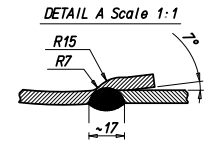
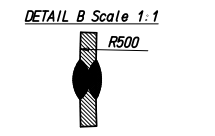


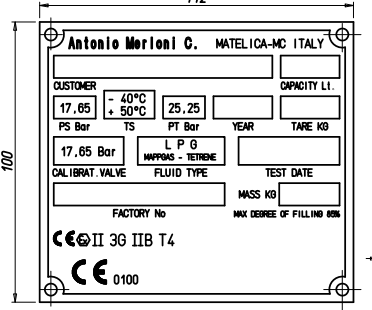
CONVENTIONAL NAME	TENS. URP.		Kg/litre	LIQUID GAS	
	-40°C tPa	+50°C tPa		C ₃ %	H ₄ %
MAPP. GAS	0.127	1.421	0.46	63	37
TETRENE	0.147	1.509	0.46	41,5	58,5
PROPANE COM.	0.186	1.754	0.42	-	-
BUTANE COM.	0.844	0.636	0.50	-	-
MIXTURE PROPANE/BUTANE	<0.106 >0.044	<1.754 >0.698	0.42	-	-

NOTES:

- 1- THE THICKNESS OF THE SHEET METAL ARE NET OF THE MANUFACTURING AND WORKING TOLERANCES
- 2- IN THE PROJECT AND PLANNING, ALL THE LOADS STATED IN ARTICLE 1 OF D.M. 21-11-72, REV. 1995 AND D.M. 15-01-98 No. 190 (SEE COMPLETE PROJECT ATTACHED) WERE TAKEN INTO CONSIDERATION.
- 3- THE CONTAINERS, DURING THE OPERATION ARE NOT SUBJECT TO ANY CORROSIVE, ABRASIVE, OR EROSIVE ACTION.
- 4 - THE DISHS ARE MOULDED AND COLD JOGGLE JOINT. NORMALIZATION AFTER DEEP DRAWING AND TAPERING OF THE DISHS.



DETAIL C - Scale 1:1
TECHNICAL DATA PLATE



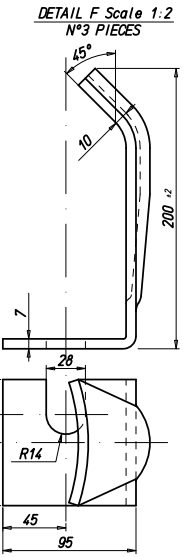
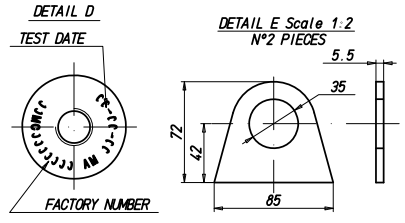
- ** LONGITUDINAL WELDING OF THE BODY:
AUTOMATIC SUBMERGED-ARC WELDING WITH SEALING RUN
 - ** CIRCULAR WELDING FOR LAP JOINTS WITH BOTTOM JOGGLE JOINT INSTEAD OF BUTT WELDING:
AUTOMATIC SUBMERGED-ARC WELDING IN "TANGENT", SINGLE-PASS, WITH STRONG PENETRATION ON A METAL SOLDER
 - ** STUB PIPE WELDING:
SINGLE-PASS AUTOMATIC SUBMERGED-ARC WELDING ON A COPPER SOLDER WITH FULL PENETRATION
 - ** WELDING OF THE ACCESSORIES:
1) MANUAL ELECTRIC-ARC WELDING (GAS SHIELDING)
2) AUTOMATED MANUAL ELECTRIC-ARC WELDING (GAS SHIELDING)
- ALL THE PROCEDURES HAVE BEEN APPRAISED BY THE B. V. ITA

PROJECT DATA	
TEST PRESSURE	2,525 Mpa
WORKING PRESSURE	1,765 Mpa
FLUID CONTAINED	L.P.G. - SEE TABLE
PROJECT TEMPERATURE SPAN	-40° +50°C
ANCC JOINT EFFICIENCY	0,85
RADIOGRAPHIC EXAMINATION	COLLECTION OF DATA "S" FOR CAT. II°
EXTERNAL TANK SURFACES	mq. 5,48

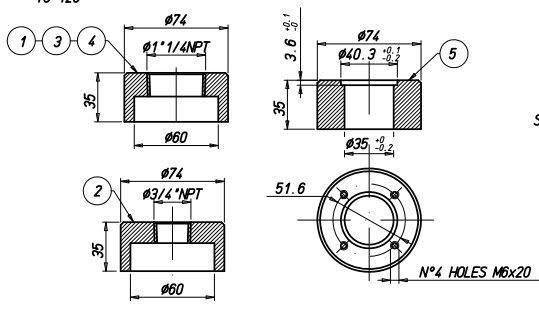
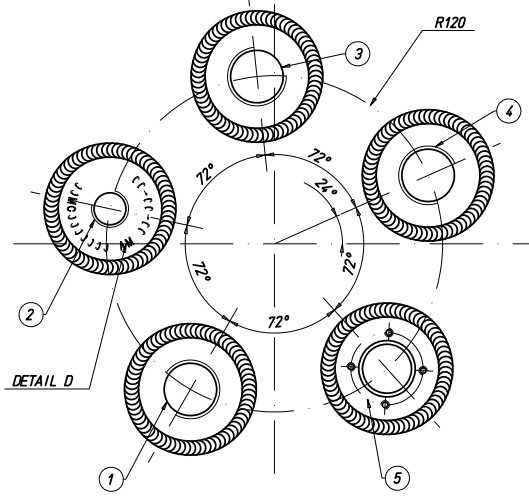
Pos	DESCRIPTION	QTY	REMARKS
5	STUB PIPE FOR LEVEL GAUGE INDICATOR	N°4 HOLES M6	
4	STUB PIPE FOR CHECK LOCK VALVE	1"1/4NPT	
3	STUB PIPE FOR SAFETY RELIEF VALVE	1"1/4NPT	
2	STUB PIPE FOR MULTIVALVE ASSEMBLY	3/4"NPT	
1	STUB PIPE FOR FILLER VALVE	1"1/4NPT	
	Pos	LIST OF FITTING	INLET THREADING

MATERIALS	
PLATE	ALUMINIUM
PLATE SUPPORT	P265NB UNI EN 10120
HOOKS FOR LIFTING	P355N UNI EN 10028-3
STUB PIPES	S355JR UNI EN 10025
FEET	S275JR UNI EN 10025
VALVE PROTECTION	POLYETHYLENE CAP HD
SHELL	P355N UNI EN 10028-3
ENDS	P355N UNI EN 10028-3

THICKNESS MIN. OF CALCULATION	
SHELL	5.10 mm
ENDS	4.70 mm



STUB PIPES POSITION - SCALE 1:2



TERRIKOM
CORPORAZIONE MICRORISORSE PERUANA

Antonio Marioni
CYLINDERS GHERGO GROUP
UNDERGROUND VERTICAL TANK LPG
1000
W.C. 1000 LITRES ±10

MODIFICHE

N° C.T. DISEGNATO APPROVATO DATA

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

101103719



Via Aristide Merloni, 2 - 62024 Matelica (MC) - ITALY

1000 Litre Tank Fab. №.: 12MC105350

CERTIFICATE OF CONFORMITY

The Antonio Merloni C. & T. s.r.l. company declares that this tank was built in conformity with the provisions foreseen in the current norms with regards to pressure appliance and that is protected for underground installation from corrosion using the method described in the circular letter from the M.I. no. P. 2004/4106 dated 27/10/1995 and in the letter no. P. 734/4106 dated 18/04/1996 from the D.G.P.C. and S.A.

The handbook entitled "INSTALLATION AND MAINTENANCE MANUAL", an integral part of the certification, includes the technical sheets and certifications as required by the circular letter from the M.I. no. P. 2004/4106 sott. 40 del 27/10/1995.

The metal tank is anchored to a cement base of a suitable weight to support the fluid pressure of the same.

The lid is provided with a key lock in order to allow access to the tank aperture for the users only, as well as for those in charge of maintenance and filling.

Moreover, the lid is equipped with an air valve which opens at a pressure of 150 millibars.

The same tank conforms to the prototype that underwent testing by the TE.SI. S.r.l. with relation to test no. 016/C dated 15.04.1996.

Antonio Merloni Cylinders Ghergo Group S.p.A.
Technical manager
Eng. Virgilio Pizzichelli
Viale Serafini, 93 - Fabriano
The Order of Engineers in the Province of Ancona, № 267

TEST CERTIFICATE (TUBERO EPOX)

MINIMUM THICKNESS

Following a check carried out using a ELCOMETER 345 suitably gauged before the measurement, it is hereby declared that the coating thickness of the tank in question CONFORMS TO the requirements included in the circular letter from the M.I. no. P. 2004/4106 sott. 40 dated 27/10/1995.

DIELECTRIC CONTINUITY

Following tests carried out using the "HOLIDAY DETECTOR" ELME - ISOLTEST HD93 Serial No. 1116 with sensor Serial No. 10569/95 with a voltage equal to 5 KV, it is hereby declared that the dielectric continuity of the coating of the tank in question CONFORMS TO the requirements included in the circular letter from the M.I. no. P. 2004/4106 sott. 40 dated 27/10/1995.

ADHESION

Following a check carried out on a small plate connected to the foot of the tank with tearing by means of "DOLLY" using the ELCOMETER instrument model 108 Serial No. 13074614, it is hereby declared that the coating adhesion of the tank in question CONFORMS TO the requirements included in the circular letter from the M.I. no. P. 2004/4106 sott. 40 dated 27/10/1995.

Antonio Merloni Cylinders Ghergo Group S.p.A.
Technical manager
Eng. Virgilio Pizzichelli
Viale Serafini, 93 - Fabriano
The Order of Engineers in the Province of Ancona, № 267



**ANTONIO MERLONI
CYLINDERS GHERGO GROUP S.P.A.**
Official distributor in Russia and CIS, Group of Companies «Terrikom».



Equipment type: **Gas Vessel**

Fabrication No: **12MC105350**

Manufacturer: **Antonio Merloni Cylinders & Tanks s.r.l.**

City: **Matelica (MC)**

Year: **2012**

Chamber	Max. working pressure		Working temperature (C°)	FLUID		Capacity (Litres)
	bar	kgf/cm ²		Tupe	Phisical state	
Main Body	17,65	18	-40°C / +50°C	LPG Tetrene Mapp-gas	L+V	1000
Phisical state: L - Liquid, V - Vapour, G - Gas						

CONSTRUCTION CHECKS

- 1). Partial and final internal inspection.
- 2). Hydraulic test as per "Table 1".
- 3). Air test for all components.

Table 1

Chamber	Test pressure (bar)	Test pressure (kgf/cm ²)	Test result	Date	City
1	25,25	25,76	Positive	30.03.2012	Matelica

PUNCHED DATA

On the pressure equipment:

- 1). Hydraulic test date on the multivalve assembly stub pipe.
- 2). Fabrication number on the multivalve assembly stub pipe.
- 3). AM (standing for Antonio Merloni C. & T. s.r.l.) on all safety valve pipes.
- 4). CE 0100 mark on the data plate.

ATTACHMENTS

- 1). Construction drawing № 2045/180-REV.0-2008.
- 2). List of materials and radiographic test report.
- 3). Certificate of conformity directive 97/23/CE.
- 4). Certificates for the tests carried out on the epoxy coating.

Notes: Product to be installed underground protected by thermosetting epoxy resins coating together with cathodic protection and sacrificial anodes.

FIRST USE AND FOLLOWING CHANGES

DATE	USER	CITY	MUNICIPALITY	PROVINCE

IMPORTANT INFORMATION

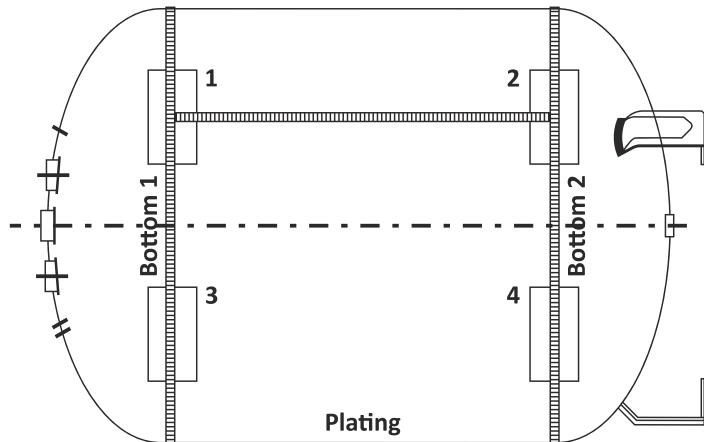
- The MAPP-GAS and TETHENE fluids can be used provided that their stability in the liquid and vapour phase is guaranteed during the storage time and throughout the gas delivery period.
- This booklet and its attachments must be kept with the equipment and be shown to the competent authorities upon request.

TANK SUBJECT TO PERIODIC VERIFICATION

Materials used						Test results								Test certificates				
Member	Nominal thickness MM	Manufacturer	Quality mark and standard table	Casting part or batch №	Sample №	Test orien	Test temp °C	Yield point H/MM2	Break load H/MM2	Elong. %	Bending		Resilience - 40°C		№	Date	Laboratory	ISPESL office
											α/d	Res.	Test type	Joule				
Plating	6,7	SOLLAC SOLMER	P355 N EN 10028-3	730119087 0422045BX		T	Amb.	414 431	550 582	28.8 30.0	180°/3A	G G	KV KV		52	17/02/12	A.MERLONI C.&T.	AN
Bottom 1	6,8	SOLLAC SOLMER	P355 N EN 10028-3	730111984 2222026BX		T	Amb.	438 447	552 592	26.4 26.3			KV KV		25	26/04/12	A.MERLONI C.&T.	AN
Bottom 2	6,8	SOLLAC SOLMER	P355 N EN 10028-3	730120626 2556024AX		T	Amb.	449 400	589 525	27.8 69.6			KV KV		48	01/04/12	A.MERLONI C.&T.	AN
Couplings - feet Supporting material		LEALI S.p.A.															LEALI S.p.A.	B.S.
Pipes	See diagram	LEALI S.p.A.	S355 JR UNI EN 10025	1T39236											HX 289	22/10/10	LEALI S.p.A.	B.S.

NOTES: resilience tests guaranteed by certificates filed in the archives at Antonio Merloni Cylinders & Tanks s.r.l.

POSITION AND RADIOGRAPH RESULTS



Film №	Symbol	Score	Radiological approval
1.			
2.			
3.			
4.			
5.			
6.			
7.			

Name of defects				Score	
A	No defect	D	No defect	1	No defect
B	No defect	E	No defect	2	No defect
C	No defect	F	No defect	3	No defect

BATCH RADIOGRAPH:

FROM FABRICATION № 12MC1050340 TO FABRICATION № 12MC1053720

THE FOLLOWING APPLIANCES PASSED THE TEST:

12MC1053780	12MC1053584	12MC1053619	12MC1053623	12MC1053638
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0



DECLARATION OF CONFORMITY (in compliance with the Attachment VII of the European Directive 97/23/CE)

A: Our equipment is an assembled pressure system:

Name:	LPG UNDER GROUND TANK Ø 1000 MM.		
Fabrication No.:	Drawing No.:	Family:	Type:
12MC105350	2045/170-REV.0-2011	Epox	Vertical

B: Structure of the equipment:

№	Description	Used module	Max acceptable pressure (bar)	Acceptable Temperature °C		Fluid content	Capacity Litres
				Min.	Max.		
1	Tank	B+D	17,65	-40	+50	LPG	1000
2	Safety valve	B+D	17,65	-40	+50		
3	Filling valve	B+D	17,65	-40	+50		
4	Liquid phase delivery valve	B+D	17,65	-40	+50		
5	Service unit	B+D	17,65	-40	+50		
6	Level indicator	A	17,65	-40	+50		
7	Control box of the cathodic protection	According to directive 94/9/CE (atex)					

C: The following conformity assessment procedures are realized: module **B+D**, category **IV**

D: Complete Quality Assurance Certificate which includes structural inspection of the module H1 № 0160/11/CE
CE Structural Control Certificate for the module B1 №0631/11/CE

E: Authorized body INAIL (previously ISPESL) № 0100

F: Consistent and inconsistent norms applied during projecting and constructing. Books “VSR, M, S” and UNI EN 10028, section 3, UNI EN 10025

With reference to the above,

we hereby declare:

1. That the equipment / pressure system described under sections A and B and checked according to the sections C, D, E, F, meets the essential safety requirements specified in the Attachment I of the Directive 97/23/CE applicable to it.
2. Moreover the equipment passed the hydraulic pressure test at 25.25 bar and was given the CE certification.

DIRECTIVE 94/9/CE (ATEX)

The pressure equipment has been manufactured according to the following harmonized standards: EN 13463 - 1 - EN1127-1. The conformity evaluation have been carried out according to Annex VIII of the directive.

The pressure equipment has been marked: **CE Ex II 3 G IIB T4**

Technical file № X001/03.

Matelica, 07/06/2012

Signature of the person in charge, appointed by the
Manufacturer Defined in the European Community.

Antonio Merloni Cylinders Ghergo Group Sp.A

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Plants

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