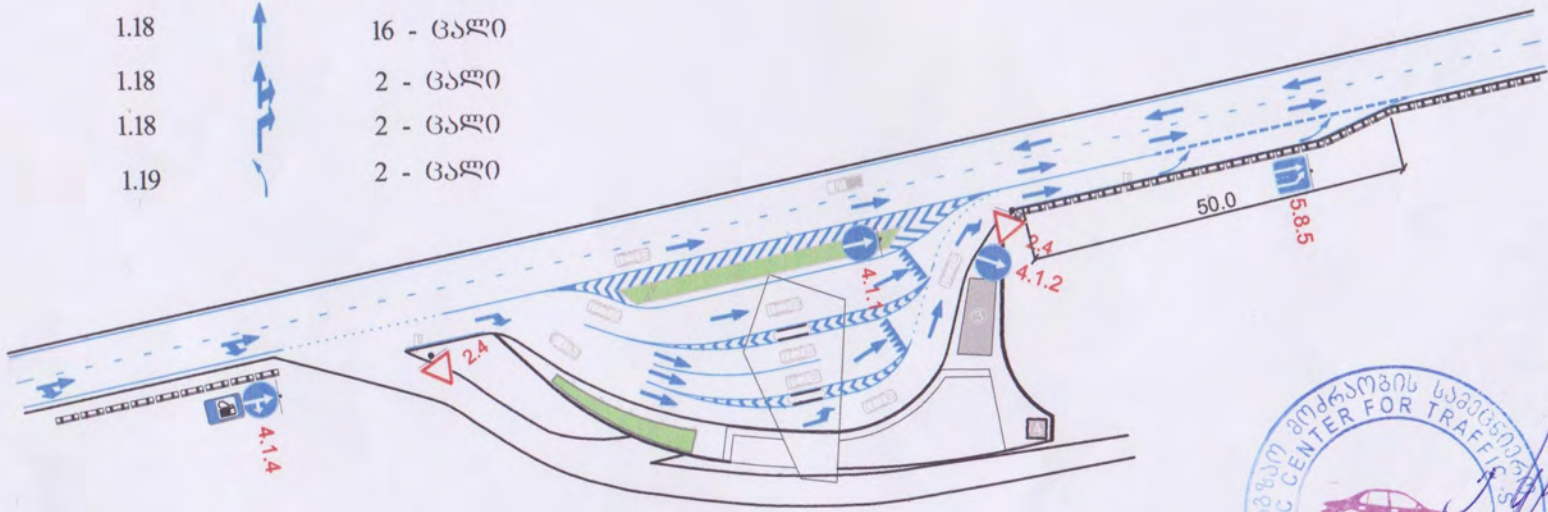
საგზაო ნიშნები და მონიშვნა

2.4		1 - ცალი
4.1.1		1 - ცალი
4.1.2		1 - ცალი
4.1.4		1 - ცალი
5.8.5		1 - ცალი
6.3		1 - ცალი
1.1		350 - მ.
1.2		65 - მ.
1.7		49 - მ.
1.8		34 - მ.
1.13		12 - ცალი
1.16		333 - მ.
1.18		16 - ცალი
1.18		2 - ცალი
1.18		2 - ცალი
1.19		2 - ცალი



"შ ე თ ა ნ ხ მ ე ბ უ ლ ი ა"
ქ. თბილისის მერიის ტრანსპორტის საძალაძო სამსახურის უფროსის მოადგილე
ნ. არჩუაძე

"შ ე თ ა ნ ხ მ ე ბ უ ლ ი ა"
ქ. თბილისის და მცხეთა მთიანეთის საპატრულო პოლიციის მთავარი სამმართველოს უფროსის მოადგილე

საგზაო მოძრაობის სამეცნიერო ცენტრი
ბახტრიონის ქ. 12 ☎ +995(32)38-35-84 email sctsgeorgia@gmail.com

შპს "GLG-GROUP"
ავტომაზგასამართი სადგური ინტენსიფიკაციის ქუჩაზე
საკონტაქტო პიროვნება ლაშა ასათიანი 5 77 200 404

საგზაო მოძრაობის ორგანიზაციის სქემა

მ. 1:1000

საქართველოს შინაგან საქმეთა სამინისტრო
საპატრულო პოლიციის დეპარტამენტი

MINISTRY OF INTERNAL AFFAIRS OF GEORGIA
THE DEPARTMENT OF PATROL POLICE

№ 20/9-1480724 „08“ 11 2012 წ.

შ.პ.ს. “GLG-GROUP“–ის დირექტორს
ბ–ნ **გიორგი დონაძეს**
ტელ. 599 14 50 60; 599 40 40 10;
თქვენს 2012 წლის 24 ოქტომბრის №04–ზე

ასლი: საპატრულო პოლიციის დეპარტამენტის
ქ. თბილისის და მცხეთა–მთიანეთის მთ.
სამმართველოს უფროსის მოადგილეს

ბ–ნ **ლ.ჯოხაძეს**

საპატრულო პოლიციის დეპარტამენტში განხილულ იქნა თქვენი წერილი, რომელიც ეხება ქ. თბილისში, ინტენსიფიკაციის ქუჩაზე ავტოგაზგასამართ სადგურზე მისასვლელად და გამოსასვლელად საგზაო მოძრაობის ორგანიზაციის დროებითი სქემის შეთანხმებას.

ვითვალისწინებთ, რა ქ.თბილისის მერიის ტრანსპორტის საქალაქო სამსახურის თანხმობას საპატრულო პოლიციის დეპარტამენტი ითანხმებს წარმოდგენილ სქემას და არ არის წინააღმდეგი განახორციელოთ ზემოთ აღნიშნული სამუშაოები შემდეგი პირობების გათვალისწინებით:

- მოძრაობის რეგულირების ტექნიკური საშუალებები განთავსდეს წარმოდგენილი დროებითი საგზაო მოძრაობის ორგანიზაციის სქემის შესაბამისად;
- სამუშაოების დაწყება და დამთავრება ეცნობოს საპატრულო პოლიციის დეპარტამენტის სამორიგეო ნაწილს (ტელ. 241 85 04; 241 85 05);

მეორე ადრესატს: გთხოვთ დააწესოთ კონტროლი და ზედამხედველობა ზემოთ აღნიშნული პირობების დაცვაზე და მოძრაობის რეგულირების ტექნიკური საშუალებების განთავსების მდგომარეობაზე თანდართული სქემის შესაბამისად, შეუსრულებლობის შემთხვევაში არ დაუშვათ სამუშაოების წარმოება.

დანართი: “ “ ფურცლად.

პატივისცემით
საპატრულო პოლიციის დეპარტამენტის
II სამმართველოს უფროსი ვალერიან ფრანგიშვილი

თბილისი. კახეთის გზატკეცილი № 38
№ 38 Kahketi Highway, Tbilisi.
ტელ./Tel.: 41 85 02
ფაქსი/Fax: 41 85 02
E-mail: ushba@mia.gov.ge

ქალაქ თბილისის მერიის სსიპ საგანგებო და გადაუდებელი სიტუაციების მართვის სააგენტო

0160 ქ. თბილისი, ცინცაძის ქ. №28 ტელ: 38-62-20; 38-62-25; ფაქსი 38-62-21

2012 წლის „22“ ოქტომბერი № 01/01/610

შპს „GLG-GROUP''-ის დირექტორს
ბატონ გ. დონაძეს

თქვენი ა/წ 19 ოქტომბრის №02 წერილზე გაცნობებთ, რომ განხილული იქნა ქ. თბილისში ნუცუბიძის ფერდობზე ავტოგაზგასამართი სადგურის სამშენებლო პროექტის არქიტექტურული ნაწილი. თანახმად საქართველოში მოქმედი სამშენებლო ნორმებისა და წესების ხანძარსაწინააღმდეგო მოთხოვნებისა საპროექტო დოკუმენტაციაში გასათვალისწინებელია შემდეგი ღონისძიებები:

- ტერიტორიაზე მოსაწყობია 100 კუბ. მ. სახანძრო აუზი.
  საფუძველი: BCH 01-89 პ. 3.5

- საოპერატორო და დამხმარე სათავსოებში მოსაწყობია ავტომატური სახანძრო სიგნალიზაცია.
  საფუძველი: შსს 1999 წლის №472 ბრძანება ცხრილი 1 პ.19

- მიწისქვეშა ავტოსადგომში მოსაწყობია ავტომატური ხანძარქრობის სისტემა.
  საფუძველი: BCH 01-89 პ. 6.1

უფროსის მოადგილე მ. ყირიმელი

"შეთანხმებულია"	„ვამტკიცებ"
გარემოს დაცვის სამინისტროს გარემოს ინტეგრირებული მართვის დეპარტამენტის უფროსი	შეზღუდული პასუხისმგებლობის საზოგადოება "GLG GROUP"-ის ა დირექტორი
/	/ გ. დონაძე /
"17" 2012 წ.	" " 2012 წ.

შეზღუდული პასუხისმგებლობის საზოგადოება "GLG GROUP"

ბუნებრივი აირით ავტოგასამართი სადგური

(ქ. თბილისი, ვაკე-საბურთალოს რაიონი, ფერდობი ნუძუბიძე, ქუჩა ინტენსიფიკაციის, ნაკვეთი 01/213)

ატმოსფერული ჰაერის დაბინძურების წყაროების და მათ მიერ გაფრქვეულ მავნე ნივთიერებათა ი ნ ვ ე ნ ტ ა რ ი ზ ა ც ი ი ს ტ ე ქ ნ ი კ უ რ ი ა ნ გ ა რ ი შ ი

შემსრულებელი:

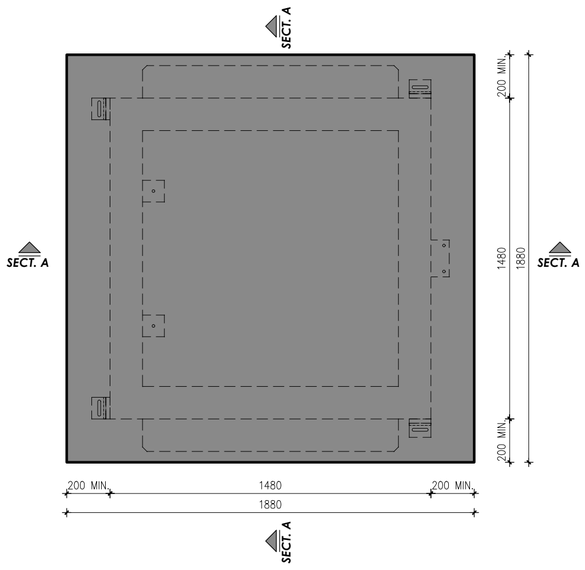
გარემოსდაცვითი საკონსულტაციო ფირმა შპს "ეკოლსერვისი"

დირექტორი ზ. ქვიტაიშვილი

თბილისი - 2012

BASE MAT STRUCTURES

scale 1:20



SECTION A-A MAT

REINFORCEMENT scale 1:10

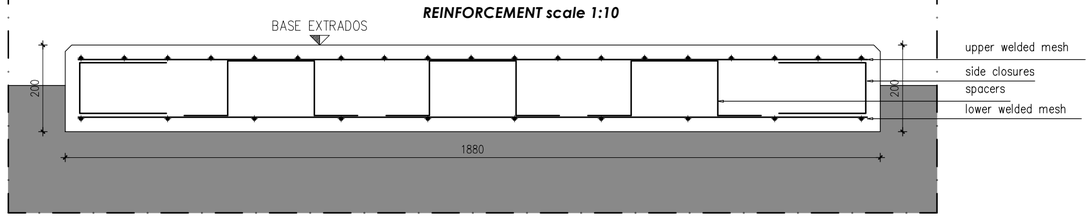
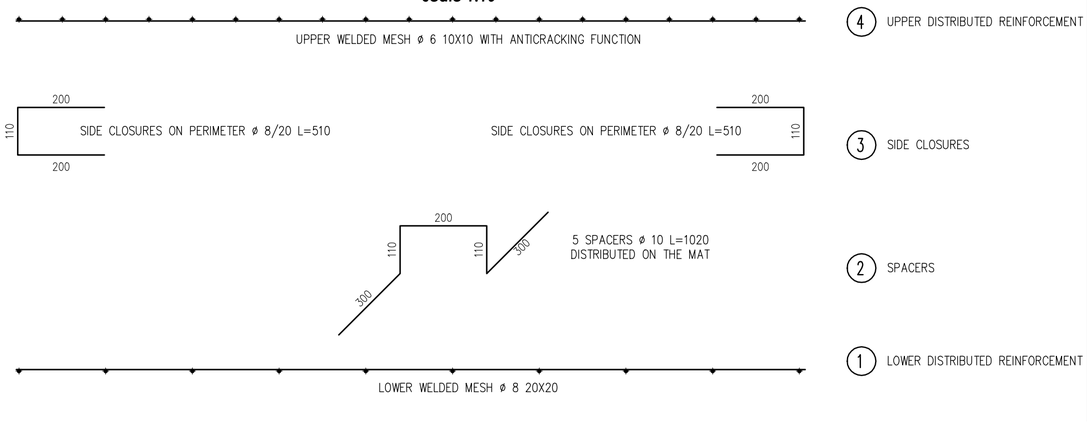
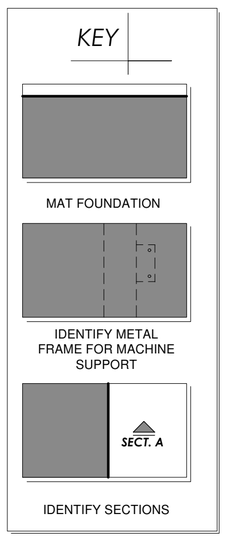


DIAGRAM WITH SEQUENCE AND SPECIFICATIONS FOR LAYING OF MAT REINFORCEMENT

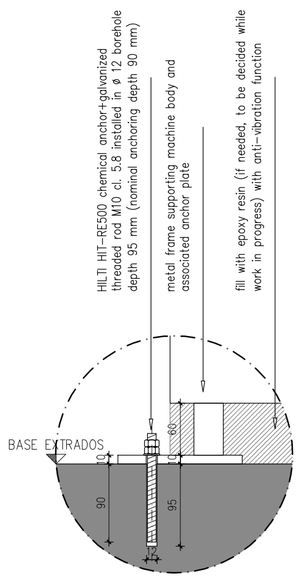
scale 1:10





DETAIL OF ANCHOR

scale 1:5

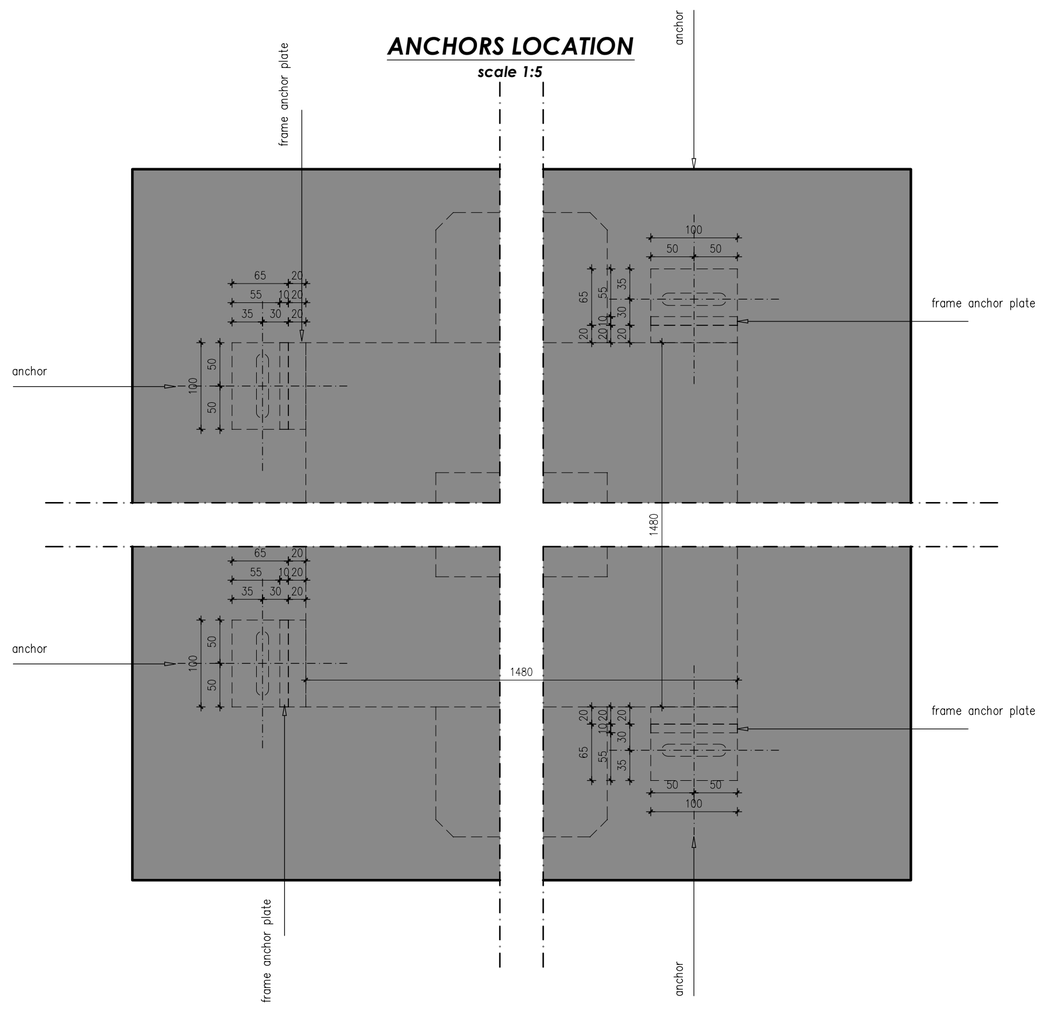


LAYING SEQUENCE AND SPECIFICATIONS

1. DRILL HOLE WITH APPROPPRIATE TIP ONLY AFTER CONCRETE CURING (AT LEAST 30 DAYS FRON LAYING DATE)
2. CLEAN HOLE USING PUMP AND BRUSHES
3. ELIMINATE THE FIRST FOUR PRODUCT QUANTITIES PUMPED, THEN INJECT CONTENT OF CARTRIDGE INTO BOREHOLE
4. INSERT THE THREADED BAR AND WAIT FOR HARDENING TO TAKE PLACE ACCORDING TO THE MANUFACTURER'S INSTRUCTION
5. TIGHTEN NUT WITH THE TORQUE INDICATED BY THE MANUFACTURER THEN INSERT SEFETY CHECK NUT OR, ALTERNATIVELY, LOCK WASHER
6. WITH WORK IN PROGRESS DECIDE WHETER IT IS NECESSARY TO FILL THE GAP BETWEEN FRAME AND EXTRADOS BASE WITH EPOXY RESINEPOSSIDICA

ANCHORS LOCATION

scale 1:5



CHARACTERISTICS OF MATERIALS

- CONCRETE: C25/30 N/sq.mm
- EXPOSURE CLASS: XC2
- CONCRETE CONSISTANCY CLASS: S5/SCC
- MAX. AGGREGATE DIAMETER: 15 mm
- STEEL FOR REINFORCED CONCRETE: B 450 C
- THREADED BARS FOR GALVANIZED CHEMICAL ANCHORS M10 CLASS 5.8
- CHEMICAL ANCHORS TYPE HILTI HIT–RE500

REINFORCED LAYING INSTRUCTIONS

- WELDED MESH OVERLAP AT LEAST TWO MESH.
- REINFORCEMENT COVER: 3 cm.
- WHEN LAYING IN COLD WEATHER USE CEMENT R425 AND SPECIAL ANTIFREEZE MIXED INTO CONCRETE MIX DO NOT LAY CONCRETE IF TEMEPRATURE IS BELOW 0° C).
- IF LAYING IN HOT WEATHER USE CEMENT R325 AND THEN WET THE SURFACE, COVER THE CONCRETE WITH WET NON–WOVEN COTH UNTIL NO MORE WATER CAN BE ABSORBED.
–LEAVE TO CURE AT LEAST 28 DAYS BEFORE INSTALLING AND ANCHORING THE MACHINE.

OTHER INSTRUCTION

- TAKE GREAT CURE IN LIVELLING THE SURFACE OF THE BASE TO ENSURE IT IS PERFECTLY LEVEL: TO THIS END WE ADVISE THE USE OF A METAL STRAIGHT EDGE BAR.
- FIX THE ANCHOR WITH A DOUBLE NUT OR, ALTERNATIVELT, WITH A LOCK WASHER TO ACCOUNT FOR POSSIBLE NEGATIVE EFFECTS ON THE ANCHORS CAUSED BY VIBRATIONS.

REV	DESCRIZIONE – DESCRIPTION	ESEG. EXEC.	CONTR. CONTR.	APPR. APPR.	DATA DATE
1					
0	**Emission**	**M.L.**	**M.L.**	**M.L.**	**04/10/2012**

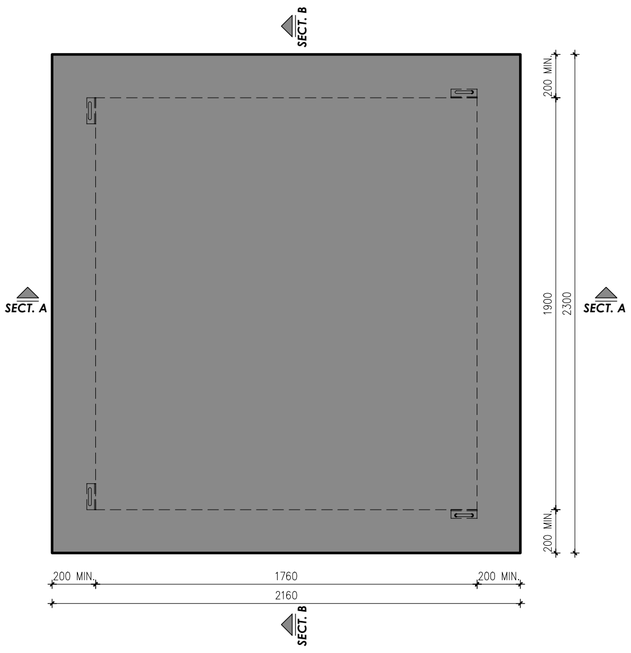
FORNOVOGAS
WE MOVE ENERGY
Via P.M.Curie,14
42122 Reggio E. – Italy
Tel. +390522/557675
r.a. Fax +390522/550112

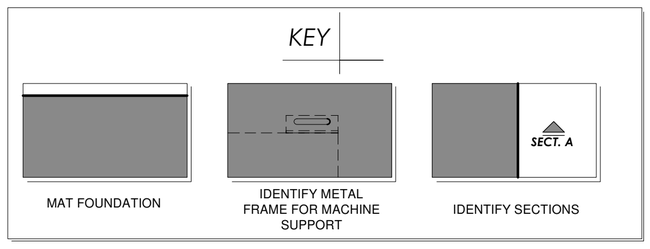
TITOLO: TITLE:	**MAT FOUNDATION FOR MODEL 200 AND DETAIL OF FRAME ANCHOR**
NOTE: NOTES:	
CLIENTE: CUSTOMER:	
Nome File: Nome File:	**PL12000072-0-EN**
Scala: Scale:	**1:5-1:10-1:20-1:50**
Formato: Format:	**A2**

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BASE MAT STRUCTURES

scale 1:20





SECTION A-A MAT

REINFORCEMENT scale 1:10

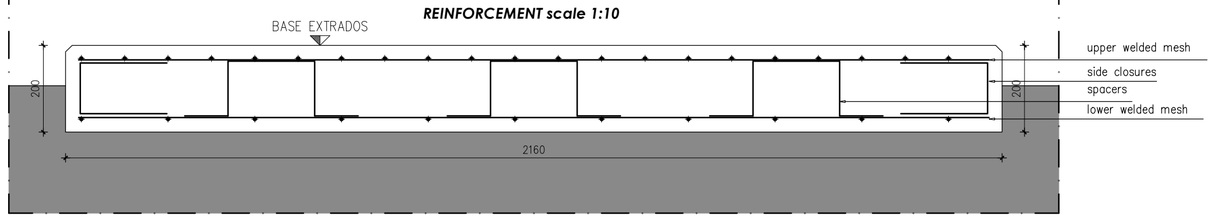
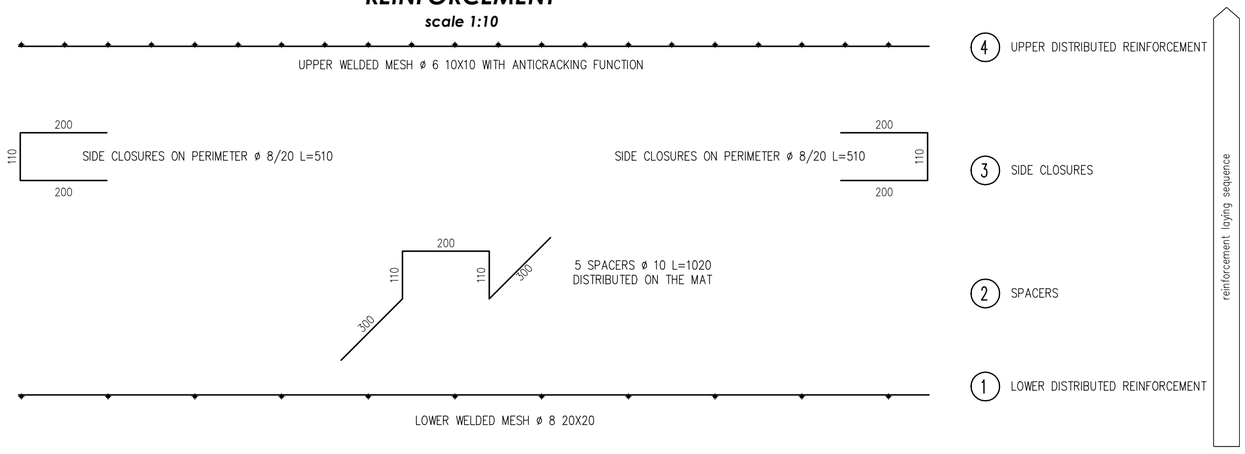


DIAGRAM WITH SEQUENCE AND SPECIFICATIONS FOR LAYING OF MAT REINFORCEMENT

scale 1:10



CHARACTERISTICS OF MATERIALS

- CONCRETE: C25/30 N/sq.mm
- EXPOSURE CLASS: XC2
- CONCRETE CONSISTANCY CLASS: S5/SCC
- MAX. AGGREGATE DIAMETER: 15 mm
- STEEL FOR REINFORCED CONCRETE: B 450 C
- THREADED BARS FOR GALVANIZED CHEMICAL ANCHORS M10 CLASS 5.8
- CHEMICAL ANCHORS TYPE HILTI HIT–RE500

REINFORCED LAYING INSTRUCTIONS

- WELDED MESH OVERLAP AT LEAST TWO MESH.
- REINFORCEMENT COVER: 3 cm.
- WHEN LAYING IN COLD WEATHER USE CEMENT R425 AND SPECIAL ANTIFREEZE MIXED INTO CONCRETE MIX DO NOT LAY CONCRETE IF TEMEPRATURE IS BELOW 0° C).
- IF LAYING IN HOT WEATHER USE CEMENT R325 AND THEN WET THE SURFACE, COVER THE CONCRETE WITH WET NON–WOVEN COTH UNTIL NO MORE WATER CAN BE ABSORBED.
–LEAVE TO CURE AT LEAST 28 DAYS BEFORE INSTALLING AND ANCHORING THE MACHINE.

OTHER INSTRUCTION

- TAKE GREAT CURE IN LIVELLING THE SURFACE OF THE BASE TO ENSURE IT IS PERFECTLY LEVEL: TO THIS END WE ADVISE THE USE OF A METAL STRAIGHT EDGE BAR.
- FIX THE ANCHOR WITH A DOUBLE NUT OR, ALTERNATIVELT, WITH A LOCK WASHER TO ACCOUNT FOR POSSIBLE NEGATIVE EFFECTS ON THE ANCHORS CAUSED BY VIBRATIONS.

SECTION B-B MAT

REINFORCEMENT scale 1:10

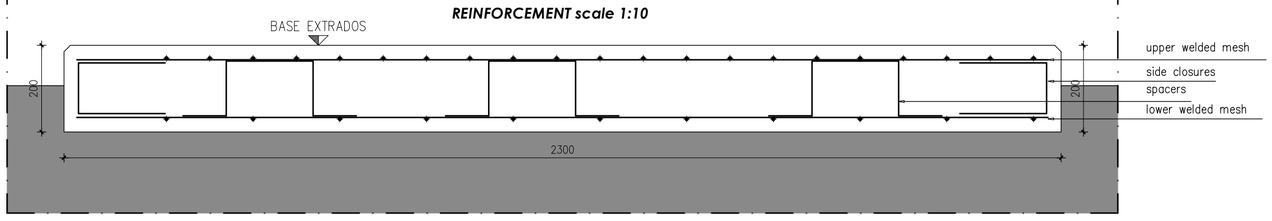
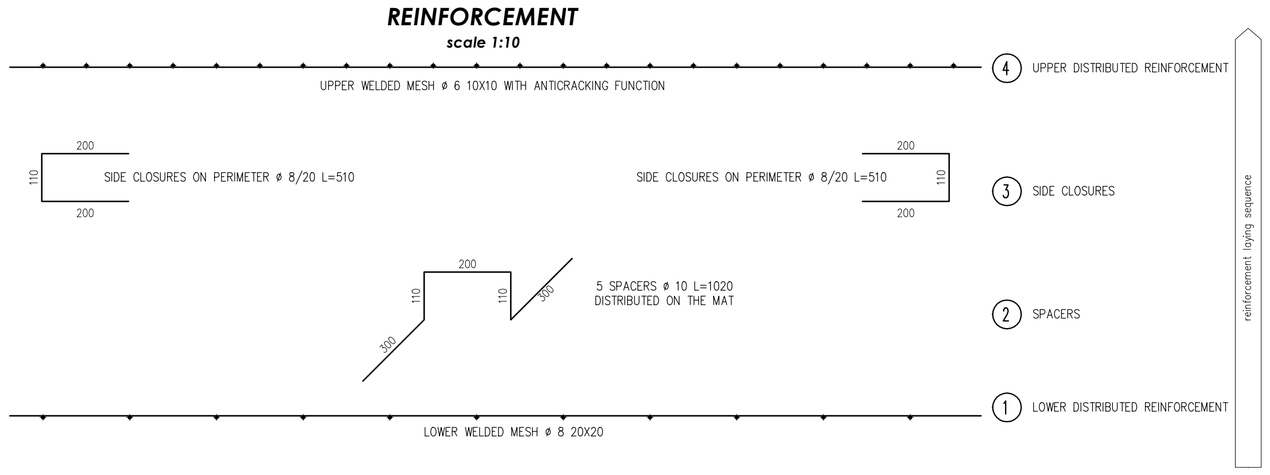


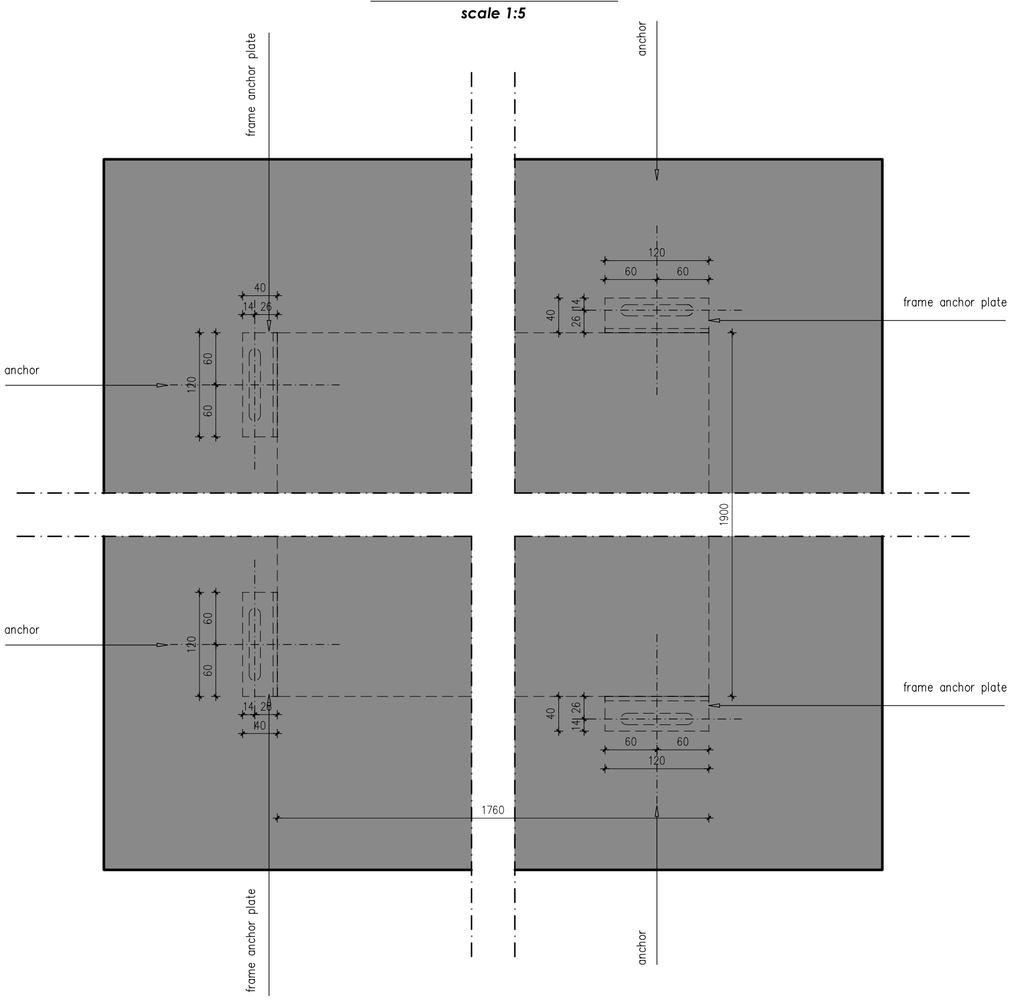
DIAGRAM WITH SEQUENCE AND SPECIFICATIONS FOR LAYING OF MAT REINFORCEMENT

scale 1:10



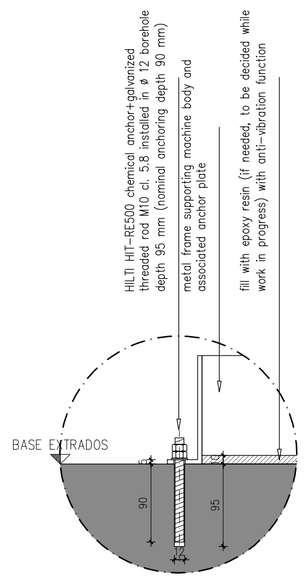
ANCHORS LOCATION

scale 1:5



DETAIL OF ANCHOR

scale 1:5



LAYING SEQUENCE AND SPECIFICATIONS

1. DRILL HOLE WITH APPROPPRIATE TIP ONLY AFTER CONCRETE CURING (AT LEAST 30 DAYS FRON LAYING DATE)
2. CLEAN HOLE USING PUMP AND BRUSHES
3. ELIMINATE THE FIRST FOUR PRODUCT QUANTITIES PUMPED, THEN INJECT CONTENT OF CARTRIDGE INTO BOREHOLE
4. INSERT THE THREADED BAR AND WAIT FOR HARDENING TO TAKE PLACE ACCORDING TO THE MANUFACTURER'S INSTRUCTION
5. TIGHTEN NUT WITH THE TORQUE INDICATED BY THE MANUFACTURER THEN INSERT SEFETY CHECK NUT OR, ALTERNATIVELY, LOCK WASHER
6. WITH WORK IN PROGRESS DECIDE WHETER IT IS NECESSARY TO FILL THE GAP BETWEEN FRAME AND EXTRADOS BASE WITH EPOXY RESINEPOSSIDICA

REV	DESCRIZIONE – DESCRIPTION	ESEG. EXEC.	CONTR. CONTR.	APPR. APPR.	DATA DATE
0	Emission	M.L.	M.L.	M.L.	04/10/2012

FORNOVOGAS WE MOVE ENERGY
Via P.M.Curie,14
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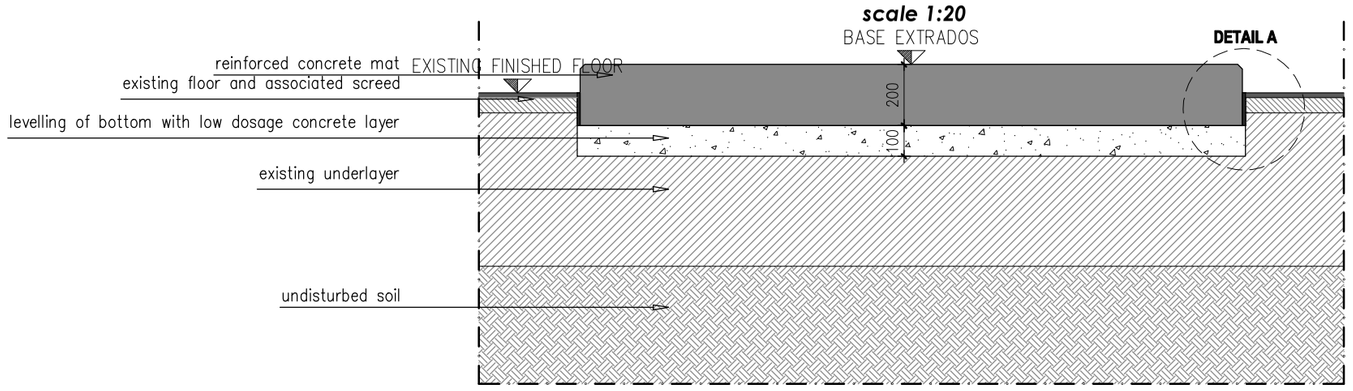
TITOLO: TITLE:	MAT FOUNDATION FOR MODEL 300 AND DETAIL OF FRAME ANCHOR
NOTE: NOTES:	
CLIENTE: CUSTOMER:	
Nome File: Name File:	PL12000073-0-EN
Scala: Scale:	1:5-1:10 -1:20
Formato: Format:	A1

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MAT TYPE SECTION

INSERTION INSIDE EXISTING FLOOR

scale 1:20



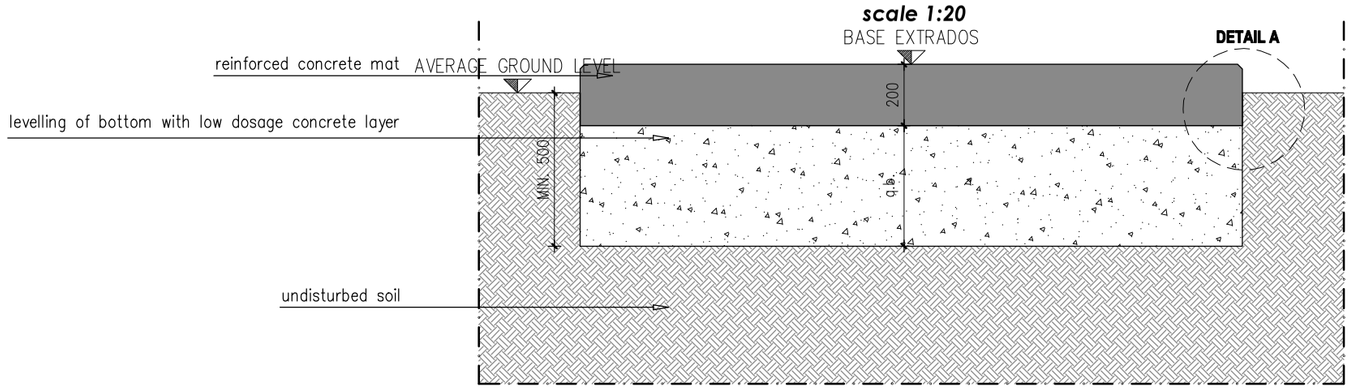
SEQUENCE AND SPECIFICATIONS FOR LAYING

1. EXECUTION OF DUOBLE CUT ON EXISTING FLOOR TO INDICATE SCARIFICATION AREA
2. EXECUTION OF SCARIFICATION UP TO SPRINGING LINE OF EXCAVATION BOTTOM CLEANING JET
3. EXCAVATION BOTTOM JETTING WITH LOW DOSAGE CONCRETE (150 kg CEMENT R 325 PER cm OF MIX)
4. LAYING OF PERIMETER ELASTOMER SLEEVE AND CREATION OF FORMWORK FOR THE PART OF CONCRETE EXCEEDING THE SURROUNDING FINISHED FLOOR LEVEL
5. LAYING OF REINFORCED CONCRETE AND BASE

MAT TYPE SECTION

LAYING ON SOIL

scale 1:20



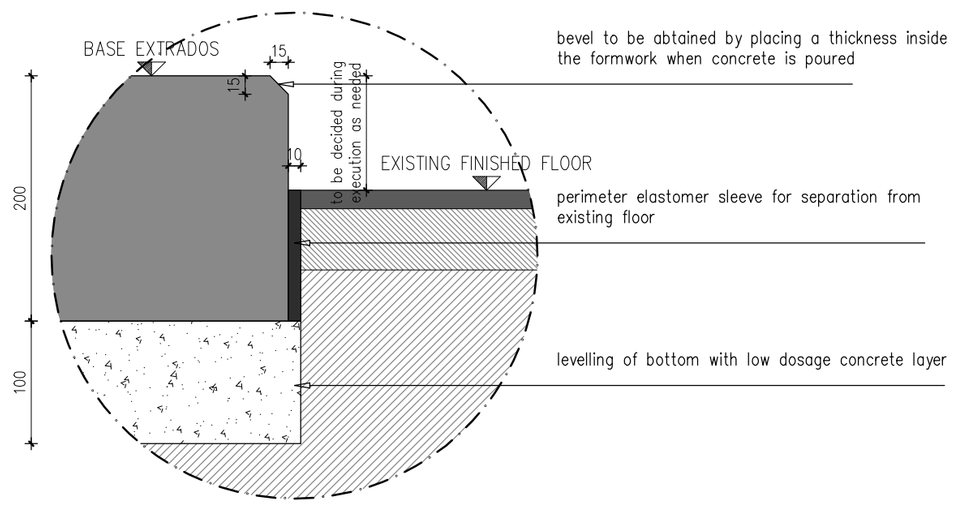
SEQUENCE AND SPECIFICATIONS FOR LAYING

1. SECTION EXCAVATION REQUIRED UP TO SPRINGING LINE OF EXCAVATION BOTTOM CLEANING JET (AT LEAST 50 cm FROM AVERAGE GROUND LEVEL)
2. EXCAVATION BOTTOM JETTING WITH LOW DOSAGE CONCRETE (150 kg CEMENT R 325 PER cm OF MIX)
3. LAYING OF FORMWORK FOR PART OF CONCRETE EXCEEDING AVERAGE GROUND LEVEL
4. LAYING OF REINFORCED CONCRETE AND BASE

DETAIL A

INSERTION INSIDE EXISTING FLOOR

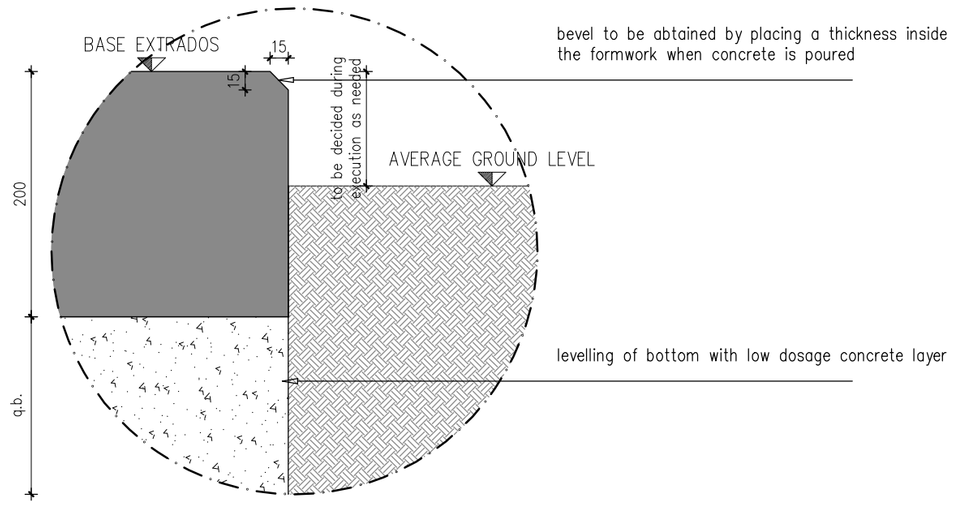
scale 1:5



DETAIL A

LAYING ON SOIL

scala 1:5



NOTES

– LAYING INSTRUCTION REFER TO INSTALLATION ON GROUND WITH MAXIMUM PRESSURE AT CONCRETE BASE INTRADOS EQUAL TO 0.37 daN/sq.cm. FOR INSTALLATION ON ELEVATED FLOORS, CARRY OUT STATIC CHECK TO VERIFY CAPACITY FOR EACH SPECIFIC CASE.
–IN CASE OF GROUND INSTALLATIONS ON INDUSTRIAL FLOORS, CONSIDER POSSIBILITY OF LAYING DIRECTLY ON FLOOR DEPENDING ON THE MECHANICAL PERFORMANCE AND CONDITION OF THE FLOOR.
–FOR OUTDOOR INSTALLATION, EVEN IF SHELTERED, CONCRETE SURFACES WILL NEED TO BE PERIODICALLY TREATED WITH ELASTOMERIC PAINT, PERMEABLE TO STEAM, MADE WITH ACRYLIC RESINS IN WATER DISPERSION. THE FIRST APPLICATION MUST BE NOT EARLIER THAN 30 DAYS FROM BASE LAYING DATE.
–LAYING INSIDE EXISTING FLOORS REQUIRES THAT THE UNDERLAYER BE ALREADY SUFFICIENTLY COMPACTED. IF THESE CONDITIONS DO NOT EXIST, THE EXISING UNDERLAYER WILL NEED TO BE COMPLETELY SCARIFIED AND REPLACED WITH LOW DOSAGE CONCRETE AND THIS THICKNESS MUST BE SUFFICIENT TO REACH THE UNDISTURBED SOIL..
–THE BASE INDICATED IS DESIGNED IN TERMS OF GEOMETRY AND EXPECTED CECHANICAL PERFORMANCE FOR THE SUPPORT OF THE COMPRESSOR OF THE TYPE AND MODEL SPECIFIED. ANY ADDITIONAL WEIGHT BEARING ON THE BASE WILL NEED TO BE PREVIOUSLY EVALUATED TO ENSURE THAT IT IS COMPATIBLE WITH THE PROPOSED MAT.
–FOR CONDITIONS NOT COVERED BY THE CASES SPECIFIED HEREIN, CONSULT YOUR SUPPLIER FOR INSTRUCTIONS ON THE CREATION OF BASES FOR THE MECHANICAL COMPONENTS..

ALTIMETRIC DIMENSIONS

– THE BASE EXTRADOS LEVEL WILL BE DEFINED IN ACCORDANCE WITH CONTINGEN NEEDS MEASUREMENT

MEASUREMENT

– ALL DIMENSIONS ARE IN MILLIMETERS (mm).

REV	DESCRIZIONE – DESCRIPTION	ESEG. EXEC.	CONTR. CONTR.	APPR. APPR.	DATA DATE
1					
0	**Emission**	**M.L.**	**M.L.**	**M.L.**	**04/10/2012**

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TITOLO: TITLE:	**PREPARATION OF MOUNTING FOR MAT FOUNDATION: MODEL 200 AND 300**	Nome File: Name File: **PL12000074-0-EN**
NOTE: NOTES:		Scala: Scale: **1:5-1:20**
CLIENTE: CUSTOMER:		Formato: Format: **A2**

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Registro Imprese di Reggio Emilia
Cod. Fisc. e P.IVA 00309340354
REA RE 131516

Reggio Emilia, 29/10/2012

ТО. ДЛЯ
GLG GROUP
Tbilisi, GEORGIA

Our ref. n°: M1200307/REV2

Our code: C1457

Subject: **Supply of *GasVector* compression unit skid-mounted– "TBILISI, yl Nutsubidze" Project, our offer ref. M1200307/REV2** (*please mention this reference in all correspondence*)
Тема: **Поставка компрессорной установки на раме в собственном здании для контейнера (машинное отделение).**
Проект АГНКС ТБИЛИСИ УЛИЦА НУЦУБИДЗЕ ,
Наша предложение M1200307/REV2 (просьба указывать этот номер в переписке)

Dear Sirs,
Уважаемые господа,

Further to your kind request, we are sending our revised technical and commercial proposal for the compression unit in question.
Согласно вашему запросу, мы отправляем вам техническое и коммерческое предложение по компрессорной установке.

DESCRIPTION OF THE SUPPLY

ОПИСАНИЕ ПОСТАВКИ

The supply includes/ Поставка включает в себя:

POS	DESCRIPTION	QUANTITY
1	Gas Vector compression unit on open skid, hourly flow rate 475-900 Sm3/h at suction pressure of 0,2-1,2 bar g, electric motor power 200 kW. ГазВектор компрессорная установка на открытой раме, часовая производительность 475-900 стандартных кубических метров в час при давлении на входе 0.2-1.2 bar g, 200 кВатт электорический мотор.	1
2	Automatic dispenser with twin connector 2 lines Автоматическая колонка двухпостовая 2 уровня газа	2
3	Gas storage 1120 litres – Аккумуляторы газа на 1120 литров	1
4	Spare Parts for 6000 working hours – Набор 6000 часов работы	1
5	Discharge gas chiller – Чиллер охлаждения газа на выходе	1
6	Parts needed to complete the system and assembly Части необходимые чтобы закончить и собрать систему	1
7	Gas delivery line - Линия газа на выходе.	37 m

All the photographs and/or drawings in this offer are for guidance only. Modifications may be made to products without notice.

Все фотографии и рисунки в этом предложении только для ознакомления. В любое время могут быть осуществлены модификации без предварительного уведомления.

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Содержание

1. **GENERAL PROJECT DATA**
   Общие исходные данные

2. **STANDARDS AND LEGISLATION**
   Стандарты и нормативы

3. **DETAILED DESCRIPTION OF THE SUPPLY**
   Детальное описание поставки

3.1. GASVECTOR WITH ENCLOSURE
ГАЗВЕКТОР В СОБСТВЕННОМ ЗДАНИИ.

3.1.1 SKID-MOUNTED COMPRESSOR UNIT
Компрессорная установка на раме (скид)
3.1.2 EXTERNAL COOLING SYSTEM
Внешняя система охлаждения
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Электрический щит и панель управления.

3.2. AUTOMATIC COMPRESSED GAS DISPENSER
Автоматические автозаправочные колонки

3.3. MATERIALS, ASSEMBLY, COMMISSIONING AND COMPLETION OF THE SYSTEM
Материалы, сборка, проверка и завершение системы.

3.4. OPTIONS
Опции.

4. **DOCUMENTATION**
   Документация.

5. **NOT INCLUDED IN THE SUPPLY**
   Что не включено в поставку.

6. **CLIENT'S DUTIES**
   Доп.условия клиента.

7. **PRICE AND TERMS**
   Цены и условия.

7.1. PRICE LIST
Прайс-лист

7.2. TERMS AND CONDITIONS
Сроки и условия.

8. ATTACHMENTS
Приложения.

8.1. General Terms of Sale
Общие условия продаж.

1. GENERAL PROJECT DATA
Общие исходные данные

Type of gas Тип газа	■ STD Natural Gas (see table below) □ Gas Analysis (attached)
Dew point of gas Точка росы газа	At least 10°C below the minimum design ambient temperature Как минимум на 10С ниже минимально возможной температуры окружающей среды
Gas input temperature Температура газа на входе	15 °C
Gas density Плотность газа	0.65 - 0.85 kg/Sm3
Design environment temperature Температура окружающей среды	Min: -20 ° C, Max: +40 °C
Gasvector supply Питание ГазВектора	three phase A.C. + pe
Voltage Напряжение	400 V , + / - 5 %
Frequency Частота	50 Hz
Dispenser supply (if applicable) Питание колонки (если есть)	230 V, +/ - 5 %
Frequency Частота	50 Hz

STANDARD NATURAL GAS COMPOSITION

Состав стандартного натурального газа

Component	Typical analysis (% mol)	Limits (% mol)
Methane	94.9	87.0 - 96.0
Ethane	2.5	1.8 - 5.1
Propane	0.2	0.1 - 1.5
i-Butane	0.03	0.01 - 0.3
n-Butane	0.03	0.01 - 0.3
i-Pentane	0.01	traces - 0.14
n-Pentane	0.01	traces - 0.04
Hexane	0.01	traces - 0.06
Nitrogen	1.6	1.3 - 5.6
Carbon dioxide	0.7	0.1 - 1.0
Oxygen	0.02	0.01 - 0.1
hydrogen	traces	traces - 0.02

ISO 15403:2006 Requirements

2. STANDARDS AND LEGISLATION
Стандарты и нормативы

The system of equipment included in this offer bears the CE mark and thus meets the essential requisites of all EC directives that apply to it. In particular:

DIRECTIVE	FIELD OF APPLICATION
97/23/EC (PED)	Pressure Equipment
94/9/EC (ATEX)	Equipment (electrical and non electrical) designed to operate in potentially explosive environments
98/37/EC (MSD)	Machines Directive
04/108/EC (EMC)	Electromagnetic Compatibility

Main standards applied during the engineering of the system (partial list):

FIELD OF APPLICATION	STANDARD
Compressor	IEC/EN1012/API
Pipes and fittings	API/ASTM/ANSI/DIN
Electric motors	IEC
Electrical equipment	IEC/EN60079-14/EN60204/EN60439
Dispensers	IEC
Pressure vessels	ASTM/ISPESL

3. DETAILED DESCRIPTION OF THE SUPPLY Детальное описание поставки

3.1 GASVECTOR SKID ГазВектор на раме (Скид)

3.1.1 SKID-MOUNTED COMPRESSOR UNIT
Компрессорная установка на раме

3.1.1.1 Compressor specifications

Спецификация компрессора

Compressor Компрессор	**4DA300**	
Number of compression stages/cylinders Количество ступеней сжатия/цилиндров	**4/3**	
Suction pressure (bar g) Давление на входе в бар избыточное	**0,2**	**1,2**
Flow rate (Sm^3/h) Производительность в стандартных кубических метрах в час	**475**	**900**
Absorbed power (kW) Потребляемая мощность в кВатт	**131**	**196**
Max delivery pressure (bar g) Максимальное давление на выходе в бар изб.	**250**	
Motor power (kW) Мощность электромотора	**200**	
Rated rotation speed (rpm) Скорость вращения мотора	**1500**	
Compressor skid suitable for installation in hazardous zone: (EN60079/10) Компрессор предназначен для установки в следующий класс опасных зон	**Zone 2**	
Tolerance:+/- 5%; Specifications refer to standard conditions (Outside temperature = 15° C, atmospheric pressure = 1.013 bar. Допустимая погрешность +-5%. Спецификация ссылается на стандартные условия (внешняя температура = 15С, атмосферное давление = 1.013 бар).		

3.1.1.2 Compressor equipment

Компрессорное оборудование

POS	DESCRIPTION ОПИСАНИЕ	YES/NO
1	Non-lubricated cylinders Безсмазываемые цилиндры	■ YES
2	Liquid-cooled cylinders Охлаждаемые жидкостью цилиндры	■ YES
3	**Blowdown unloading system (vessels supplied loose) Система blow-down разгрузки ступеней компрессора (баллоны поставляются в разобранном виде –не смонтированными).**	■ YES

3.1.1.3 Compressor operation

Операция компримирования.

POS	DESCRIPTION ОПИСАНИЕ	YES/NO
1	Direct connection with flexible joint Прямое соединение посредством вискомуфты	■ YES
2	Safety guard for moving parts Защита вращающихся частей	■ YES
3	OPERATED BY ELECTRIC MOTOR Привод электромотором	■ YES
4	Motor power (kW) Мощность мотора в кВатт	**200**
4A	Number of poles Кол-во полюсов	**4**
4B	Power supply voltage (V) - frequency (Hz) Напряжение-частота	400 - 50
4C	Inverter (excludes 4E) Инвертер	■ NO
4D	Delta/star starter (excludes 4D) Запуск дельта/звезда	■ YES
5	OPERATED BY INTERNAL COMBUSTION ENGINE Привод от двигателя внутреннего сгорания	■ NO

3.1.1.4 Lubrication Circuit

Контур смазки

POS	DESCRIPTION ОПИСАНИЕ	YES/NO
1	Lubrication circuit for the crank mechanism produced by Fornovo Gas Контур смазки для механизма вращения, сделанный Форново Газ	■ YES
2	Pipes and fittings in galvanized carbon steel Трубы и фитинги из гальванизированной углеродистой стали	■ YES
3	Oil/water heat exchanger for cooling of the crank mechanism oil Теплообменник масло/вода для охлаждения вращательного механизма	■ YES
4	Oil pressure control valve Клапан контроля давления масла	■ YES
5	Full flow particulate filter Фильтр масляной	■ YES
6	Oil pump operated by the compressor (std - excludes 7) Масляный насос с приводом от компрессора	■ YES
7	Oil pump operated by independent EM (opt. - excludes 6) Масляный насос с независимым мотором	■ NO
8	**Oil heater for cold climates** **Нагреватель масла для холодных климатов**	■ YES
9	Oil pressure transmitter for continuous monitoring of oil pressure Датчик давления масла для постоянного контроля давления масла	■ YES
10	Oil temperature transmitter for continuous monitoring of oil temperature Датчик температуры масла для постоянного контроля температуры масла	■ YES
11	Low-oil switch	■ YES

	Сигнал низкого уровня масла	
12	Visual indicator of oil level and pressure gauge for control of oil pressure Визуальных индикатор уровня масла и датчик для контроля давления масла	■ YES
13	Differential manostat for control of oil filter blockages Дифференциальный маностат для контроля масляного фильтра	■ YES
14	First oil fill Первичное наполнение масла	Included Включен

3.1.1.5 Cooling circuit

Контур охлаждения

POS	DESCRIPTION ОПИСАНИЕ	YES/NO
1	**LIQUID COOLING Жидкостное охлаждение**	■ YES
1A	Skid-mounted cooling circuit produced by Fornovo Gas Смонтированный на раме контур охлаждения сделанный Форново Газ	■ YES
1B	Skid-mounted shut-off valves and drain Размещенные на раме клапаны и дренаж	■ YES
1C	Coolant pressure transmitter for continuous monitoring of the coolant pressure Датчик давления охладительной жидкости для постоянного мониторинга давления хладогента	■ YES
1D	Coolant temperature transmitter for continuous monitoring of the coolant temperature Датчик температуры хладогента для постоянного мониторинга температуры хладогента	■ YES
1E	Flow switch (opt.)	■ NO

3.1.1.6 Gas circuit

Контур газа

POS	DESCRIPTION ОПИСАНИЕ	YES/NO
1	**SKID SUCTION LINE (from the output flange on the measurement system to the input connection on the compressor)** **Линия на вход в СКИД (от выходного фланца на узле учета газа до входа в компрессор)**	
1A	Manually operated shut-off valve Ручной кран открыт/закрыт	■ YES
1B	Pneumatically operated shut-off valve Пневматический клапан открыт/закрыт	■ YES
1C	Particulate filter Фильтр частиц	■ 1μm
1D	Safety valve (std for enclosure version - opt. for skid mounted) Предохранительный клапан (стандарт для контейнера, опция для рамы)	■ NO
1E	Liquid separator (opt.) Жидкостный сепаратор	■ NO
1F	Suction pressure transmitter for continuous monitoring of the suction	■ YES

	pressure Датчик давления на вход для постоянного мониторинга давления на вход	
1G	Pressure regulating valve – КЛАПАН-РЕДУКТОР НА ВХОДЕ НА 1.2 бара	■ NO
2	**COMPRESSOR Компрессор**	
2A	Interstage liquid separators (opt.) Межступенчатые жидкостные сепараторы	■ NO
2B	Interstage safety valves Межступенчатые предохранительные клапана	■ YES
2C	Interstage water/gas tube exchangers Межступенчатые трубы-теплообменники вода/газ	■ YES
2D	Pneumatically operated interstage shut-off valves Пневматические межступенчатые клапана открыт/закрыт	■ YES (if necessary)
2E	Pressure transmitters for continuous monitoring of delivery pressure at each compression stage Датчики давления для постоянного контроля давления на выходе из каждой ступени	■ YES
2F	Temperature transmitters for continuous monitoring of delivery temperature at each compression stage (opt.) Датчики температуры для постоянного мониторинга давления на выходе каждой ступени сжатия	■ NO
3	**SKID DELIVERY LINE** **Линия газа на выход из Скида (рамы)**	
3A	Safety valve Предохранительный клапан	■ YES
3B	Number of delivery lines Количество линий на выход	■ 1 □ 2 □ 3
3C	Liquid separator (opt.) Сепаратор жидкости	■ NO
3D	**Priority panel – 1 line -** supplied loose, with: 1 pressure transmitter and 1 pneumatic valve for each delivery line, with adjustment of settings from the control panel. Панель приоритета предоставляет смонтированной, но отдельно с 1 датчиком давления и одним пневматическим клапаном для каждой линии на выход, с корректировкой уставок из электрического щита	■ YES
4	**SKID VENT LINE Линия на свечу**	
4A	Vent manifold: collects slow and fast draining material from the compressor, safety valves, drains. Линия на свечу собирает медленные и быстрые частицы из дренажа от компрессора, предохранительных клапанов, сливов.	■ YES
5	**SKID MATERIALS** **Материалы Скида (Рамы)**	
5A	Piping for welding (ND> 38) Трубы для сварки	■ C Steel (ST) □ Stainless steel 300 series
5B	Tubing (ND <= 38) Трубы	■ C Steel (ST) □ Stainless steel 300 series
5C	Fittings for tubing Фитинги для труб	■ C steel (ST) □ Stainless steel 300 series
5D	Gas valves Газовые клапана	■ C steel (ST) □ Stainless steel 300 series

3.1.1.7 On Board

На раме

POS	DESCRIPTION ОПИСАНИЕ	YES/NO
1	Air circuit for tools on the skid produced by Fornovo Gas Пневмоконтур для управления устройствами, сделанный Форново Газ	■ YES
2	Emergency button on the skid Кнопка аварии на раме (скид)	■ YES
3	Instrument cabling on the skid Кабели к инструментам на раме	■ YES

OVERALL DIMENSIONS OF THE *GasVector* COMPRESSOR SKID (APPROX).

Приблизительные размеры ГазВектора компрессорной установки.

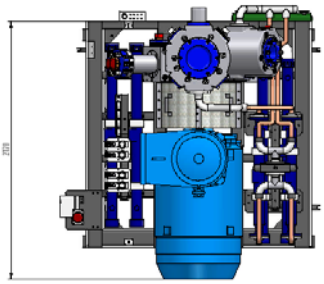
DA COMPRESSORS

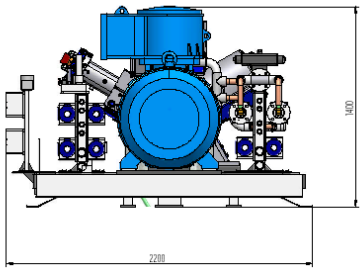
Length Длина m 2.3

Width Ширина m 2.2

Height Высота m 1.4

Weight Вес kg 5.500 APPROX приблизительно







Skid-mounted DA300 GasVector Compressor.

Компрессорная установка DA300 GasVector, смонтированная на раме (скиде

3.1.2 EXTERNAL COOLING SYSTEM
Внешняя система охлаждения

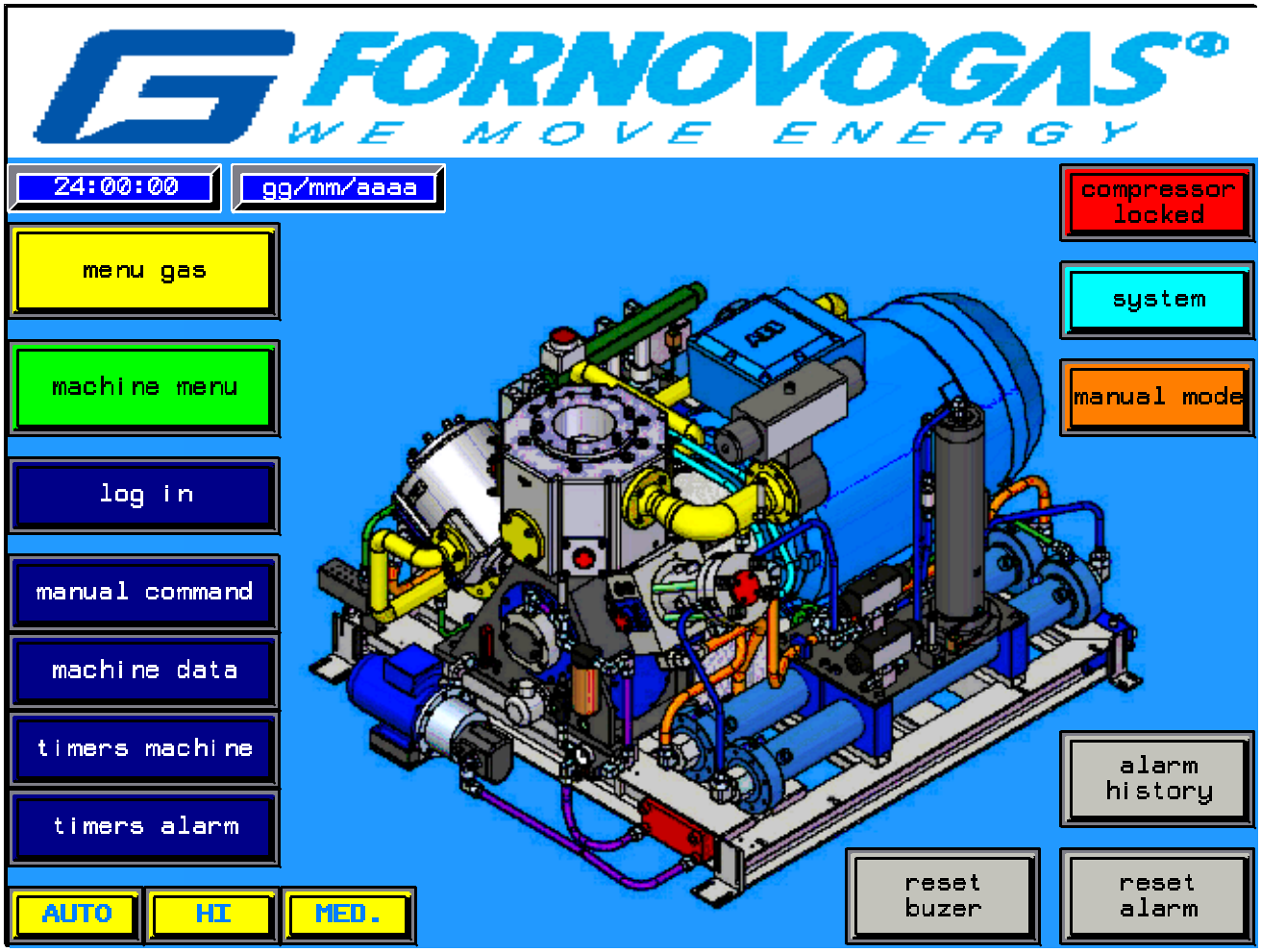
POS	DESCRIPTION ОПИСАНИЕ	YES/NO
1	Water/air unit cooler suitable for local installation: Теплообменник вода/воздух для установки в месте	■ Safe безопасн. □ Hazardous Опасное
2	Circulation pump suitable for local installation: Насос циркуляции для установки в месте	■ Safe безопасн. □ Hazardous Опасное
3	Unit cooler + pump supplied preassembled with pipes and valves Установка теплообменник и насос вместе с предустановленными трубами и клапанами	■ YES □ NO
4	Position: Позиция	□ roof крыша (subject to assessment of classification) ■ ground земля

3.1.3 SUPPLY AND CONTROL PANEL
Электрический щит и панель управления.

POS	DESCRIPTION ОПИСАНИЕ	YES/NO
1	**Electric power supply and control panel made of metal in colour RAL7035, degree of protection IP54, power supply 400V 50Hz 4P, 15kA DC, room temp. -20/+40°C, internal ventilation system and anti-condensation heater. Suitable for installation in safe area.** **Электрический щит и панель управления, сделанный из метала в цвете RAL7035, уровень защиты IP54, питание 400 Вольт, 50 Гц, 4 фазы, 15 кАмпер DC, температура внутри -20/+40C, внутренняя система вентиляции и нагреватель антиконденсат. Предназначен для установки в безопасной зоне.**	■ Supplied loose предоставлен отдельно □ In dedicated cabinet room (safe area) в контейнере
2	**POWER SECTION** **Секция питания**	
2A	Control panel cut-off device with door locking handle Контрольная панель с выключателем и с ручкой для закрытия двери	■ Disc. Switch (STD) □ Aut. Diff. Sw
2B	Class I+II overvoltage dischargers Класс I+II снятия перенапряжения	■ YES
2C	Type of compressor motor starter Тип стартера мотора компрессора	■ Y/D (STD) □ Inverter
2D	Direct starting of auxiliary motors, protection with overload cut-out Прямой запуск вспомогательных моторов, защиты с отключением при перенагрзки	■ YES
3	**CONTROL SECTION** **Секция контроля**	
3A	Standard control based on final pressure Стандартный контроль, основанный на давлении на выход	■ YES
3B	Control based on flow rate (opt.) Контроль, основанный на производительность (если задана)	■ NO
3C	Control with adjustment of speed (opt. - only with inverter)	■ NO

	Контроль по скорости вращения (только в случае с инвертером)	
3D	Control with lamination valve on the suction line (opt.) Контроль по клапану на давлении на вход	■ NO
3E	Control with loop system (opt.)	■ NO
3F	Control with exclusion of compression effects (opt.)	■ NO
4	**HUMAN - MACHINE INTERFACE (HMI)** **Интерфейс человек-машина**	
4A	Colour touch screen on panel front Цветной экран на передней панели	□ 5.7” ■ 10” (STD) □ other size
4B	Pushbuttons and lights on the front of the panel for control and signals Кнопки и огни на передней панели для контроля и сигнализирования	■ YES
4C	Emergency mushroom pushbutton with manual reset on the front of the panel Кнопка аварии в виде гриба с ручной перезагрузкой на передней панели	■ YES
4D	Ready for remote signalling of operation and blockage, compressor stop Предустановлен для удаленного сигнализирования операций блокировки, остановки компрессора	■ YES
4E	External sound-light warning column (safe area) (opt.) Внешний светошумовой динамик (безопасная зона) (опция)	■ NO
4	Ready for external emergency release Предустановлен для аварийного запуска	■ YES
5	**REMOTE COMMUNICATION** **Удаленное сообщение**	
5A	No.1 Ethernet port available on the HMI, it can be used as Web gate Кол-во 1 Ethernet port, установлен на интерфейсе и можем быть использован как web gate	■ YES
5B	No.1 serial port 485, Unitlway protocol for communication with the Schneider PLC Кол-во 1 шт серийный порт 485, Unitlway protocol для сообщения с Schneider PLC	■ YES

Touch Screen



3.1.4 GAS STORAGE
АККУМУЛЯТОРЫ ГАЗА.

- **Qty: 2**

The storage system enables the refuelling of some cars without the need for the compressor to immediately start running, and so limiting the number of times it starts up to save energy and wear on equipment.

Drainage system: not necessary (no lube compressor).

Система аккумуляторов газа позволяет заправлять некоторое количество автомобилей без необходимости включать компрессор, тем самым это снижает количество пусков, позволяет сэкономить электроэнергию и снижает износ оборудования.

POS	DESCRIPTION ОПИСАНИЕ	YES/NO
1	Total geometric volume (litres) Общий геометрический объем (в литрах)	1,120 litres
2	Number and geometric volume of each container Количество и геометрический объем каждого баллона.	14 x 80 litres
3	Maximum operating pressure	250 bar

	Максимальное рабочее давление	
4	Design pressure Спроектированное давление	275 bar
5	Number of sections Количество секций.	■ 1 □ 2 □ 3
6	Safety valve and pressure gauge for each section Предохранительные клапана, краны дренажа и датчики давления на каждой секции.	■ YES
7	Storage position Установка баллонов	■ Supplied in open skid поставка на собственной раме

3.2 AUTOMATIC COMPRESSED GAS DISPENSER
Автоматические газонаполнительные колонки

Dispensers of compressed natural gas, approved by the Ministry of the Interior and with metric approval in Italy, measure the actual amount of gas (kg) dispensed to the vehicle, regardless of its pressure, temperature and density. Dispensers are all made with a **double galvanised and painted metal frame.**

Колонки сжатого натурального газа, сертифицированные МВД, апробированы в Италии как измерительные единицы. Опредляют текущее количество газа (в кг) заправленное в машины, внезависимости от его давления, температур, плотности. Корпус колонок сделан из двойной гальванизированной стали.

3.2.1 Features
Данные

POS	DESCRIPTION ОПИСАНИЕ	OPTION
1	Number of refuelling points Количество постов	□ 1 ■ 2
2	Number of refuelling lines Количество заправляющих линий	□ 1 ■ 2 □ 3
3	Maximum operating pressure (bar g) Максимальное рабочее давление в бар изб.	220
4	Design pressure (bar g) Спроектированное рабочее давление бар изб.	250
5	Maximum flow rate (kg / min) Максимальный поток (кг/мин)	12
6	Minimum flow rate (kg / min) Минимальный поток (кг/мин)	1,5
7	Measuring accuracy Погрешность	+/- 1%

3.2.2. Hydraulic section (for each refuelling line)

Гидравлическая секция (для каждой заправляющей линии)

POS	DESCRIPTION ОПИСАНИЕ	OPTION
1	Manual shut off valve, installed in the trap. Ручной клапан, установленный на колонке.	■ YES
2	Excess flow valve (opt.)	■ NO
3	Pneumatically operated shut-off valve Пневматические клапана	■ YES
4	Check Valve Клапан проверки	■ YES
5	Mass meter – Micromotion Расходомер Микромоушен	■ YES
6	Pressure reducer (opt.) Редуктор давления опция	■ NO
7	Pressure gauge Измеритель давления	■ YES

3.1.1 Hose assembly

Шланги

POS	DESCRIPTION ОПИСАНИЕ	OPTION
1	Twin hose Двойной шланг	■ YES
2	Excess flow valve (opt.) Клапан превышения потока (опция)	■ NO
3	Break away Разрывная муфта	■ YES
4	Check Valve Клапан проверки	■ YES
5	Three-way valve for dispensing and recovery of gas Трехлинейный клапан для заправки и убирания газа.	■ YES
6	Gas recovery line Линия сброса газа	**■ YES □ NO**
7	Local Nozzle Тип соединения	■ NO

3.1.2 Electronic head assembly

Электронная начинка

POS	DESCRIPTION ОПИСАНИЕ	OPTION
1	Number of displays Количество дисплеев	□ 1 ■ 2
2	Switches to start/stop dispenser Кнопки старт/стоп на колонке	■ YES
3	Signal lights (red: delivery in progress, green: free) Сигнальные лампочки (красное – идет заправка, зеленая – не идет)	■ YES
4	Display of total price Дисплей с итоговой ценой Currency (specify) Валюта (уточнить)	■ YES, 6 digits Euro

5	Display of refuelled amount Дисплей заправленного количества Units of measure for refuelling (средства измерения)	■ YES, 5 digits ■ kg □ Sm^3
6	Display of unit price Дисплей цены на 1 единицу	■ YES, 4 digits
7	Drum total meter Итоговое заправленное количество	■ YES , 7 digits
8	**SECURITY AND CONTROL** **Безопасность и контроль**	
8A	Pressure sensor with block on maximum delivery pressure Датчик нажатия с блокировкой максимального давления выдачи	■ YES □ NO
8B	Diagnostics programme Диагностическая программа	■ YES
8C	Maximum flow rate block Блокировка максимального потока	■ YES
8D	Temperature compensation (opt.) Температурная компенсация	□ YES ■ NO

Dimensions and weight Размеры и вес:

Length Длина	*mm*	1000
Width Ширина	*mm*	535
Height Высота	*mm*	1945
Weight Вес	*kg*	250



3.3 MATERIALS, ASSEMBLY, COMMISSIONING AND COMPLETION OF THE SYSTEM
Материалы, Монтаж, сдача объекта.

3.3.1 Materials Материалы

POS	DESCRIPTION ОПИСАНИЕ	YES/NO
1	**GAS SYSTEM MATERIALS OUTSIDE THE ENCLOSURE Материалы установки газа , которые не находятся в контейнере**	**NO**

3.3.2 Assembly Сборка

1	**ASSEMBLY WORK OUTSIDE THE ENCLOSURE Деятельность по монтажу, внешняя к модулю**	**NO**

3.3.3 Commissioning Сдача объекта

1	COMMISSIONING AND TRAINING	YES/NO
1A	Load testing with control of engineering parameters for all equipment supplied Проверка работы с проверкой всех заданных при проектировании параметров всех устройств максимум 3 рабочих дня	■ YES □ NO
1B	Training of filling station staff on routine maintenance and station management (duration 2 days during assembly and commissioning) Тренинг вашего персонала станции по обычному ТО и управлению станцией (длительность 2 дня во время сдачи и монтажа)	■ YES □ NO
1C	Travel and accommodation expenses - Расходы по визиту и пребыванию не больше 5 дней.	■ YES □ NO
1C	Training of filling station staff on routine and extraordinary maintenance for 5 days at our premises (travel and accommodation expenses not included)	□ YES ■ NO

3.4 OPTIONAL
ОПЦИИ

3.4.1 Spare Parts List for 6000 working hours

Набор запчастей для первого Технического Обслуживания.

Каждый комплект запчастей на 6000 моточасов работы включает в себя:

- Piston rings: 1 set per type, per cylinder;

уплотнения к поршням 1 набор каждого вида к каждому цилиндру;

• Rod seals: 1 set per type, per cylinder;
уплотнение шатуна: 1 набор каждого типа на каждый цилиндр;

• O-Ring / back up ring kit:: 2 sets per type, per cylinder; набор уплотнений противоизносных: 2 набора каждого типа на каждый цилиндр;

• Washers / Gaskets for compressor valves: 2 sets per type, per cylinder;
уплотнения компрессорных клапанов - 2 набор каждого типа, на каждый клапан установленный на компрессоре;

• Compressor valves (suction / delivery / concentric): 1 valve per type, per cylinder; клапана сжатия (вход-выход-концентрация) 1 клапан на каждый тип цилиндра;

• Valve lifter extensions: 1 piece per type, per cylinder;
удлинение на клапан - 1 шт. каждого типа на цилиндр;

• Valve lifter rod: 1 piece per type, per cylinder;
направляющая на клапан: 1 шт. каждого типа на цилиндр;

• Crank gear O-Ring kit: 1 kit per compressor;
набор уплотнений на части вращения компрессора (1 шт. на компрессор) ;

• Crankshaft dynamic seal ring: 1 piece per compressor;
Динамические кольца к коленвалу 1шт. на компрессор;

• Oil filter cartridge: 2 pieces per compressor.
Картридж масляного фильтра 2 шт. на компрессор.

3.4.2 Chiller

- Qty: 1

The supply incudes :

Chiller on delivery line:

- 1 chiller to guarantee a delivery gas temperature of 15 - 20°C with a max ambient temperature of 50°C
- 1 heat exchanger.

3.4.3 Линия газа на выходе (опция) Gas delivery line (option).

Предложение включает в себя The supply includes:

- Линию газа на выходе. Трубы высокого давления - из стали с карбоном – DN 25 PN 250 (трубы и фитинги) - на 37 метров.

gas delivery line: high pressure tubing - stainless steel – MULTIPIPE, including fittings to connect multipipe to compressor and storage: qty: 37 mt

4. DOCUMENTATION
Документы

POS	DESCRIPTION ОПИСАНИЕ	YES/NO
1	**DOCUMENTATION PROVIDED WITHIN 1 MONTH OF THE ORDER CONFIRMATION Документы предоставить в течении 1 месяца после подтверждения заказа.**	
1A	P&ID gas, lubrication, cooling Схемы газа, смазки, охлаждения	■ YES
1B	Drawings with dimensions, weights and connections Чертежи весы и соединения (подводки)	■ YES
1C	Static and dynamic loads (нагрузки статические и динамические)	■ YES
2	**DOCUMENTATION PROVIDED WITH DELIVERY Документацию предоставить вместе с поставкой**	
2A	Operating and maintenance instructions for the compressor and auxiliary equipment Инструкция по использованию и обслуживанию компрессора и других агрегатов	■ YES
2B	Certificates for materials Сертификаты на используемые комплектующие	■ YES

5. NOT INCLUDED IN THE SUPPLY
Что не включено в поставку

Anything not specifically mentioned is not included in the supply.

Подразумевается, что исключено из поставки все, что не указано как часть поставки.

POS	DESCRIPTION ОПИСАНИЕ
1	Any civil engineering/masonry/foundation work required for compliance with current standards Все работы городские/строительные/фундамент, которые должны быть сделано согласно существующим нормам
2	Any electrical work (conversion cab, general control panel for the filling station, cables, earth network. ...) Реализация каналов чтобы прокладки труб и кабелей для нужд станции, включая раскопки и работы на местности любого вида Все электрические дела (трансформаторная будка, электрощит общий станции, кабеля)
3	Installation of the equipment to be supplied Установка оборудования на месте
4	Any additional equipment on the gas lines, in particular the drying unit in case of moisture in the gas Возможные дополнительные устройства на линии газа, в особенности баллоны для водоотвода (при влажности в газе)
5	Hire of lifting equipment for unloading and placement of the equipment on site Аренда средств для поднятия и маневрирования оборудование при строительстве
6	Application and charges for obtaining any permits from the pertinent authorities Какие-либо взносы и платежи для каких-либо разрешений у соответствующих органов
7	Connections to public utilities Доступ к коммунальным услугам
8	Water, electricity and natural gas for testing on site Вода, Энергия и газ для испытаний при строительстве.
9	Lightning protection report Защиты от атмосферных осадков и условий

10	Fornovo personnel for verification of measurements and testing at the pertinent authorities, unless specified – Деятельность по инженеризации и сертификации отличные от тех, что указаны в оферте
11	Transportation to final destination Доставка (может быть предоставлена по запросу)
12	Air circuit, enclosure

6. CLIENT'S DUTIES
Пожелания клиента

N.A.

7. PRICE AND TERMS
Прайс-лист и условия

7.1 Price list Прайс-лист

SECTION	DESCRIPTION	UNIT PRICE	Q.TY	TOTAL PRICE
3.1	**"GasVector" compression unit skid-mounted 4DA300-200kW, control panel and cooling system included, С РЕДУКТОРОМ ДАВЛЕНИЯ НА ВХОДЕ на 1.2 БАР. ГазВектор компрессорная установка смонтированная на скиде 4DA300 – 200кВатт, электрический щит, система охлаждения включены. система разгрузки BLOW-DOWN включена.**	**€ 136.800,00**	**1**	**€ 136.800,00**
3.1.4	**Gas storage 1.120 litres Аккумуляторы газа**	**€ 10.600,00**	**1**	**€ 10.600,00**
3.2	**Automatic CNG Dispenser – double hose Автоматическая колонка двухпостовая**	**€ 16.500,00**	**2**	**€ 33.000,00**
3.3.3	**Commissioning and start-up of the system Проверка и запуск системы**	**€ 7.300,00**	**1**	**€ 7.300,00**

3.4.1	**Комплект запчастей для Технического обслуживания 6000 моточасов. Spare Parts List 6000 hours**	**€ 5.500,00**	**1**	**€ 5.500,00**
3.4.2	**Chiller (*) Чиллер**	**€ 6.800,00**	**1**	**€ 6.800,00**
3.4.3	**Линия газа на выход, 37 метров трубы с соединительными элементами Gas delivery line: 37 mt lenght**	**€ 3.900,00**	**1**	**€ 3.900,00**
	Delivery 1pc 40”HC container DAP Tbilisi Custom warehouse with insurance 110% value of goods. Доставка 1 контейнера 40” HC до DAP Тбилиси таможенный склад со страховкой на 110% от стоимости.	**€ 4.200,00**	**1**	**€ 4.200,00**
TOTAL SUPPLY Общая сумма поставки→				**€ 208.100,00**

(*) The warranty for the chillers is limited to the spare sparts

7.2 Terms and conditions

Сроки и условия

Delivery terms Условия поставки	DAP TBILISI GEORGIA
Packing Упаковка	Including, where necessary, suitable for road transport включена, если необходима. Приспособлена для транспортировки по дороге.
Transportation Транспортировка	Not included Не включена ■ Included
Deadline for delivery of materials: Сроки готовности материалов	**Skid version:** Ex production site within **4 (four) months** – August and Christmas Festivities excluded - of the date: ■ Advanced payment Производство в течении 4 месяцев (за исключением августа) от даты подтверждения (и произведения первого платежа)
Transfer of ownership Переход прав собственности	The ownership of any materials supplied will be transferred according to the "delivery terms" mentioned above. Права собственности на все предоставленные материалы происходит при выполнении условий указанных выше

Testing: **Тестирование**	In the manufacturing workshop according to our standards/the supplier's standards for Third Party materials В нашей мастерской согласно нашим стандартам или стандартам поставщика материалов
Guarantee: **Гарантия**	See section 8 in our "GENERAL TERMS OF SALE." The guarantee will be valid for "**12 months from commissioning and for no more than 18 months from the date of notification that the goods are ready for collection.**" Период гарантии - 12 месяцев от срока запуска, но ни в коем случае не может превышать 18 месяцев с момента оповещения, что груз готов.
Terms of payment **Условия платежа**	For the order amount for this supply: 100% LC CONFIRIMED
	100% payment by irrevocable and confirmed Letter of Credit, to be agreed with and issued by a first rate Italian bank at the moment the order is placed, available at sight against submission of notice of readiness for shipment. Relevant bank expenses borne by the purchaser. Или на сумму 100% подтвержденное гарантийное письмо от итал. банка
Offer Validity: **Срок действия предложения**	60 days from the date of this offer 60 дней с момента выпуска настоящего комм. предложения

We look forward to hearing from you soon and remain at your disposal for any further information/ details you may require at the following contact number:

ЕВГЕНИЙ ВОРОНИН

E-mail: eugenio.voronin@gmail.com
Tel(ita): +39-329-444-75-30
Tel(rus): +7-926-571-85-03

Yours faithfully,

Fornovo Gas S.r.l.
Chief Executive Officer
Carlo Bauzone

8.1 GENERAL TERMS AND CONDITIONS FOR SALE

NOTICE: sale by Fornovo Gas of any Products and/or Services is expressly conditioned on the Buyer's assent to these General Terms and Conditions. Any additional or different terms proposed by Buyer are expressly objected to and will not be binding upon Fornovo Gas unless specifically assented to in writing by Fornovo Gas' authorized representative. Any order for Products and/or Services or any statement of intent to purchase Products and/or Services or any direction to perform work followed by Fornovo Gas' performance of work shall constitute assent to this General Terms and Conditions.

1. DEFINITIONS

Unless otherwise defined in the Proposal or the Contract, the following terms shall have the following meanings throughout the Proposal or the Contract:

"Buyer" means the entity to which Fornovo Gas' Proposal is directed.

"Contract" means the contract between Fornovo Gas and Buyer resulting from Fornovo Gas' Proposal, to which these General Terms and Conditions for Sale are attached.

"Contract Price" means the price to be paid by Buyer to Fornovo Gas under the Proposal or any resulting Contract.

"Products" means all equipment, parts, materials, supplies, products, components and other goods offered by Fornovo Gas to Buyer under the Proposal.

"Proposal" means the formal offer together with the technical specification and any amendments or modifications thereto which may be offered by Fornovo Gas to Buyer, to which these General Terms and Conditions for Sale are attached.

"Fornovo Gas" means Fornovo Gas S.r.l., as entity issuing the Proposal and its successors and permitted assigns.

"Service" means all the services to be performed or provided by Fornovo Gas under the Proposal.

2. PAYMENT

2.1 Unless otherwise provided in the Contract, payment shall be made by Buyer in Euros, upon presentation of the specified documents without any setoff whatsoever (including, without limitation, setoff under other contracts with Fornovo Gas or its affiliates), against one or more irrevocable letters of credit confirmed by a primary international bank acceptable to Fornovo Gas and advised through an Italian bank, which letter of credit shall (i) be established by Buyer, at Buyer's expense (including confirmation charges), (ii) be opened within 30 (thirty) days from the Contract signature and (iii) remain in effect until ninety (90) days after the latest payment date due under the Contract, (or final execution of Services). The opening of said letter of credit is a condition precedent to the commencement of contractual performance by Fornovo Gas. The letter of credit shall provide for partial payments pro rata on partial deliveries and for the payment of any charges for storage, export shipment, price adjustments, cancellation or termination, and all other payments due from Buyer under the Contract against Fornovo Gas' invoice and certification of the charges and grounds for such payment. Buyer will increase the amount(s) and/or extend the validity period(s) and make appropriate modifications to any letter within thirty (30) days of Fornovo Gas' notification that such is necessary to provide for payments to become due.

2.2. If Buyer fails to fulfil any condition of its payment obligations, Fornovo Gas may suspend performance and delivery. Any cost incurred by Fornovo Gas in accordance with such suspension (including storage costs) shall be payable by Buyer upon submission of Fornovo Gas' invoices . Performance of Fornovo Gas' obligations shall be extended for a period equaling the period of Buyer's nonfulfillment of any portion of the payment terms, wheter or not Fornovo Gas suspends performance and such additional time as may be reasonable necessary in the circumstances. If Buyer does not correct such failure in the manner and time satisfactory to Fornovo Gas, the Fornovo Gas may , at its option, terminate the Contract in respect to the portion of the Products not delivered and Services not yet performed. Buyer shall pay Fornovo Gas its reasonable and proper termination charges in the event of such termination.

2.3 If Buyer's financial condition at any time does not justify contionuation of the work to be performed by Fornovo Gas on the terms of payment set forth above, Fornovo Gas may require full or partial payment in advance or shall be entitled to terminate the Contract. If Buyer becomes bankrupt or insolvent, or if any proceeding is brought against Buyer, voluntarily or involuntarily, under the bankruptcy laws or any insolvency laws, Fornovo Gas shall be entitled to terminate the Contract. Buyer shall pay Fornovo Gas its reasonable and proper termination charges in the event of such termination.

2.4 All the payments due shall be made, in any case, on the appointed dates, even if the Products cannot be delivered for reasons not ascribable to Fornovo Gas and/or in consequence of a cause of Force Majeure suffered by Buyer. The notice that the Products are ready for shipment will replace the shipping documents to all intents and purpose, including the beginning of the warranty period. It is understood and agreed that all the extracosts arising from the change in the dates stated in the Contract for the reasons mentioned above shall be borne by Buyer.

3.TAXES AND DUTIES

3.1 Fornovo Gas shall not be responsible for any taxes, including taxes are measured by net income or profit, duties,fees, or other charge of any nature, that might arise from the execution of the Contract with the exception of those taxes, duties, fees or other charge of any nature imposed by the Italian governmental authorities. Any taxes, duties or other charges imposed by the country of delivery to Fornovo Gas shall be considered as not considered as not included in the Contract Price. Consequently, all payments due and payable by Buyer to Fornovo Gas shall be made in the full amount of the Contract Price, free and clear of all deductions and witholdings and Buyer shall refund Fornovo Gas for any payment of taxes, duties or other charges imposed by the country of delivery to Fornovo Gas and related to the execution of the Contract- Such refund shall

become due and payable after one month from presentation by Fornovo Gas to Buyer of copy of the receipts of payment. Buyer shall cooperate with the Fornovo Gas to explore and evaluate price impact determined by taxes levied on the Fornovo Gas by the governmental authorities of the country of delivery.

4.DELIVERY, TITLE TRANSFER, RISK OF LOSS, STORAGE

4.1 Unless otherwise provided for in the Contract, Fornovo Gas shall deliver each item of the Products to be shipped from Fornovo Gas' country to Buyer EXW FORNOVO GAS' factory (INCOTERMS 2000). Fornovo Gas shall deliver each item of the Products to be shipped from a country other than Fornovo Gas' country or the country of installation DES Port of Import (INCOTERMS 2000). Fornovo Gas shall deliver any items of the Products to be shipped from within the country of installation CIP the facility (INCOTERMS 2000). The delivery date for any item of the Products is defined as the date on which such item of the Products is delivered in accordance with this Article. Partial deliveries will be permitted.

4.2 Title to each Product to be shipped from Fornovo Gas' country shall pass to Buyer when available for shipment from Fornovo Gas' factory. Title to each Product to be shipped from a country than Fornovo Gas' country of origin or the country of installation, shall pass to Buyer at the port of export immediately after any such Product has been cleared for export. Title to other work in progress, including costruction Serv ices, shall pass to Buyer as performed. Notwithstanding passage of title, Fornovo Gas shall remain responsible for risk of loss to the Products until delivered.

4.3 If any of the Products cannot be shipped to Buyer when ready due to any cause not attributable to Fornovo Gas, upon notice to Buyer, Fornovo Gas may ship such Products to storage. If such Products are placed in storage, including storage at the facility where manufactured, the following conditions shall apply: (a) title and all risk of loss shall thereupon pass to Buyer if it had already passed; (b) any amounts otherwise payable to Fornovo Gas upon delivery or shipment shall be payable upon presentation of Fornovo Gas' invoices and certification as to cause for storage; (c) all expenses incurred by Fornovo Gas, such as for preparation for and placement into storage, handling, inspection, preservation, insurance, storage, removal charges, V.A.T. and any taxes shall be reimbursed by Buyer upon submission of Fornovo Gas' invoices; and (d) when conditions permit and upon payment of all amounts due hereunder, Fornovo Gas shall resume delivery of the Products to the originally agreed point of delivery.

5.EXCUSABLE DELAYS

5.1 Fornovo Gas shall not have any liability or be considered to be in breach or default of its obligations under the Contract to the extent that performance of such obligations is delayed or prevented, directly or indirectly, due to: (i) causes beyond its reasonable control; or (ii) acts of God, acts (or failure to act) of governmental authorities, fires , severe weather conditions, earthquakes, strikes or other labor disturbances, floods, war (declared or undeclared), epidemics, civil unrest, riot, delays in transportation, or car shortages; (iii) acts, or omissions, of Buyer including failure to promptly : (a) provide Fornovo Gas with information and approvals necessary to permit Fornovo Gas to proceed with work immediately and without interruption, (b) comply with the terms of payment, or (c) provide Fornovo Gas with such evidence as Fornovo Gas may request that any export or import or permit has been issued (if such is the responsibility of the Buyer), or (iv) shipment to storage under Article 4 or (v) inability on account of causes beyond the reasonable control of Fornovo Gas to obtain necessary materials, necessary components or services. Fornovo Gas shall notify Buyer in the event of any such delay. The date of delivery or of performance shall be extended for a period equal to the time lost by reason of delay, plus such additional time as may be reasonably necessary to overcome the effect of such excusable delay. Fornovo Gas shall notify Buyer, as soon as practicable, of the revised delivery date. If Fornovo Gas is delayed by acts or omissions of Buyer or by the prerequisite work of Buyer's other contractors or suppliers, Fornovo Gas shall also be entitled to an equitable price adjustment.

5.2 If delay excused by this Article extends for more than ninety (90) days and the parties have not agreed upon a revised basis for continuing the work at the end of the delay, including adjustment of the price, then either party (except where delay is caused by Buyer, in which event only Fornovo Gas), upon thirty (30) days written notice, may terminate the Contract with respect to the unexecuted portion of the work, whereupon Buyer shall promptly pay Fornovo Gas its termination charges determinate in accordance with Fornovo Gas' standard accounting practices upon submission of Fornovo Gas' invoices therefor.

6. COMPLIANCE WITH LAWS, CODES AND STANDARDS

6.1 The price is based on Fornovo Gas' design, manufacture, testing and delivery of the Products pursuant to (i) its design criteria, manufacturing processes and procedures and quality assurance program, (ii) those portions of industry specifications, codes and standards in effect as of the date of Fornovo Gas' Proposal to Buyer which Fornovo Gas has deemed applicable to the Products, (iii) the Italian Laws and rules in effect on the date of Fornovo Gas' Proposal to Buyer and (iv) any mutually agreed upon specification.

6.2 The price and delivery dates will be equitably adjusted to reflect additional costs incurred by Fornovo Gas resulting from (i) a change in standards and regulations described in 6.1 (ii) or 6.1 (iii) after the date of Fornovo Gas' proposal to Buyer which affect the Products and (ii) changes required to comply with regulatory or industrial requirements in the country where the Products will be installed. Buyer shall advise Fornovo Gas of requirements affecting the Products resulting from the applicability of qny laws, rules or regulations in the location where the Products will be installed. Reasonable adjustments will be made to the delivery date, performance evaluation criteria and performance dates as may be appropriate to comply with the foregoing.

6.3 Buyer agrees not to re-export US origin goods supplied by Fornovo Gas, other than in and to the ultimate country of destination specified in the Contract and/or declared as the country of ultimate destination on Fornovo Gas' invoice, except as may be permitted by the US export laws and regulations, as may be amended. Buyer agrees that it will not re-export to the

countries designated in Export Administration Regulations Section 779.4 (f), any technical data or software (nor the direct part thereof) provided to Buyer by Fornovo Gas in connection with this Contract, unless prior written authorization is obtained from the US Export Administration.

6.4 The Products sold hereunder are not intended for application (and shall not be used) in connection with any nuclear installation or activity and Buyer warrants that it shall not use the Products for such purposes, or permit others to use or permit others to use the Products for any such purposes. If, in breach of the foregoing, any such use occurs, Fornovo Gas shall have no liability for any nuclear or other damage, injury or contamination and Buyer shall indemnify Fornovo Gas, its affiliates and suppliers of every type and tier against any such liability, whether arising as result of breach of contract, warranty, indemnity, tort (including negligence), strict liability or otherwise.

6.5 Notwithstanding any other provisions herein, Buyer shall be responsible for timely obtaining of any required authorization, such as an export license, import license, foreign exchange permit, work permit or any other governmental authorization, even though any such authorization may be applied for by Fornovo Gas. Buyer and Fornovo Gas shall provide each other reasonable assistance in obtaining required authorizations. Fornovo Gas shall not be liable if any authorization is delayed, denied, revoked, restricted or not renewed and Buyer shall not be relieved thereby of its obligations to pay Fornovo Gas for the work.

6.6 Fornovo Gas acknowledges that, in connection with the performance of this Contract, the import and customs laws and regulations of the country in which Fornovo Gas facility is located apply to the furnishing and shipment of the Products, materials and any components thereof.

7. WARRANTY

7.1 Fornovo Gas warrants to Buyer that the Products shall be designed and fit for the purpose specified in the Contract and shall be free from defects in title, material and workmanship. The foregoing warranties (except as to title) for each Product shall apply to defects which appear within 12 months from the date of shipment from the manufacturing workshop or from the date of notice of goods ready for shipment, in case the shipment cannot be effected for reasons not ascribable to Fornovo Gas (the "Warranty Period").

7.2 If a failure to meet warranty set forth in Article 7.1 appears within the Warranty Period, Buyer shall promptly notify Fornovo Gas in writing and promptly, as its own charge, will dismantle and ship back to Fornovo Gas' production workshop the defective component; Fornovo Gas shall thereafter as soon as is practicable , correct any warranty defect by repairing the defective component in its production workshop ("repair" can be intended at Fornovo Gas' exclusive option, also as "replacement with a similar, already tested and fully efficient component") and will deliver the repaired component to installation site. Buyer shall be responsible for payment of any customs duties or similar levies which may be assessed as a result of the shipment of any such repaired parts. Should the intervention of Fornovo Gas' personnel be needed to dismantle the defective component covered by warranty and/or to reinstall the repaired component and/or to restore the correct efficiency of the equipment on which the repaired component has been reinstalled, relevant performances will be invoiced to the Buyer at the tariffs in force at the moment the service will be requested.

7.3 Fornovo Gas does not warrant the Products or any repaired or replacement parts against normal wear and tear including that due to environment or operation, including excessive operation at peak capability, frequent starting, type of fuel, detrimental air inlet conditions or erosion, corrosion or material deposits from fluids or which has been involved in an accident. The warranties and remedies set forth herein are further conditioned upon (i) the proper storage, installation, operation and maintenance of the Products and conformance with the operation instruction manuals (including revisions thereto) provided by Fornovo Gas and/or its subcontractors as applicable and (ii) repair or modification pursuant to Fornovo Gas' instructions or approval. Fornovo Gas does not warranty any equipment or services of others designated by Buyer where such equipment or services are not normally supplied by Fornovo Gas.

7.4 The preceding paragraphs of this Article 7 set forth the exclusive remedies for all claims based on failure of or defect in the Products provided under the Contract, whether the failure or defects arises before or during the Warranty Period and whether a claim, however instituted, is based on contract, indemnity, warranty, tort (including negligence), strict liability or otherwise. The foregoing warranties are exclusive and are in lieu of all warranties and guarantees whether written, oral implied or statutory. NO IMPLIED STATUTORY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL APPLY.

8. PATENTS

8.1 Fornovo Gas agrees to indemnify and hold harmless Buyer from any rightful claim of any third party that any Products manufactured by Fornovo Gas and furnished hereunder infringes any patent. If Buyer notifies Fornovo Gas promptly of the receipt of any claim, does not take any position adverse to Fornovo Gas regarding such claim and gives Fornovo Gas information, assistance and exclusive authority to settle and defend the claim, Fornovo Gas shall, at its own expense and option, either (i) settle or defend the claim or any suit or proceeding and pay all damages and costs awarded in it against Buyer or (ii) procure for Buyer the right to continue using the Products or (iii) modify the Products so that they become non-infringing or (iv) replace the Products with non-infringing Products or (v) remove the infringing product and refund the price. If, in any suit arising from such a claim, the continued use of the Products for the purpose intended is forbidden by any court of competent jurisdiction, Fornovo Gas shall at its option take one or more of the actions under (ii), (iii), (iv) or (v) above. The foregoing states the entire liability of Fornovo Gas for patent infringement of any Products.

8.2 Article 8.1 shall not apply to (i) any Product which are manufactured to Buyer's design or (ii) the use of any Products furnished under the Contract in conjunction with any other apparatus or material. As to any Products or use described in the preceding sentence, Fornovo Gas assumes no liability whosoever for patent infringement.
8.3 With respect to any Products furnished under the Contract which are not manufactured by Fornovo Gas, only the patent indemnity of the manufacturer, if any, shall apply.

9. INDEMNITY AND LIMITATION OF LIBILITY

9.1 General indemnity. Fornovo Gas hereby agrees to indemnify and hold harmless Buyer from any physical damage to property of third parties or injury to persons, including death, to the extent resulting directly from the negligence of Fornovo Gas or its officers, servants, agents, employees and /or assigns while engaged in activities under this Contract. Buyer shall likewise indemnify and hold harmless Fornovo Gas from any physical damage to property of third parties or injury to persons, including death, to the extent resulting directly from the negligence of Buyer, its officers, servants, agents, employees and or assigns, while engages in activities relating to this Contract. In the event such damage or injury is caused by the joint or concurrent negligence of Fornovo Gas and Buyer, the loss shall be borne by each party in proportion to its negligence.
9.2 The total liability of Fornovo Gas on all claims of any kind, whether in contract, warranty, indemnity, tort (including negligence), strict liability or otherwise arising out of the performance or breach of the Contract or use of any Product, shall not exceed the Contract Price allocable to the Product giving rise to the claim. All liability under this contract shall terminate upon expiration of the Warranty period as defined in the Contract or any agreed extension thereof.
9.3 In no event, whether as a result of breach of contract, warranty, indemnity, tort (including negligence), strict liability or otherwise shall Fornovo Gas or its subcontractors or suppliers be liable for loss of profit or revenues ("lucro cessante"), loss of use of the Product or any associated equipment, cost of capital, cost of substitute equipment, facilities, services or replacement power, downtime costs, claims of Buyer's customers for such damages or for any special, consequential, incidental, indirect or exemplary damages.
9.4 If Buyer is furnishing Fornovo Gas' products or Services to a third party by contract, Buyer shall obtain from such third party a provision affording Fornovo Gas the protection of this Article and shall, in any event, indemnify Fornovo Gas against any liability in excess of the limitations and exclusions provided herein.
9.5 If Fornovo Gas furnishes Buyer with advice or assistance concerning any products or Services which is not required pursuant to the Contract specification, the furnishing of such advice or assistance will not subject Fornovo Gas to any liability, whether in contract, warranty, indemnity, tort (including negligence), strict liability or otherwise.
9.6 For the purposes of this Article the term "Fornovo Gas" shall mean Fornovo Gas, its affiliates, subcontractors and suppliers of any tier and their respective agents and employees, whether individually or collectively.
9.7 The provisions of this Article shall prevail over any conflicting or inconsistent provisions contained in any of the documents comprising this Contract, except to the extent that such further restrict Fornovo Gas' liability.

10. DISPUTE RESOLUTION

10.1 For any disputes arising between the parties the Italian Court of Reggio Emilia should be competent.

11. GOVERNING LAW

11.1 The validity, performance and all matters relating to the interpretation and effect of the Contract shall be construed and interpreted in accordance with the Italian law, provided that any provision of such law invalidating any provision of these terms or modifying the intent of the parties as expressed in these terms shall not apply.

12. GENERAL CLAUSES

12.1 Buyer may, by written change order, ,make mutually agreed in the Product and Ser vices . If any such change results in an increase or decrease in the cost or time required for the performance of the work under the Contract , there shall be an equitable adjustment in the Contract Price and the scheduled delivery date(s). Fornovo Gas shall not be obligated to proceed with the changed or extra work until the price of such change and its effects on the scheduled delivery date(s) have been agreed upon and effected by change order.
12.2 Buyer may terminate the Contract only upon paying Fornovo Gas its termination charges determinate in accordance with Fornovo Gas' standard accounting practices upon submission of Fornovo Gas' invoices therefor, and all cost satisfying all other obligations, commitment and claims which Fornovo Gas may have undertaken with third parties in connection with the Contract. Termination of the contract shall not relieve either Party of any obligation arising out of work performed prior to termination.
12.3 Fornovo Gas may assign or novate its right s and obligations regarding the Products, in part or in whole to one or more of its wholly owned subsidiaries upon written to Buyer setting forth the effective date of such assignment or novation. Upon the effective date of such assignment or novation, all of the rights and obligations of Fornovo Gas under this Contract shall vest solely in Fornovo Gas' subsidiaries. Buyer agrees to execute such docuements as may be necessary to effect the assignment or novation. Fornovo Gas guarantees the performance of its subsidiaries after the assignment or novation takes effect. The delegation or assignment by Buyer if any or all of its duties or rights under the Contract without Fornovo Gas' prior written consent shall be void. Fornovo Gas shall have the right at all times to assign to third parties any and all credits under the Contract subject to prior notification in writing to Buyer.
12.4 The Products and/or the Services supplied under the Contract are based on the use of Fornovo Gas' standard technical solutions and sub-suppliers for the supply. A sub-suppliers Vendor List may be provided by Fornovo Gas that, however, reserves the right at any time to replace any sub-supplier indicated therein with another suitable for the same products

and/or services. In the event Buyer requires the use of specific sub-suppliers, Fornovo Gas may propose alternatives provided that such alternatives will not have impact on the quality and delivery performance specified in the contract.
12.5 Except as provided in the Article entitled "Limitation of Liability" , these provisions are for the benefit of the parties hereto and not for any other third party.
12.6 The assignment of Fornovo Gas' skilled personnel, as well as the services rendered by the same for the erection and putting into operation of the Products, will be governed by the "General Conditions governing the assignment of Fornovo Gas personnel abroad " in force at the time when the services are rendered.
12.7 This contract represents the entire agreement between the parties and no modification, amendment, rescission, waiver or other change shall be binding on either party unless assented to in writing by the parties' authorized representatives. Any oral or written representation, warranty, course of dealing or trade usage not contained or reference herein shall not be binding on either party. Each party agrees that it has not relied on, or been induced by, any representations of the other party not contained in this contract.
12.8 The invalidity in whole or in part of any part of this Contract shall not affect the validity of the remainder of the Contract.
12.9 The following Articles shall survive termination of any agreement between Buyer and Fornovo Gas regarding the Parts: Article 3 (Taxes and Duties); Articles 6.3,6.4 and 6.6 (Compliance with Laws); Articles 7 (Warranty); Article 8 (Patents); Article 9 (Limitation of Liability); Article 10 (Dispute Resolution); Article 11 (Governing Law); Article 12 (General Clauses).

Signature

Buyer expressly states to accept all Articles in the present General Terms and Conditions for Sale and more specifically the Article 2 (Payment), 3 (Taxes and Duties), 4 (Delivery, Title Transfer, Risk of Loss, Storage), 6 (Compliance with Laws, Codes and Standards), 7 (Warranty), 9 (Indemnity and Limitation of Liability), 10 (dispute Resolution), 11 (Governing Law), 12 (General Clauses) as per Art.1341 and 1342 of the Italian Civil Code.