Notified Body n° 0426



### ITALCERT S.r.I.

viale Sarca, 336 - IT 20126 MILANO MI tel. +39 0266104876 - fax +39 0266101479 E-mail italcert@italcert.it

# CERTIFICATE N° 062-03-00-DM

(in compliance with Annex II of the Directive 93/42/EEC)

# **ITALCERT**

certifies that

Full Quality Assurance System applied for the design, manufacture and final inspection of "Medical Devices" - MD -

by the manufacturer

# MD S.r.l.

Via Guido Rossa, 22/c - 30037 SCORZÈ (VE) - ITALY

in the headquarters located in

Via Guido Rossa, 22/c 30037 SCORZÈ (VE) - ITALY

complies with the requirements stated in

Directive 93/42/EEC - Annex II (excluding point 4)

and authorizes the same manufacturer to mark

CE 0426

in compliance with the criteria defined in Annex XII of the Directive 93/42/EEC the MD reported in Annex 1 of this Certificate

dr. ing, Roberto Cusolito

MANAGING DIRECTOR

First Issue date 2006-05-24

Renewal date 2019-05-24

Expire date 2024-05-23



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# Annex 1 to the Certificate n° 062-03-00-DM

- page 1 of 2 -

## Active medical device intended to administer and/or remove medicines, body liquids or other substances to or from the body

Terminal units for medical gas and vacuum pipeline systems (class IIb)

PF-01xx-yyyy Base blocks for terminal units for medical gas pipeline systems PF-02xx-yyyy Outlets for terminal units for medical gas pipeline systems PF-06xx-yyyy Probes for terminal units for medical gas pipeline systems PF-36xx-yyyy Doublers for terminal units for medical gas pipeline systems KT-02xx-yyyy Maintenance kits for terminal units PF-34xx-yyyy Pre-installed terminal units boxes PF-66xx-yyyy Hose assemblies KT-01xx-yyyy Maintenance kits for base blocks

Second stage pressure regulators for medical gas pipeline systems (class IIb)

PF-05xx-yyyy / PF-37xx-yyyy Line pressure regulators for medical gas pipeline systems

KT-05xx-yyyy / KT-37xx-yyyy Maintenance kits for line pressure regulators

PF-55xx-yyyy High flow line pressure regulators

KT-55xx-yyyy Maintenance kits for high flow line pressure regulators

PF-44xx-yyyy Pre-assembled cabinets for second stage pressure regulation / line

pressure stabilization and regulation cabinets

Terminal units for type 1 AGSS (Anaesthetic gas scavenging systems) (class IIa)

PF-02Ex-yyyy Outlets for terminal units for AGSS Base blocks for terminal units for AGSS PF-01Ex-yyyy PF-06Ex-yyyy Probes for terminal units for AGSS

KT-02Ex-yyyy Replacement kits for terminal units for AGSS

Accessories for AGSS PF-76xx-yyyy

Flow-meters for connection with terminal units of medical gas pipeline systems (class IIa)

Flow meters PF-26xx-yyyy

Humidifiers for flow meters PF-27xx-yyyy

PF-57xx-yyyy Flow selectors

Medical suction devices

PF-38xx-yyyy Vacuum regulators with collection for collection jar or hose barb fitting

(class IIa)

Vacuum regulator - Probe - Flexible hose kit - Hose barb PF-50xx-yyyy

fitting/collection jar - filter (class IIb)

Shut-off area valves and Vacuum control units (class IIb)

Shut-off area valves for medical gases and vacuum PF-03xx-yyyy PF-35xx-yyyy Vacuum control units PF-45xx-yyyy Area valves pre-assembled cabinets PF-46xx-yyyy Shut off valves pre-assembled cabinets for fire control PF-48xx-yyyy Shut off line valves pre-assembled cabinets PF-49xx-yyyy Medical gas distribution system management cabinet PF-61xx-yyyy Shut-off area valves for medical gases and vacuum PF-64xx-yyyy AVSU (Area Valve Service Unit)

KT-61xx-yyyy Maintenance kits for shut-off area valves

Area shut-off valves for compressed medical gases and vacuum PF-74xx-yyyy

KT-74xx-yyyy Connecting kits for area shut-off valves PF-74xx-yyyy KT-76xx-yyyy Maintenance kits for area shut-off valves PF-74xx-yyyy



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# Annex 1 to the Certificate n° 062-03-00-DM

- page 2 of 2 -

- High pressure systems (class llb)

PF-40xF-yyyy

Pigtails for cylinders

PF-40xP-yyyy

Pigtails for cylinder bundles

PF-40xT-yyyy

High pressure flexible connections

PF-42xy-zzzz

Cylinder manifolds

- First stage regulation devices (class IIb)

PF-43xx-yyyy First stage regulators for medical gas cylinder manifolds

KT-43xx-yyyy Maintenance kits for first stage pressure regulators

PF-51xx-yyyy Automatic change-over decompression units for medical gases

PF-52xx-yyyy Automatic change-over

PF-53xx-yyyy Emergency decompression units for medical gases

PF-62xx-yyyy First stage regulators for medical gas cylinder manifolds

KT-62xx-yyyy Maintenance kits for first stage pressure regulators

PF-70xx-yyyy High-flow manual change-over safety decompression station for medical gases

Double-stage regulation devices (class IIb)

PF-54xx-yyyy

Double-stage decompression units for medical gases

PF-56xx-yyyy

Double-stage emergency decompression units for medical gases

PF-59xx-yyyy

HTM 02-01 automatic manifolds for medical gases

PF-60xx-yyyy

HTM 02-01 emergency reserve manifolds for medical gases

Milan, 2019-05-24

dr. ing. Roberto Cusolito

Managing Director



# CERTIFICATO N° 306SGQ06

CERTIFICATE N° 306SGQ06

Si certifica che il

this is to certify that - on certifie que

# Sistema di Gestione per la Qualità

Quality Management System – Système de Gestion pour la Qualité

messo in atto da

implemented by – mis en acte par

# MD S.r.I

Via Guido Rossa, 22/c – IT 30037 SCORZE' (VE)

nella Sede Operativa di

Operative Unit – Siège Opérationnel

Via Guido Rossa, 22/c – IT 30037 SCORZE' (VE)

è conforme alla norma

is in compliance with the standard – est conforme à la norme

UNI EN ISO 9001-2015 (ISO 9001-2015)

per i seguenti Processi

concerning the following kinds of Processes – pour les suivants Processus

# Progettazione e produzione di componenti per impianti di distribuzione dei gas medicinali e per vuoto e per impianti di evacuazione dei gas anestetici.

Design and manufacture of components for pipeline systems for compressed medical gases and vacuum and for anaesthetic gas scavenging disposal systems.

Conception et fabrication de composants pour systems de distribution de gaz médicaux comprimes et de vide e pour Systémes d'evacuation de gaz d'anesthésie non réutilisables

Il presente Certificato è soggetto al rispetto delle condizioni stabilite dai Regolamenti per la Certificazione in vigore applicabili

This Certificate shall satisfy the requirements established in the Rules for the certification in force applicable. Ce certificate est soumis à la conformité avec les termes et conditions du règlement de certification applicable.

In caso di discordanza tra le lingue utilizzate nella traduzione del contenuto del presente certificato, fare riferimento alla lingua italiana In cases of discrepancy between the languages used in the translation of the content of this certificate, please refer to the Italian language En cas de divergence entre les langues utilisées pour la traduction du contenu de ce certificat, veuillez vous référer à la langue italienne

L'AMMINISTRATORE DELEGATO

MANAGING DIRECTOR

Dr. Ing. Roberto Cusolito

Data di Prima Emissione Forst Issue Date

2011-10-10

Data di Rinnovo Renewal Date 2020-11-19 Data di Scadenza Expiration Date 2023-06-05

Settore IAF 17



SGQ N° 023A

Membro degli Accordi di Mutuo Riconoscimento FA, IAF e II Al
Signatory of EA, IAF and ILAC Mutual Recognition Agreement



# CERTIFICATO N° 306DM09

CERTIFICATE N° 306DM09

Si certifica che il

this is to certify that - on certifie que

# Sistema di Gestione per la Qualità

Quality Management System – Système de Gestion pour la Qualité

messo in atto da

implemented by – mis en acte par

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Via Guido Rossa, 22/c – IT 30037 SCORZE' (VE)

nella Sede Operativa di

Operative Unit – Siège Opérationnel

Via Guido Rossa, 22/c – IT 30037 SCORZE' (VE)

è conforme alla norma

is in compliance with the standard – est conforme à la norme

UNI CEI EN ISO 13485-2016 (ISO 13485-2016)

per i seguenti Processi

concerning the following kinds of Processes – pour les suivants Processus

Progettazione e produzione di componenti per impianti di distribuzione dei gas medicinali e per vuoto e per impianti di evacuazione dei gas anestetici.

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L'AMMINISTRATORE DELEGATO

MANAGING DIRECTOR

Dr. Ing. Roberto Cusolito

Data di Prima Emissione
Forst Issue Date

2005-12-01

Data di Rinnovo Renewal Date 2020-11-19 Data di Scadenza Expiration Date 2023-06-05



SGQ № 023A Membro degli Accordi di Mutuo Riconoscimento FA, IAF e II A Signatory of EA, IAF and ILAC Mutual Recognition Agreement







# Surface mount installation systems for terminal units #ITALCERT





### **IDENTIFICATION**

- Surface mount wall outlet box for installation of medical gas and AGSS terminal units (model for systems with centralized blower)
- Equipped with wall box cover with bas-relief moulding for gas identification sticker
- Construction in white ABS with threaded inserts for fastening terminal units
- ► Modular design to allow multiple boxes to be installed in series

### **SURFACE MOUNT BOX**

		PACKAGING						
CODE	DESCRIPTION	type	<b>≗</b> kg	pcs				
PF-2100-4000	Surface mount box for terminal units	unboxed	0.14	1				

### **GAS IDENTIFICATION STICKERS**

				PACKAGING			
CODE	GAS	SYMBOL	COLOR	type	pcs		
ET-2100-000V	Vacuum	Vac	Yellow	bag	1		
ET-2100-00O2	Oxygen	O <sub>2</sub>	White	bag	1		
ET-2100-00AC	Medical Air	Air	Balck - White	bag	1		
ET-2100-0N2O	Nitrous Dioxide	N <sub>2</sub> O	Blue	bag	1		
ET-2100-0CO2	Carbon Dioxide	$CO_2$	Grey	bag	1		
ET-2100-0AC8	Instruments Air	Air-800	Black - White	bag	1		
ET-2100-00EV	Anaesthetic gas scavenging	AGSS	Magenta	bag	1		







# 



### **IDENTIFICATION**

- ► Humidifier for oxygen therapy designed to contain demineralized water used to increase the relative humidity of the oxygen supplied to the patient
- Autoclavable polycarbonate jar
- Autoclavable plastic cap
- ▶ Internal silicone rubber tube complete with filter for diffusion of oxygen in the water
- ▶ Hose connector on humidifier cap for connection to patient administration devices (masks, nasal catheters...)
- ▶ Indication of water filling limit and safety information
- ► Latex-safe humidifier assembly



Notified body 0426 CE marking in risk class II A in accordance with Legislative Decree 24 February 1997, no. 46 "Implementation of Directive 93/42/EEC, concerning Medical Devices" and further modifications

### **REFERENCE STANDARDS**

**UNI 11341**: "Bubbling humidifiers for medical use - fundamental requirements"

HTM 02-01: "Medical gas pipeline systems"

\*Validity of the standards is referred to the current year

- ► Capacity: 250 cc
- ► Connection with flow meter via nickel-plated brass union with G 1/4" or 9/16" fitting
- ► Maximum pressure: 500 kPa
- ► Maximum flow rate: 20 NI/min
- ► Sterilizable in autoclave at 121 °C
- ► Time for sterilization cycle: 20 minutes





# This is a translation of certificate N. IT94/0008

SGS

The quality management system of

# SILMET S.p.A.

Via Martiri della Libertà, 31 - 25030 Torbole Casaglia (BS) - Italy

has been assessed and certified as meeting the requirements of

# ISO 9001 / UNI EN ISO 9001:2015

For the following activities

Manufacturing and trading under own brand name of copper tube plumbing for hydro-thermo sanitary plants, distribution systems of medical gases and their mixtures, air, vacuum and anesthetic evacuation gases, for air conditioning and refrigeration applications, and other industrial use and manufacturing and rolling of copper strips and sheets for building and industrial use.

EA Sector: 17, 29

This certificate is valid from 04/06/2021 until 04/06/2024 and remains valid subject to satisfactory surveillance audits.

Re certification audit due before 04/06/2024.

Issue 10. Certified since 01/09/1994.

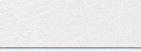
The audit leading to this certificate commenced on 17/05/2021 Previous issue certificate validity date was until 04/06/2021

> Authorized by Paola Santarelli

SGS ITALIA S.p.A.

Via Caldera, 21 - 20153 MILANO - Italy
t + 39 02 73 93 1 f +39 02 70 10 94 89 www.sgs.com

Page 1 of 1



ACCREDI*F* 

SGO Nº 0015 A

Membro di MLA EA per gli schemi ci accreditamento SGQ, SGA, PRD, PRS ISP, GHG, LAB, LAT, PTP e RMT, CMLA IAF per gli schemi ci accreditamento SGQ, SGA, SSI, FSM PRD e PRS e di MRA ILAC per schemi di accreditamento LAB, MED

ignatory of EA MLA for the coreditation schemes QMS, EMS, RD, PRS, INSP, GHG, TL, CL, PTP and MT, of 1AF MLA for the accreditation chemes QMS, EMS, ISMS, FSMS, PR and PRS and of 1LAC MRA for the coreditation schemes TL, ML, Cl.



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# **silmet S.P.A. MEDICAL COPPER TUBE**

MEDICAL, the ideal choice for plants for the distribution of medical gases and vacuum systems.

Manufactured according to the most modern technologies on the current world market, in observance of European standard EN 13348, compatible with equipment manufactured in accordance with the Medical Device Directive 93/42/EEC, result of scientific studies and tests that guarantee the maximum compatibility for distributing the following gases and systems:

- oxygen, nitrous oxide, nitrogen, helium, carbon dioxide, xenon;
- air for breathing;
- specific mixtures of these gases mentioned above;
- air for operating surgical instruments;
- anaesthetic gases and vapours;
- vacuum.

The inner surface meets the requirements of reference standard and is also exempted from incompatible materials with medical gases. The standard EN 13348 is harmonized under the PED Directive 97/23/EC (EU Pressure Equipment Directive), therefore the Silmet MEDICAL tubes also meet the requirements of that Directive.



### **TECHNICAL CHARACTERISTICS**

Alloy	Cu-DHP CW024A (Cu = 99,90% min $P = 0,015 \div 0,040\%$ )							
Physical state according to EN 13348	Annealed R220	Half-Hard R250	Hard R290					
Unit tensile strength – R min.	220 N/mm <sup>2</sup>	250 N/mm²	290 N/mm²					
Percentage elongation – A min.	40%	20% o 30%	3%					
Total carbon	C ≤ 0.02 g/m² max. in compliance with standard EN 13348							
Inner surface	Glossy							
Marking on tube	SILMET MEDICAL EN 13348 Ø X sp. Year quarter							
Dimensions and tolerances	In compliance with standard EN 13348							
Internal surface roughness		RA - 1/10 of micron						
Linear thermal expansion coefficient	0.00168 mm/m °C							
Thermal conductivity at 20°C	364 W/m · K							
* the symbol ## is only present in the hal	f-hard physical state							

### **TABLE OF DIMENSIONS**

external nominal diameter d	nominal thickness e mm											
mm	0,7	0,8	0,9	1	1,2	1,5	2					
8		RV		RV								
10		RV		RV								
12				RV								
15	RV			RV								
18				RV								
22			RV	RV		RV						
28			V	V		V						
35					V	V						
42					V	V						
54					V	V	V					
R tubes in coils												
V tubes in straight leng	gths											

Other sizes can be supplied by agreement between the purchaser and the supplier.

For availability and feasibility of these measures and for other sizes please contact our sales department.







# **EC DECLARATION OF CONFORMITY**

The manufacturer:

Silmet S.p.A. – Via Martiri della Libertà, 31 25030 – Torbole Casaglia (BS) Italy

Declare that the seamless, round copper tubes for water and gas in sanitary and heating applications with an outside diameter of 6 - 76,1 mm, for:

- Distributing networks for hot water and cold water
- Hot water heating systems including panel heating systems (under-floor, wall, overhead)
- Domestic gas and liquid fuel distribution
- Drainage, and disposal of other liquids and gaseous waste
- Fire suppression and extinction systems
- Pressure and vacuum systems

comply with the requirements of the following EC Directives, when installed according to national regulations

89/106/EEC

**EU Construction Products Directive** 

97/23/EC

**EU Pressure Equipment Directive** 

and comply with the requirements of these directives is demonstrated thought conformity with the following standard:

EN 1057:2010

Seamless, round copper tubes for water and gas in sanitary and heating

applications

Notified body: Identification No. DPC 0679

### **CSTB**

84, avenue Jean Jaurès Champs sur Marne F-77447 Marne la Vallée CEDEX 2 Test Report No.: CA 09-010

Francesco Orio – Quality Manager

Pieralberto Ghidini – Managing Director

April, 01 2010



### **BASIS FOR THE CE MARKING**

### EN 1057:2010 Annex ZA

Compliance with the Construction Products Directive 89/106/EEC

Essential characteristic	Result	Remarks								
Reaction to fire	Class A1	Decision of the Commission 96/603/EC, amended 2000/605/EC								
Crushing strength	NPD*	Derived from wall thickness and mechanical properties								
Internal pressure	NPD*	Derived from wall thickness and mechanical properties								
Dimensional tolerances	pass	All tubes must meet the specified dimensional tolerances								
Resistance to high temperature  suitable for use up to 120 °C  Temperatures found in heating system non significant influence on the representation properties of copper. Copper tubes caused for higher temperatures regulations must be observed where higher temperatures										
Weldability	pass	The suitability for welding is characteristic of the copper grade used for products and ensured through the control of the material composition								
Tightness	pass	All tubes must be subjected to leak-tightness testing								
Durability of crushing strength, internal pressure and tightness	pass	All tubes must meet the requirements regarding surface condition								

<sup>\*</sup> Note: "No Performance Determined" according to EN 1057 ZA.3

### EN 1057:2010 Annex ZB

Compliance with the Pressure Equipment Directive 97/23/CE

Essential characteristic	Remarks				
Material properties	Material properties must be meet in accordance with the required mechanical properties. Copper is not susceptible to brittle fracture due to its face-centred cubic crystal structure				
Conformity of material and manufacturer's certified documentation	On request, compliance of the product is confirmed by a certificate of the manufacturer according to EN 10204 Annex ZA				

### **GENERAL REMARKS**

- The CE marking ensures the free movement of goods within Europe. It does not replace existing national regulations for special applications (e.g. water, gas, sanitary, heating installations, etc.)
- The copper tube is suitable for drinking water applications. The national regulations for drinking water applications remain applicable and must be followed.

This declaration is no guarantee of properties in terms of product liability. The safety information of the product documentation must be observed.

# REPUBLICA MOLDOVA

35 C. Y. Krmacom - Didactic Denumires personei jurdice

# DE CALIFICARE PROFESIONALĂ CER WHITHCHE

Seria CPL

Nº 008830

Prezentul certificat eliberat

Dlui/Dnei Betnaza

autentifică absolvirea cursului multidisciplinar de

elrego zesudos meseria

Durata studiilor\_

ore

Semnătura titularului

Notă: Programa Cursurilor este aprobată de Ministerul Educației

Nr. de înregistrare

COM-DID

Eliberat la 03

a studiat disciplinele:

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