VENUS INDUSTRIES

Makers of KONARAK Water Meters

PRECISE. ACCURATE. RELIABLE

Introducing Reliable Metering Systems
From Venus Industries

GET IN TOUCH:

Address: No 4 Devayani Industrial Complex, Gowdanapalya, Subramanyapura, Opposite Prarthana School, Bangalore - 560061
Email: venusmeters@gmail.com
Phone: +91 - 9845287696
Website:: www.venusmeters.com

ABOUT US:

- Venus industries is a part of the Bangalore based Klas group of companies, established in the year 2000.

- With over a decade of experience in the manufacturing of various types of domestic and commercial water meters we have gained popularity amongst a large client base including the BWSSB.

- Venus industries has fully equipped facilities to manufacture, calibrate and test water meters as per the IS-779-1994 (with latest amendment) and ISO4064 (with latest amendment) to meet national and international standards so as to easily meet the ever growing demands of our valued customers

QUALITY:

- Quality, being the heart of our organization, is of paramount importance to us.

- Hence all our precision components are manufactured in-house and from our sister company Konarak Industria

- Ensuring that all our products are in tandem with the requisite quality standards

- 100% testing is done at – flow rates, after which a computerized test certificate is issued to each of Venus's water meters.

- Venus utilizes sophisticated semi-automatic test benches to test all our water meters, ensuring every one of our products conforms to the high level of precision and accuracy one comes to expect from our company.

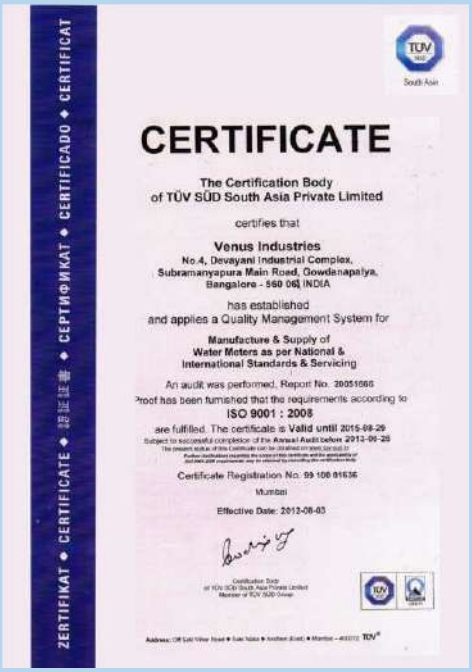
APPROVED CERTIFICATES:

- Approved by Bureau of Indian standards and meter marked as ISI CM/L-6220145

- Water meter has passed endurance test (life test) at Fluid Control Research Institute (FCRI) (under the ministry of heavy industries and public enterprises. NABL accreditation laboratory)

- ISO 9001: 2008 certified company by TUV SUD, Germany.

APPROVED CERTIFICATES:



CERTIFICATE

The Certification Body of TÜV SÜD South Asia Private Limited

certifies that

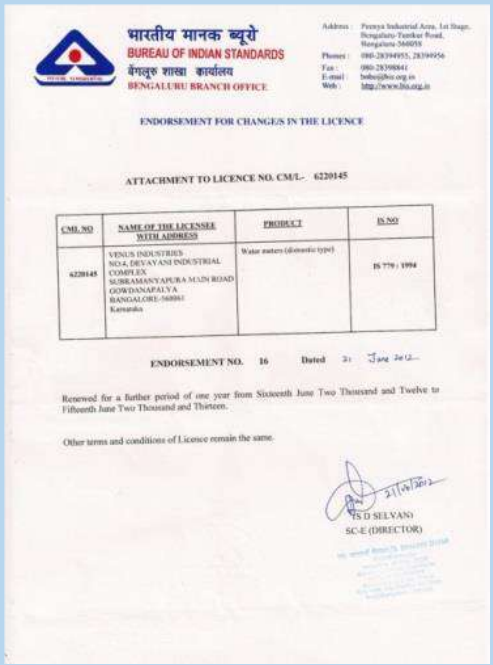
Venus Industries
No.4, Devayani Industrial Complex,
Subramanyapura Main Road, Gowdanapalya,
Bangalore - 560 061 INDIA

has established and applies a Quality Management System for

Manufacture & Supply of Water Meters as per National & International Standards & Servicing

An audit was performed, Report No. 20051066
Proof has been furnished that the requirements according to
ISO 9001 : 2008
are fulfilled. The certificate is **Valid until 2015-08-29**
Subject to successful completion of the **Annual Audit before 2013-09-28**

Certificate Registration No: 99 100 81636
Mumbai
Effective Date: 2012-08-03



भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS
बेंगलूरु शाखा कार्यालय
BENGALURU BRANCH OFFICE

ENDORSEMENT FOR CHANGE/S IN THE LICENCE

ATTACHMENT TO LICENCE NO. CM/L- 6220145

CML NO	NAME OF THE LICENSEE WITH ADDRESS	PRODUCT	IS NO
6220145	VENUS INDUSTRIES NO.4, DEVAYANI INDUSTRIAL COMPLEX SUBRAMANYAPURA MAIN ROAD GOWDANAPALYA BANGALORE-560061 Karnataka	Water meters (domestic type)	IS 779 : 1994

ENDORSEMENT NO. 16 Dated 21 June 2012

Renewed for a further period of one year from Sixteenth June Two Thousand and Twelve to Fifteenth June Two Thousand and Thirteen.

Other terms and conditions of Licence remain the same.

21/6/2012
(S D SELVAN)
SC-E (DIRECTOR)

COMMERCIAL - IN - CONFIDENCE
FLUID CONTROL RESEARCH INSTITUTE, PALAKKAD
An ISO 9001 Establishment
(A Govt. of India R & D Organisation)
Under Ministry of Heavy Industries & Public Enterprises
KANJIKODE WEST, PALAKKAD - 678 623, KERALA, INDIA.

CERTIFICATE OF TESTING
ON THREE WATER METERS
Of make KONARAK from
M/s Venus Industries, Bangalore.

DATE OF RECEIPT	DATE OF TESTING	DATE OF ISSUE	FCRI/CWM/2010/TR43
18/11/2010	20/11/2010 to 03/01/2011	05/01/2011	PAGE 01 OF 09 PAGES

APPROVED SIGNATORY
Jacob Chandapillai
Chief Research Engineer

SUMMARY

Test on three Multi jet domestic water meters (Make : **KONARAK**) of class B of size 15mm from **M/s Venus Industries, Bangalore,** was conducted at Water Flow Calibration facility of **Fluid Control Research Institute**, Palakkad during 20.11.2010 to 03.01.2011.

The tests were carried out as per the procedure described in this document which is based on ISO 4064/1:1993 / ISO 4064/3:1999. All the meters were initially subjected to pressure and flow tests. Then the meters were subjected to accelerated endurance test and once again the pressure and flow tests were carried out. The regulations and permitted tolerances in the measurement of physical quantities associated with the water meter test methods and equipments as per ISO 4064/3:1999 were fully followed during testing.

The model supplied has **PASSED** the endurance test. The details of the test results are produced in Table 1 and Table 2. The meters are retained at FCRI under model approval Program (MAP) for enabling future comparisons during validity period.

Tested by:	Report prepared by:	Checked by:
P.Guruvayurappan,Lab Asst.	R.C.Nair,M E.	D.S.Anilkumar,Sr.Engineer.

ISO BIS FCRI

OUR PRODUCT:

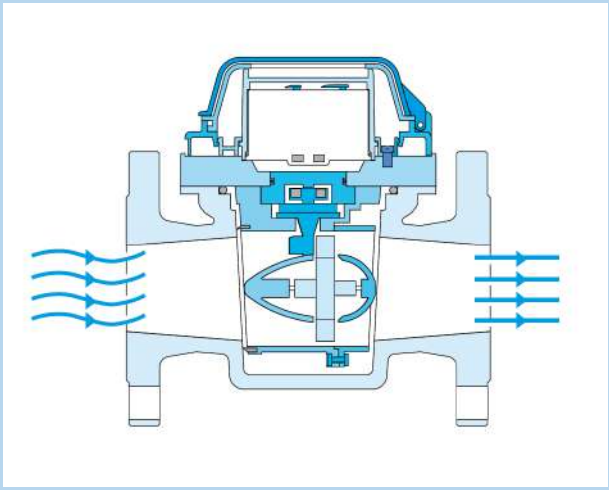
BULK WATER METER

Woltman meters for high flow rates:

Woltman type water meters can be used for flow rates higher than Qn 15 m^3/h. They are thereby distinguished by ensuring an especially low head loss, even with high flow rates. The newly developed measuring insert with a special construction of the turbine where the water flows through guarantees a high measuring accuracy and long-term stability of the measuring results. Large number rollers on the dry dial counter ensure the readability of the numbers at all times.

OUR PRODUCT:

BULK WATER METER



Construction principle:

Similar to multi-jet meters, Woltman meters measure the velocity of the water flowing through with the help of a turbine. The volume is mechanically calculated, through the known volume of the measuring chamber, and indicated with the roller counters in cubic meters. The unique form of the "paddle wheels" enable the Woltman meters to cover a very large measuring range with, especially low head loss. Aside from their construction for high flow rates, they also reliably start measuring with small water quantities.

OUR PRODUCT:

BULK WATER METER

Woltman meter with parallel turbine shaft (WPH-N):

Woltman Parallel type meters are always used when high flow rates with a relatively constant flow rate profile are to be measured. Through its robust construction they not only are capable of covering a large measuring range, but the measuring accuracy is also long-term stable.

The hydrodynamic optimized turbine is reliably operated already at small flow rates and "upwards" it has enough power reserves to reliably measure flow rate peaks. Especially strong bearings with low friction guarantee a long life of the meter.

Reed sensors, optical and inductive-NAMUR sensors can always be retrofitted without damaging the calibration seal. Then the meter can be integrated with data communication or automation and control systems in a simple and flexible way

OUR PRODUCT:

BULK WATER METER

Technical data WPH-N								
Nominal flow	Qn	m³/h	150	250	400	600	1000	1500
Nominal diameter	DN	mm	150	200	250	300	400	500
Overall length	L	mm	300	350	450	500	600	800
Metrological class			B	B	B	B	B	B
Maximum flow (short-term)	Qmax	m³/h	350	650	1200	1500	2500	4000
Maximum flow (constant)		m³/h	250	325	600	700	1250	2000
Transitional flow	Qt	m³/h	12	20	32	48	80	120
Minimum flow	Qmin	m³/h	3,5	6,5	12	18	30	45
Flow rate with 0.1 bar head loss		m³/h	200	650	1000	1500	2500	4000
Head loss at Qmax		bar	0,2	0,05	0,05	0,05	0,05	0,05
Display range	min	l	20	20	20	20	200	200
	max	m³	9.999.999	9.999.999	9.999.999	99.999.999	99.999.999	99.999.999
Maximum temperature		°C	50	50	50	50	50	50
Operating pressure, max.	PN	bar	16	16	16	16	16	16
Height	H	mm	305	375	470	495	635	740
Flange diameter	D	mm	285	340	395	445	565	670

OUR PRODUCT:

BULK WATER METER

Technical data WPH-N								
Nominal flow	Qn	m³/h	15	15	25	40	60	100
Nominal diameter	DN	mm	40	50	65	80	100	125
Overall length	L	mm	200	200	200	225	250	250
Metrological class			B	B	B	B	B	B
Maximum flow (short-term)	Qmax	m³/h	60	90	120	150	250	300
Maximum flow (constant)		m³/h	30	45	60	90	125	170
Transitional flow	Qt	m³/h	1	1	2	3,2	4,8	8
Minimum flow	Qmin	m³/h	0,35	0,35	0,45	0,8	1,5	3
Flow rate with 0.1 bar head loss		m³/h	20	30	50	70	100	150
Head loss at Qmax		bar	0,2	0,1	0,1	0,2	0,2	0,2
Display range	min	l	2	2	2	2	2	2
	max	m³	9.999.999	9.999.999	9.999.999	9.999.999	9.999.999	9.999.999
Maximum temperature		°C	50	50	50	50	50	50
Operating pressure, max.	PN	bar	16	16	16	16	16	16
Height	H	mm	206	200	208	255	275	290
Flange diameter	D	mm	150	165	185	200	220	250

OUR PRODUCT:

FILTERS:

Dirt Filters:

Large suspended particles and fibrous contamination in the water can impact the measuring characteristics of Woltman meters and can deposit in the bearings. The dirt filter can filter particles up to 4mm* from the water and reliably protect the meters that follow.