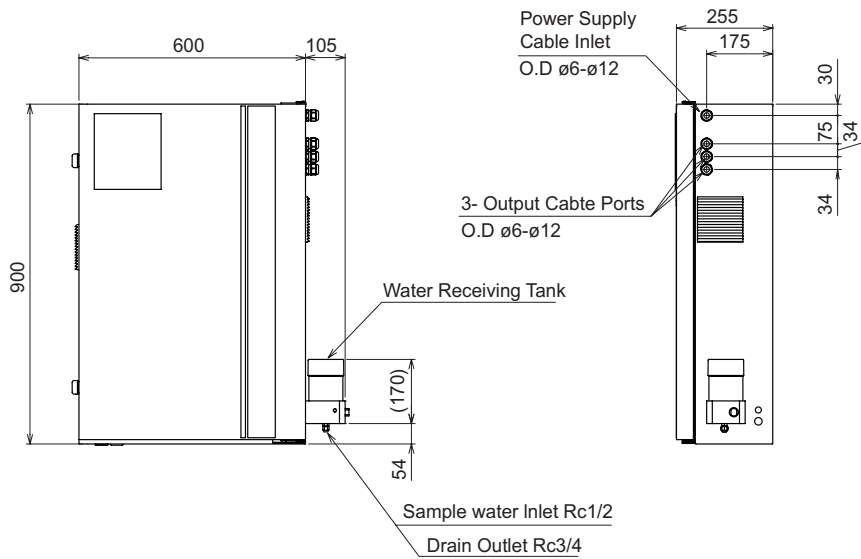
Pure Water Tank	20L, with level sensor
Waste Water Tank	20L, with level sensor

Flow Sheet

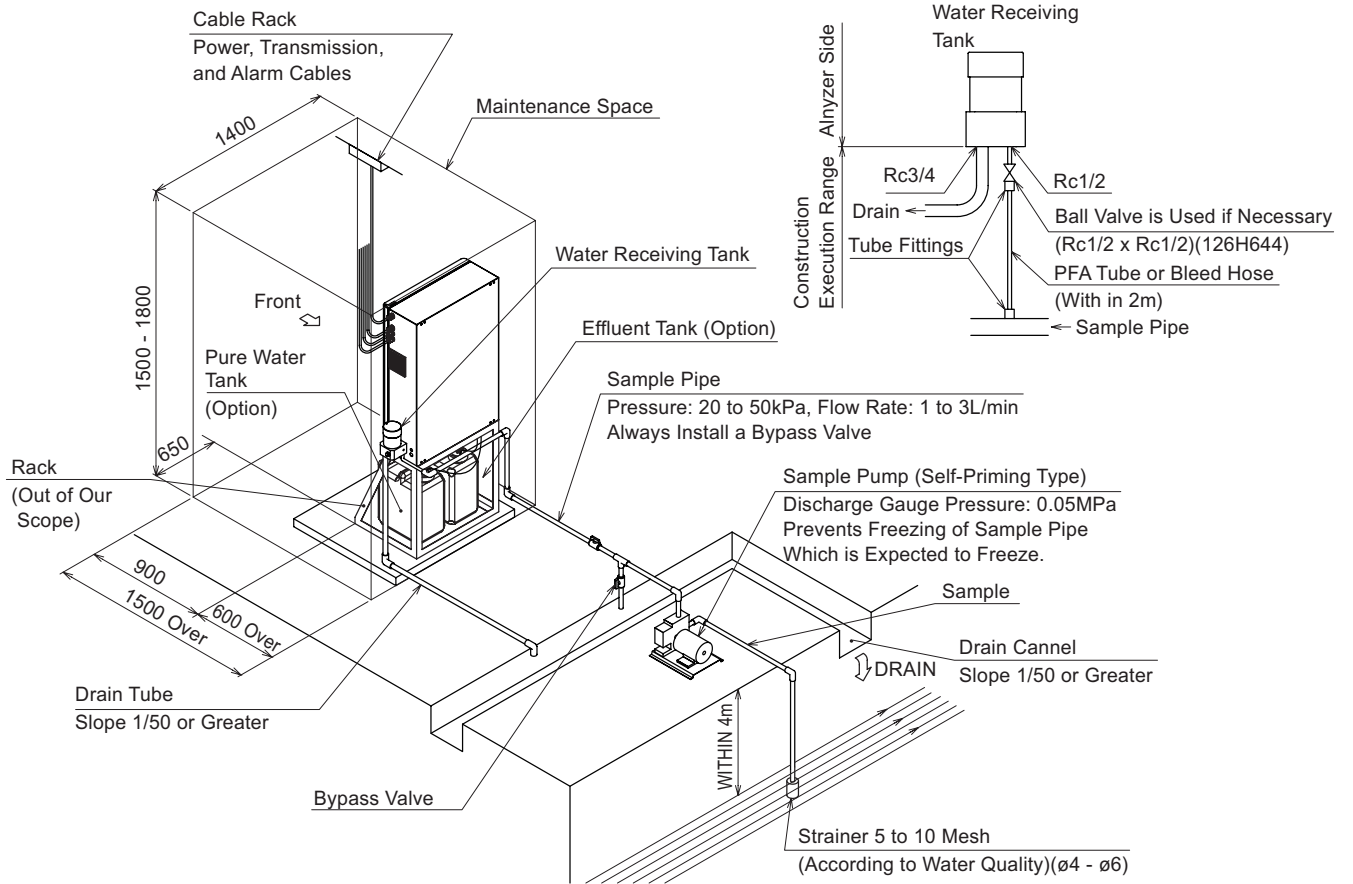


Dimensions

Unit : mm



Installation (Example)



Note

1. Remove Dirt, etc by Thoroughly Flushing the Inside of the Piping Before Piping to the Equipment. Dirt in the Piping will Clog the Solenoid Valves.
2. Rack/Mounting Brackets Should be Provided by the Customer.

Product Code

HMATNI-0-	□	□	□	
A	Pure Water Tank		
B	None		
	Included		
A	Wast Water Tank		
B	None		
	Included		
	Markings		
1	Japanese		
2	Chinese		
3	English		



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CAUTION

Do not operate products before consulting instruction manual.