



**TECHNICAL SPECIFICATIONS FOR ONE HALF INCH WATER METERS**


<b>SPECIFICATIONS</b>									
Designed for the measurement of cold potable water									
1. Standard	ISO 4064:1993 or latest								
2. Nominal Diameter	15mm								
3. Meter Type	Single Jet								
4. Metrological Class	"B" or its equivalent to latest edition								
5. Meter Body	Copper alloy containing not less than 75% copper  or a copper alloy containing not less than 65% copper but with anti-corrosion treatment.  - Testing result of the copper content from any government accredited material testing laboratory like DOST, MIRDC or any accredited government agency or from any DOST-accredited laboratory shall be submitted to ZCWD during Bid Opening								
6. Register	Hermetically vacuum sealed or hermetically sealed								
	With magnetic ring/shield								
	Glass lens with abrasion resistant								
	Meter Register in Cubic Meters								
	Marked with "ZCWD" at top plate of register using Arial Text with font size of 9 - 12, printed in Bold and all written in Capital Letters.								
	Cubic Meters in registration – minimum of 4 digit								
7. Working Condition	Maximum Working Pressure: 10 bars or 1.0Mpa Maximum Working/Liquid Temperature: 30°C or Higher								
8. Metrological Characteristics (Permissible Error)	Maximum flowrate ( $Q_{max}/Q_4$ ) = 3.0m <sup>3</sup> /hr. or higher; Allowance error in accuracy ± 2%								
	Nominal flowrate ( $Q_n/Q_3$ ) = 1.5m <sup>3</sup> /hr. or higher; Allowance error in accuracy ± 2%								
	Transitional flowrate ( $Q_t/Q_2$ ) = 120 l/hr. or lower; Allowance error in accuracy ± 2%								
	Minimum flowrate ( $Q_{min}/Q_1$ ) = 30 l/hr. or lower; Allowance error in accuracy ± 5%								
9. Meter and corresponding Tailpiece length ranges	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Water Meter Length</th> <th>Length per Tail Piece</th> </tr> </thead> <tbody> <tr> <td>115mm</td> <td>100mm</td> </tr> <tr> <td>165mm</td> <td>75mm</td> </tr> <tr> <td>190mm</td> <td>63mm</td> </tr> </tbody> </table>	Water Meter Length	Length per Tail Piece	115mm	100mm	165mm	75mm	190mm	63mm
Water Meter Length	Length per Tail Piece								
115mm	100mm								
165mm	75mm								
190mm	63mm								
10. Meter Seal	Meter body should be properly sealed								
11. Strainer	With plastic strainer installed								
12. Serial Numbering	Meter numbers should be in series, clearly and permanently engraved								
13. Painting	All water meters shall be painted by the supplier with acrylic Tahiti blue (or closer shade acceptable to the end user) automotive paint with properly primed surface of compatible paint primer.								
14. Meter Body Markings	Meter Size – (embossed)								
	Flow Direction (arrow) – (embossed)								
15. Warranty	All meters shall be guaranteed against factory defects in workmanship and materials for a period of one (1) year from the date of acceptance. Defective meters or parts discovered within this period shall be replaced without charge upon the return to the supplier.								
16. Packaging	All water meters shall have plastic end cap installed on both meter body thread ends								
	Each water meter shall be packed individually in a small box and must contain 2 tailpieces and rubber gaskets								

	The water meters shall be packed by 10's or 20's per batch and shall indicate the meter serial numbers on the box.
17. Other requirements	One (1) unit sample complete with tail pieces and gaskets with the water meter testing and calibration report from Manila Water or Davao City Water District or any ISO accredited water meter calibration laboratory to be submitted by the bidder during bid opening.
	One (1) unit cut away sample to be submitted by the bidder during bid opening.

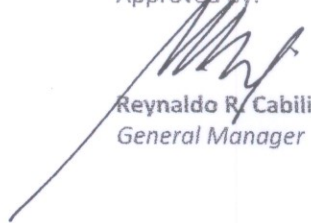
Submitted by:

  
 Atty. Vincent F. Fernandez  
 Officer In-Charge  
 General Services Department

Recommending approval:

  
 Louella A. Aguilera  
 Assistant General Manager  
 Administration Group

Approved by:

  
 Reynaldo R. Cabilin  
 General Manager