

DANI

A SCENT OF FUTURE



SULFUR ANALYSIS

Архангельск (8182)63-90-72
Астана (7172)727-132
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Казань (843)206-01-48

Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81

Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54

Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93

Единый адрес для всех регионов: drs@nt-rt.ru || www.danimaster.nt-rt.ru

SULFUR ANALYSIS



Time is Money.

Benjamin Franklin



Time is always a key factor in today's laboratories productivity.

Master your Time with the DANI Gas Analyzers.

The ability to provide the proper configuration to meet the most challenging analytical demands comes from a long and proven experience and a deep industry knowledge. As requirements are constantly changing, even a highly reliable instrumentation could not be enough to succeed in getting trustworthy results: complete and guaranteed solutions are essential to comply with the latest industry standards and specifications.

After a long working relationship with its customers to know and to best match their real needs, DANI Instruments has developed key analytical solutions that cover a broad array of applications, requirements and protocols in the environmental industry.

Master DANI Air Analyzers are **PRE-CONFIGURED, PRE-ASSEMBLED AND FACTORY-TESTED SYSTEMS** specifically designed for peculiar analyses. The analyzers include the **HARDWARE**, the **SOFTWARE**, **COLUMNS AND CONSUMABLES**, the **OPTIMIZED ANALYSIS METHOD**, the **ANALYTICAL CONDITIONS**, and the **DOCUMENTATION** to run up your analysis from day one.

PRE-CONFIGURED, PRE-ASSEMBLED AND FACTORY-TESTED SYSTEMS

The installation process is faster than ever before and all the startup procedure is oversimplified ensuring immediate analytical performance and results.

HARDWARE AND SOFTWARE

DAA Analyzers are pre-engineered systems based on the versatility, flexibility and robustness of the proven Master GC hardware. All the Master GC parameters are set prior the shipment.

COLUMNS AND CONSUMABLES

No more doubts about the proper column, parts and supplies. DAA Analyzers are delivered with all you may need for your analysis.*

OPTIMIZED ANALYSIS METHOD

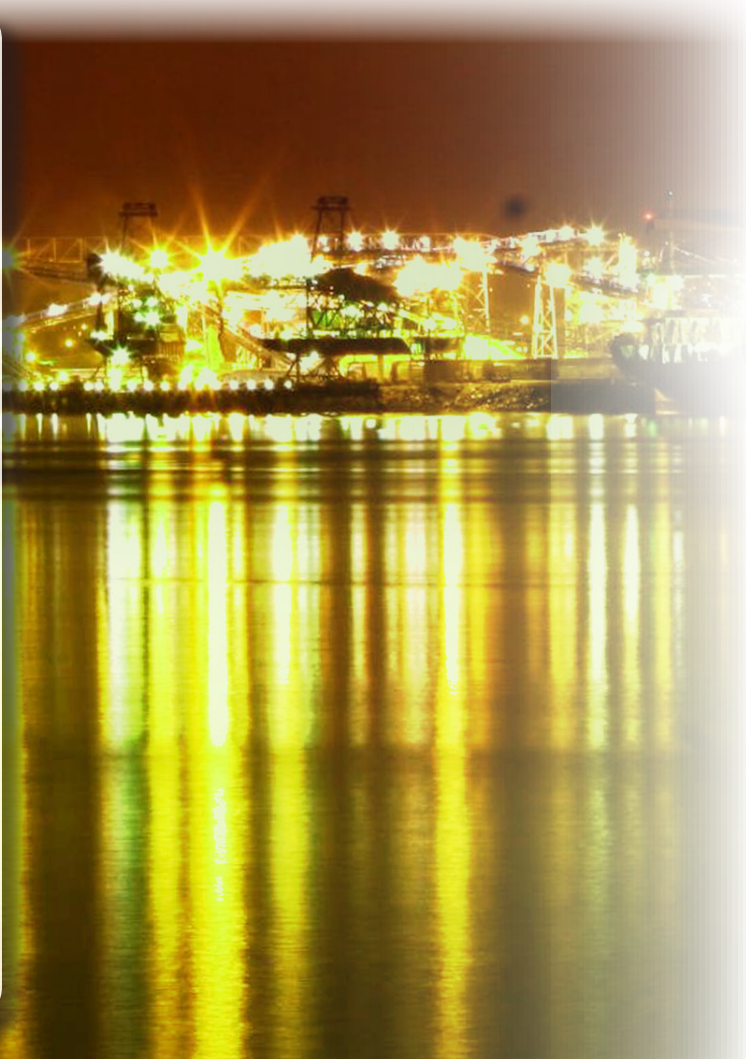
Analytical methods are pre-loaded to be immediately used for the determination of pollutants in air. Whenever possible, reduction of analysis time and amounts of toxic solvents are considered. Method development time and costs are thus dramatically reduced.

ANALYTICAL CONDITIONS

DAA Analyzers are designed to perfectly accomplish the analytical conditions of interest.

DOCUMENTATION

A getting started manual, calibration and method files, and all the information for a quick startup are included.



* Chemicals are not supplied



DANI MASTER GC

- Intuitive and easy-to-use touchscreen interface.
- Complete range of injectors:
 - Split/Splitless Injector
 - Programmable Temperature Vaporizer (PTV)
 - Packed Injector
- Wide selection of detectors:
 - Flame Ionization Detector (FID)
 - Electron Capture Detector (ECD)
 - Nitrogen-Phosphorus Detector (NPD)
 - Flame Photometric Detector (FPD)
 - Thermal Conductivity Detector (TCD)
 - Pulse Discharge Detector (PDD)
 - Master TOF-MS Time of Flight Mass Spectrometer
- Extensive Choice of Dedicated Devices:
 - Auxiliary ovens
 - Gas sampling and switching valves
 - Liquid sampling valves
 - GC oven cryogenic cooling device
 - Methanizer

DANI MASTER AUX

Auxiliary Ovens for Isothermal Temperature

- Up to 7 valves (5 gas + 2 liquids)
- Up to 250° C
- Up to 2 auxiliary gas valves
- Up to 6 needle valves
- Extremely compact design
- Two models available with different capacities to house valves and columns for dedicated analyses



DANI MASTER SHS

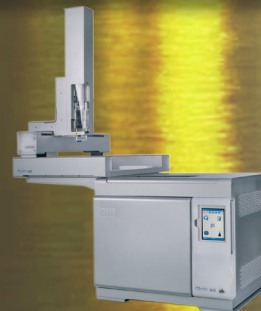
Static Headspace Sampler

- A robust and flexible system to meet complex and versatile needs
- Reliable results and exceptional reproducibility
- Intuitive, powerful, and straightforward user interface
- Highest sample capacity with a 120-position vial tray
- Unlimited priority sample position
- Unmatched oven capacity: 18 vials simultaneously

DANI MASTER AS

Liquid Autosampler

- Superior flexibility, repeatability, and performance
- Easy-to-use
- 160 samples capacity
- No sample degradation or solvent evaporation
- up to 7 syringe capacity types
- unmatched injection capabilities



SULFUR ANALYSIS

TABLE OF CONTENTS

Configuration	Typical Detected Compounds	Official Methods Met	Sample Type
DGA-006 DANI Gas Analyzer for Sulfur Compounds H₂S, COS, CS₂, and Mercaptanes			
Single channel with FPD, one valve, and auxiliary oven.	carbonyl sulfide methanethiol dimethyl sulfide	propyl mercaptan carbon disulfide hydrogen sulfide	Gas
DGA-016 DANI Gas Analyzer for Natural Gas with Permanent Gas and H₂S			
Single channel with μ TCD, two valves, capillary columns, auxiliary oven.	hydrogen argon oxygen methane nitrogen	carbon monoxide carbon dioxide dicarbon hydrogen sulfide	
DGA-018 DANI Gas Analyzer for Hydrocarbons and Sulfur Compounds			
	methane ethane n-butane isobutane	n-pentane isopentane C ₆ + (hexane and higher hydrocarbons)	
DGA-022 DANI Gas Analyzer for Permanent Gas, Hydrocarbons and H₂S			
Single channel with TCD and FID, packed columns, three valves, and auxiliary oven.	oxygen nitrogen carbon dioxide methane ethane propane	<i>iso</i> -butane <i>iso</i> -pentane pentane hexane hydrogen sulfide	ASTM 1945 ASTM 1946 GPA 2177 Gas
DGA-025 DANI Gas Analyzer for Permanent Gas, Hydrocarbons, and Sulfur Compounds			
Three channels with μ TCD, FID, FPD, micro-packed and capillary columns, two valves, auxiliary oven.	oxygen carbon monoxide nitrogen carbon dioxide methane ethane	propane <i>n</i> -butane isobutane <i>n</i> -pentane isopentane	ASTM 1945 ASTM 1946 GPA 2177 Gas
DGA-033 DANI Gas Analyzer for Permanent Gas, CO₂, Hydrocarbons, COS, H₂S, CS₂			
Dual channels with FID, μ TCD, FPD, three valves, and auxiliary oven.	oxygen nitrogen carbon dioxide carbonyl sulfide hydrogen sulfide carbon disulfide methane	ethane propane <i>i</i> -butane <i>n</i> -butane <i>i</i> -pentane <i>n</i> -pentane <i>n</i> -hexane	Gas

SULFUR ANALYSIS

DGA-006

DANI Gas Analyzer for Sulfur Compounds H_2S , COS , CS_2 , and Mercaptanes

The sulfur compounds analysis is carried out using a split/ splitless (SL/IN) injector, a capillary column and a flame photometric detector (FPD).

Moreover, the gas chromatograph is configured with a 6-port VALCO Hastelloy valve located in an auxiliary oven. The gas sample is introduced into the system by the 6-port sampling valve equipped with 3 mL sample loop.

DANI DGA-006 is the ready-to-go solution to attain the maximum performance in the shortest time for your analysis of Permanent Gas, H_2 and Hydrocarbons.

Master **DGA-006**

SAMPLE TYPE:

Gas

TYPICAL DETECTED COMPOUNDS:

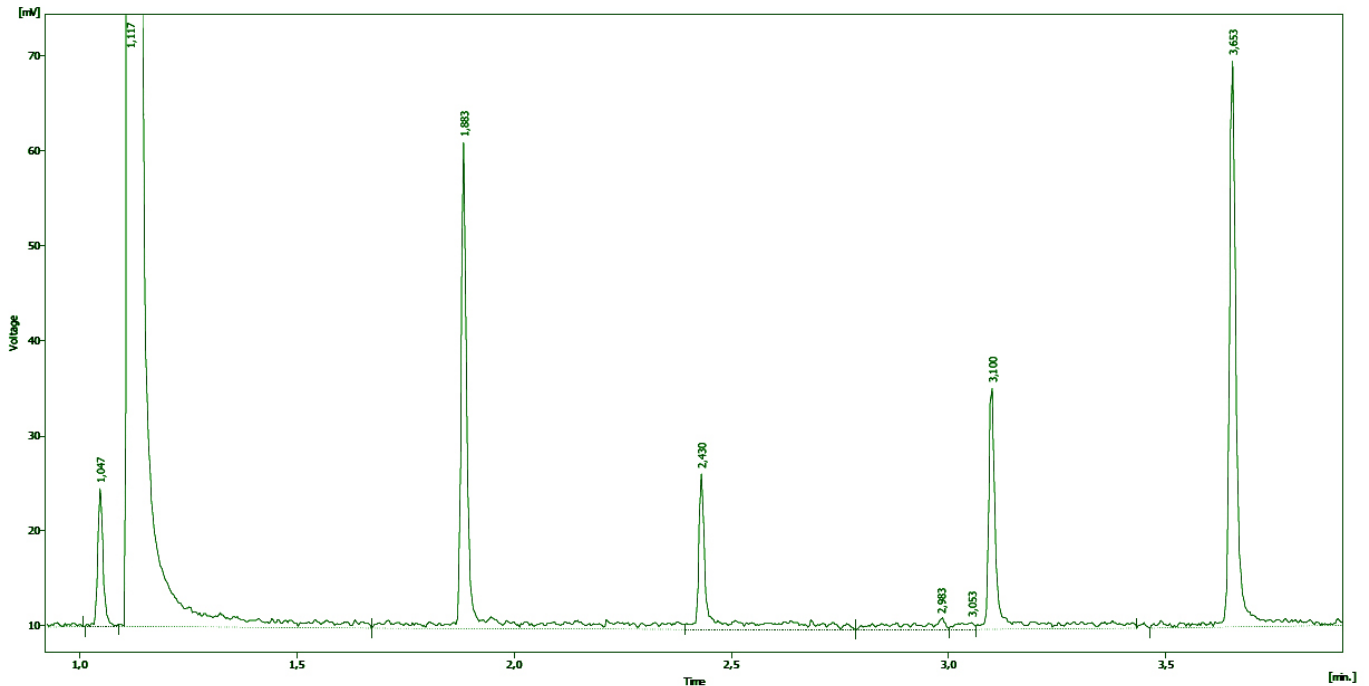
COS , CH_4S , C_2H_6S , C_3H_8S , CS_2 , H_2S ;

KEY FEATURES & BENEFITS:

The 6-port valve enables the system to introduce the sample into the FPD channel equipped with a capillary column GASPRO (30 m length, 0.32 mm internal diameter).

The valve system configuration and their default positions of switching are factory set up. The user can visualize their default position through the gas chromatograph's touch screen device; press "Menu", then "Aux/Events", then "Events";

In order to perform sulfur compounds analysis the system is equipped with a split/ splitless injector, a capillary column and an FPD. The 6-port valve, equipped with a 3 mL sample loop, enables the introduction of the sample into the GASPRO (30 m length, 0.32 mm ID).



Gas chromatographic profile of the sulphur compounds sample. Peaks correspond to: COS, H₂S, CS₂, methyl mercaptan, ethyl mercaptan, propyl mercaptan.

EXPERIMENTAL PARAMETERS	
Master GC Analyzer	
Columns	GASPRO (30m length, 0.32 mm ID)
GC Oven	
Temperature	50° to 250°C at 50°C/min
Injector B: SL/IN	
Temperature	250°C
Carrier Gas	Helium
Control Mode	Constant Flow
Flow	10 mL/min
Split Mode and Ratio	Split 1:10
SPlit Purge	5 mL/min
Column Outlet	ambient
Detector A : FPD	
Temperature	230°C
Auxiliary Gas Type	Nitrogen
Aux Flow	20 mL/min
H ₂ Flow	215 mL/min
Air Flow	5 mL/min
Air 2 Flow	180 mL/min
Range	1
Min Half-Peak Width	1s
Digital Acquisition Rate	10 Hz
PMP Control	ON
PMP Voltage	0.8 kV
Auxiliary Temperature	
Aux Temp 1 (°C) FPD Head Temp	130°C
Aux Temp 2 (°C) - Aux Oven Temp	50°C

SULFUR ANALYSIS

DGA-016

Sulfur Analyzer for NGA for Permanent Gas and H₂S

The DGA-016 analyzer enables the analysis of permanent gases and other compounds which is performed using a split/split-less injector (SL/IN), capillary columns and a micro thermal conductivity detector (μ TCD). The GC oven is equipped with a cryogenic system that allows oven temperature to go below zero.

DANI DGA-016 is the ready-to-go solution to attain the maximum performance in the shortest time for your analysis of Permanent Gas, and H₂S.

Master DGA-016

SAMPLE TYPE:

Gas

TYPICAL DETECTED COMPOUNDS:

H₂, Ar, O₂, CH₄, N₂, CO, CO₂, C₂, H₂S

OFFICIAL METHODS MET:

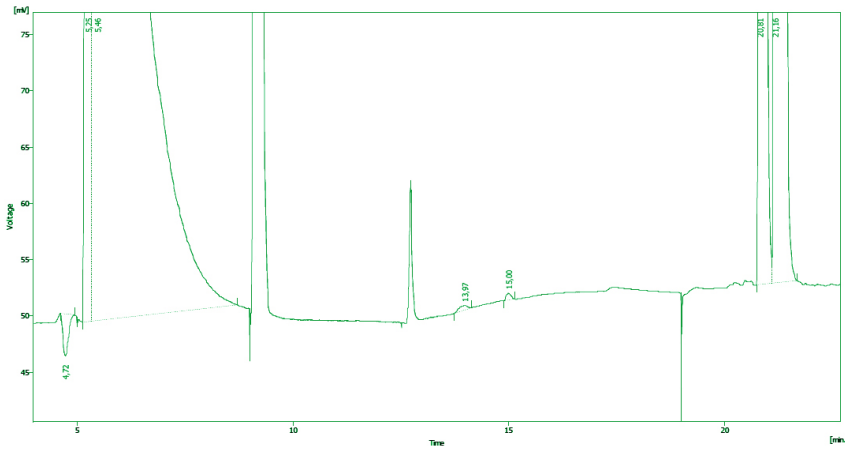
KEY FEATURES & BENEFITS:

With the DGA-016 Analyzer it is possible to determine H₂, Ar, O₂, CH₄, N₂, CO, CO₂, C₂, and H₂S in a gas mixture and to separate these compounds using a switch valve and a molsieve column;

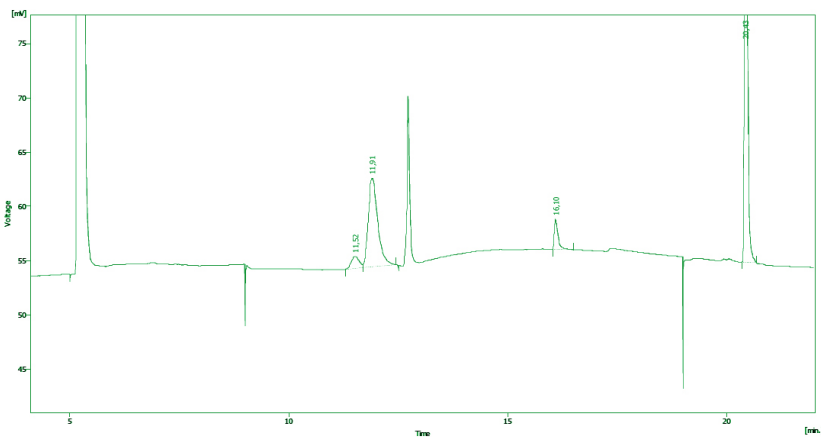
High separation power and high retention for permanent gases are guaranteed by the optimized choice of columns;

The cryogenic system assures improved resolution and better detection limits;

All the analytical parameters can be controlled by the DDS Clarity™ Chromatography Station Software;



uTCD chromatogram of the Gas standard mixture 1. It is possible to recognize the peaks of H₂, CO₂, C₂H₄, C₂H₆, N₂, CO



uTCD chromatogram of the Gas standard mixture 2. It is possible to recognize the peaks of Ar, O₂, H₂S, N₂

EXPERIMENTAL PARAMETERS FOR PERMANENT GAS AND H₂S DETERMINATION

Master GC Analyzer	
Columns	Channel A Poraplot Q (25m, 0.32 mm ID, 30 μm) Molsieve 5A (25m, 0.32 mm ID, 10 μm)
GC Oven	
Temperature	at 12.5 min from 200°C to 36°C at 50°C/min after 1 min from 36°C to 200°C at 20°C/min for 10 min
Cryo Threshold	32°C
Injector B: SL/IN	
Temperature	200°C
Carrier Gas	Helium
Split Flow	Splitless
Flow	8 ml/min
Detector A : μTCD	
Temperature	150°C
Filament Temperature	210°C
Signal Zeroing	50mV
Filament Safety	Injector B
Auxiliary Temperature	
Aux temp 1 - Aux oven temp	90°C

SULFUR ANALYSIS

DGA-018

DANI Gas Analyzer for Hydrocarbons and Sulfur Compounds

The analysis with MASTER GC Analyzer is performed using a split/ splitless (SLIN) injector, micro-packed columns and a micro thermal conductivity detector (mTCD) the instrument is equipped also with a FID detector that can be used for the hydrocarbons analysis.

The channel A of the instruments is equipped with a SL/IN injector and an FPD detector that have not been used in this instrument setup.

Moreover, the gas chromatograph is configured with two valves: an internal 10 port valve for gas samples injection and a side-mounted 4-port valve for liquid samples injection.

DANI DGA-018 is the ready-to-go solution to attain the maximum performance in the shortest time for your analysis of Hydrocarbons and Sulfur Compounds

Master DGA-018

SAMPLE TYPE:

TYPICAL DETECTED COMPOUNDS:

CH₄, ethane, propane, *n*-butane, isobutane, *n*-pentane, isopentane and C₆+ (hexane and higher hydrocarbons)

OFFICIAL METHODS MET:

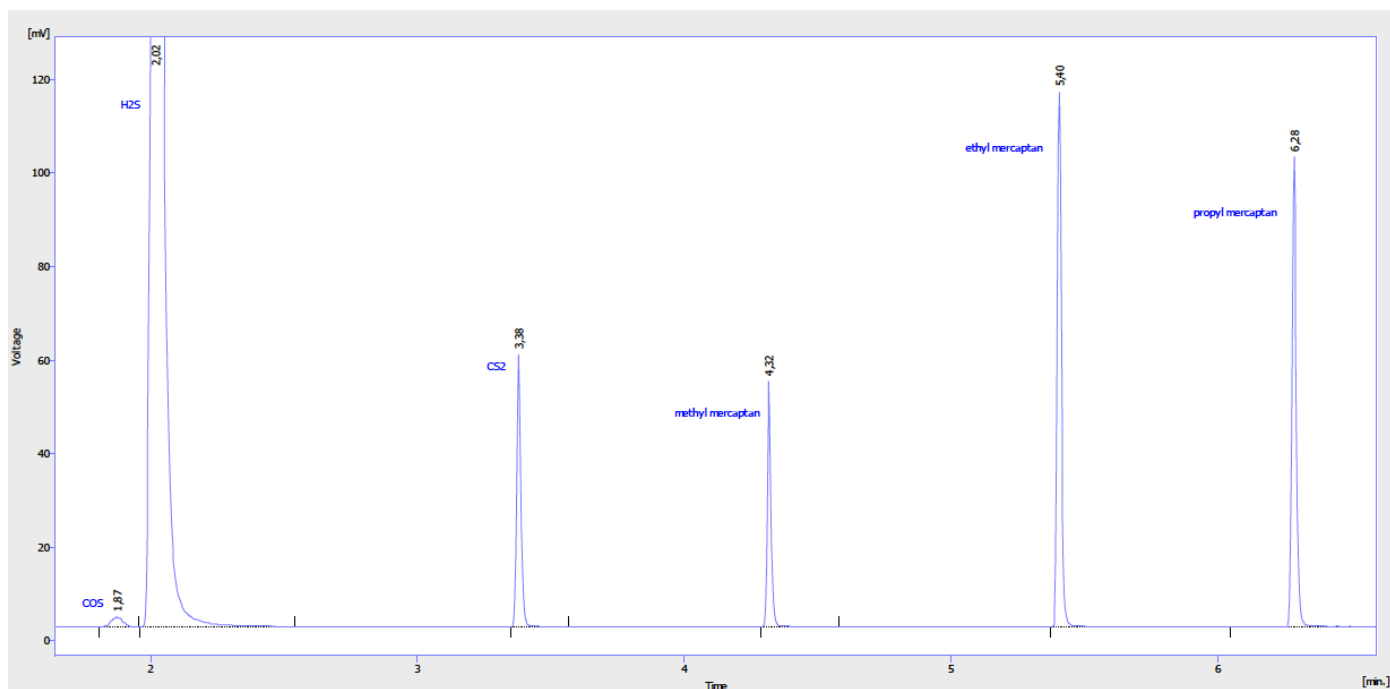
KEY FEATURES & BENEFITS:

Analysis of the hydrocarbons is performed using the channel equipped with mTCD detector. The hydrocarbons gas sample is introduced using the 10-port internal valve and carried to the Hayesep Q column by carrier B.

The gas sample is introduced in the system by the 10-port valve equipped with two 1 ml sample loops.

The external valve gives the possibility to introduce liquid samples in the analytical channel;

All the analytical parameters can be controlled by the DDS Clarity™ Chromatography Station Software;



FPD (channel A) chromatogram of the standard gas mixture. It is possible to identify the peaks corresponding to: COS, H₂S, CS₂, methyl mercaptan, ethyl mercaptan, propyl mercaptan.

EXPERIMENTAL PARAMETERS	
Master GC Analyzer	
Columns	Channel C Hayesep Q (3m, 1/16", 80/100 mesh)
GC Oven	
Temperature	at 2 min 32°C to 180°C at 30°C/min then to 280 at 20°C for 2 min
Injector B: SL/IN	
Temperature	250°C
Carrier Gas	Helium
Split Ratio	1:2
Flow	10 ml/min
Detector A : μTCD	
Temperature	200°C
Main Filament Temperature	220°C
Main Filament Safety	Injector B
Min. Half-Peak Width	1 s
Digital Acquisition Rate	10 Hz
Signal Zeroing	50 mV

SULFUR ANALYSIS

DGA-022

DANI Gas Analyzer for Permanent Gas, Hydrocarbons and H₂S Determination

The analysis is performed using a packed Injector (PK), packed columns, a Thermal Conductivity Detector (TCD) with gold plated filmants and a Flame ionization Detector.

One 10-port valve and two 6-port valves are used for the injection and the separation of the compounds.

DANI DGA-022 is the ready-to-go solution to attain the maximum performance in the shortest time for your analysis of Permanent Gas, Hydrocarbons and H₂S

Master DGA-022

SAMPLE TYPE:

Gas

TYPICAL DETECTED COMPOUNDS:

O₂, N₂, CO₂, CH₄, ethane, propane, *iso*-butane, *iso*-pentane, pentane, hexane, H₂S;

OFFICIAL METHODS MET:

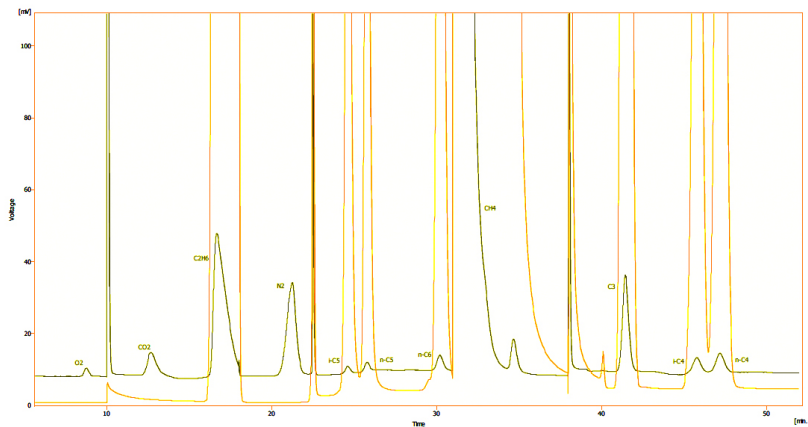
ASTM 1945, ASTM 1946, GPA 2177

KEY FEATURES & BENEFITS:

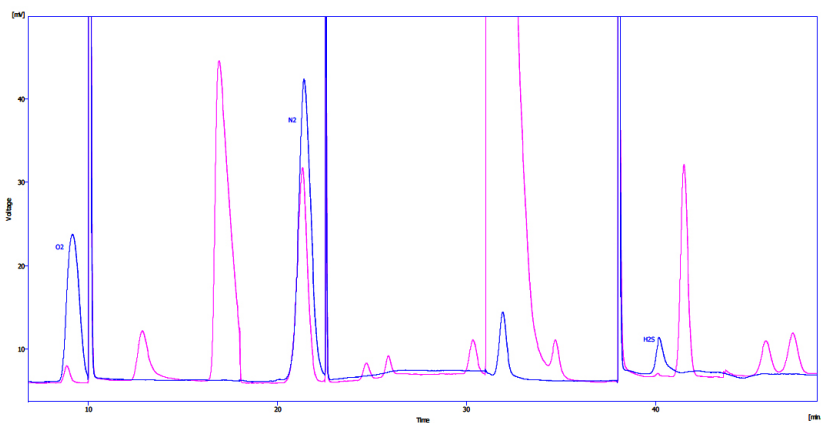
The separation of permanent gases and hydrocarbons is made possible by the presence of packed Molsieve column;

The TCD detector responds to all the pure substances that the FID cannot detect while, on the other hand, the FID, because of its sensitivity, it is the solution of choice for the analysis of hydrocarbons. The combination of the two detectors guarantees an accurate a precise detection of all the components;

All the analytical parameters can be controlled by the DDS Clarity™ Chromatography Station Software;



TCD (green) and FID (orange) overlaid chromatograms of the gas standard mixture (C6).
Labelled peaks correspond to: O₂, CO₂, C₂H₆, N₂, i-pentane, n-pentane, hexane, CH₄, propane, ibutane, n-butane.



TCD chromatograms of the two gas standard mixtures: C6 (purple) and O₂/H₂S (blue).
Labelled peaks correspond to: O₂, N₂, H₂S.

EXPERIMENTAL PARAMETERS	
Master GC Analyzer	
Columns	DC 200 (0.3m, 4x3mm (ODxID), 60/80 mesh) DC200 (5m, 4x3mm (ODxID), 60/80 mesh) Porapack N (2m, 4x3mm (ODxID), 80/100 mesh) Molsieve 5A (2m, 4x3mm (ODxID), 60/80 mesh) T max oven : 140°C
GC Oven	
Temperature	40°C (for 20 min) then at 20°C/Min to 140°C (for 27 min)
Injector A: PK	
Temperature	250°C
Carrier Gas	Helium
Max Pressure	2 bar
Flow	20 ml/min
Detector C: FID	
Temperature	320°C
Aux Flow (N ₂)	25 ml/min
H ₂ Flow	40 ml/min
Air Flow	280 ml/min
Detector A: TCD	
Temperature	200°C
Voltage	6.00 V
Polarity	Negative (-)
Maximum Current	180 mA
Filament Safety	Injector A
Filament Safety Reference	Aux Gas 1
Signal Target	10 mV
Aux Pressure	
Aux 1 Pressure	0.18 bar

SULFUR ANALYSIS

DGA-025

DANI Gas Analyzer for Permanent Gas, Hydrocarbons and Sulfur Compounds

The DGA-025 Analyzer can perform the analysis of permanent Gas, Hydrocarbons and Sulfur Compounds with two Split/Split-less Injectors (SL/IN), micro-packed and capillary columns, a Micro Thermal COnductivity Detector (μ TCD) and a Flame Photometric Detector (FPD).

The system is equipped also with a FLame Ionization Detector that can be used for the Hydrocarbons analysis. One 10-port valve for gas samples injection and one 6-port switch valve are located in the GC auxiliary oven

DANI DGA-025 is the ready-to-go solution to attain the maximum performance in the shortest time for your analysis of Permanent Gas, Hydrocarbons and Sulfur Compounds

Master **DGA-025**

SAMPLE TYPE:

Gas

TYPICAL DETECTED COMPOUNDS:

O₂, CO, N₂, CO₂, CH₄, ethane, propane, n-butane, isobutane, n-pentane, isopentane

OFFICIAL METHODS MET:

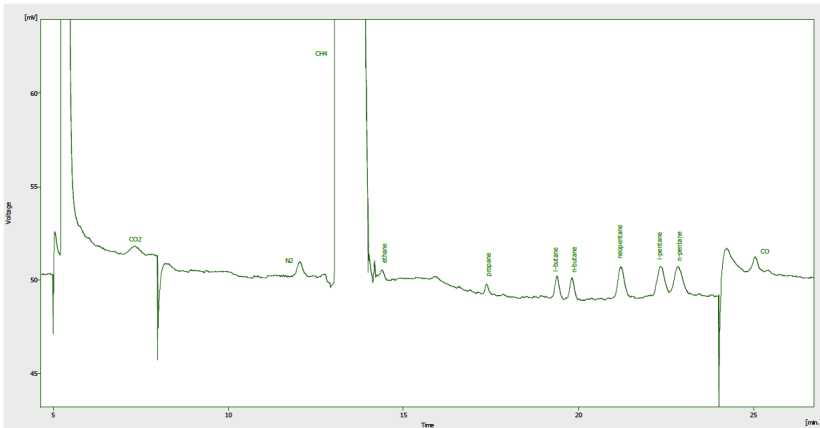
ASTM 1945, ASTM 1946, GPA 2177

KEY FEATURES & BENEFITS:

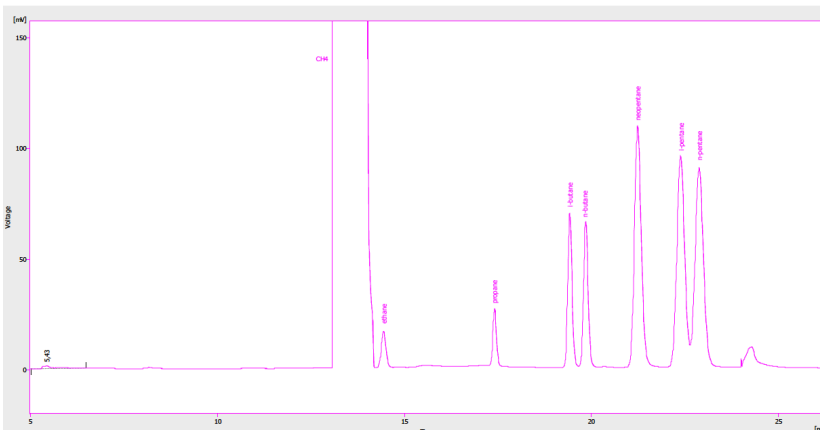
Analysis of the permanent gas and hydrocarbons is performed using the channel equipped with μ TCD and FID detector. The hydrocarbons gas sample is introduced using the 10-port valve and carried to the Hayesep Q and Molesieve columns by carrier C. At the same time the 10-port valve, using carrier B, injects the sample to the second channel equipped with the GasPro capillary column and the FPD detector;

Furthermore it is possible to analyze sulfur compounds using the channel equipped with FPD detector;

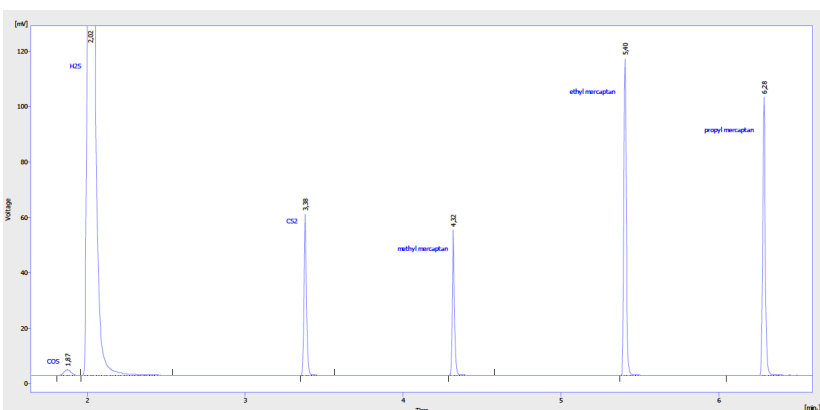
All the analytical parameters can be controlled by the DDS Clarity™ Chromatography Station Software;



mTCD (channel C) chromatogram of the gas standard mixture (C5).
Peaks correspond to: CO₂, N₂, CH₄, ethane, propane, isobutane, n-butane, isopentane, n-pentane, CO.



FID (channel B) chromatogram of the gas standard mixture (C5).
Peaks correspond to: CH₄, ethane, propane, isobutane, n-butane, neopentane, isopentane, n-pentane.



FPD (channel A) chromatogram of the standard gas mixture. It is possible to identify the peaks corresponding to: COS, H₂S, CS₂, methyl mercaptan, ethyl mercaptan, propyl mercaptan.

EXPERIMENTAL PARAMETERS FOR PERMANENT GAS AND HYDROCARBONS ANALYSIS

Master GC Analyzer	
Columns	Hayesep Q (3m, 1mm ID, 1/16" OD, 80/100 mesh) Molsieve 5A (3m, 1mm ID, 1/16" OD, 80/100 mesh) GasPro (30m, =.32 mm ID) Tmax : 250°C
GC Oven	
Temperature	at 10 min 34°C to 200°C at 20°C/min for 15 min
Injector B: SL/IN	
Temperature	200°C
Carrier Gas	Helium
Split Ratio	1:2
Flow	5 ml/min
Injector C: SL/IN	
Temperature	200°C
Carrier Gas	Helium
Split Ratio	1:2
Flow	15 ml/min
Det A: FPD	
Temperature	200°C
Aux Flow	15 ml/min
H ₂ Flow	200 ml/min
Air Flow	2 ml/min
Air 2 Flow	160 ml/min
Aux Type	Nitrogen
PMP Voltage	0.650 kV
Det B: FID	
Temperature	300°C
Aux Flow	25 ml/min
H ₂ Flow	40 ml/min
Air Flow	280 ml/min
Aux Type	Nitrogen

EXPERIMENTAL PARAMETERS FOR SULPHUR COMPOUNDS

Master GC Analyzer	
Columns	GasPro (30m, =.32 mm ID) Tmax : 250°C
GC Oven	
Temperature	40°C to 250°C at 30°C/min for 3 min
Injector B: SL/IN	
Temperature	200°C
Carrier Gas	Helium
Split Ratio	1:2
Flow	5 ml/min
Det A: FPD	
Temperature	250°C
Aux Flow	15 ml/min
H ₂ Flow	200 ml/min
Air Flow	2 ml/min
Air 2 Flow	160 ml/min
Aux Type	Nitrogen
PMP Voltage	0.650 kV

SULFUR ANALYSIS

DGA-033

Natural Gas Analyzer for Permanent Gas, CO₂, Hydrocarbons, COS, H₂S and CS₂

This MASTER GC Analyzer enables the analysis of permanent gas, CO₂, COS, H₂S, CS₂ and hydrocarbons up to C₆.

The analysis are performed with two different pathway equipped as follows:

Channel 1 is composed by a PK injector, two types of columns (Plot Q and Molesieve), a micro Thermal Conductivity Detector (μ TCD), a Flame Photometric Detector (FPD);

Channel 2 is composed by a SL/IN injector, a Plot Q column and a Flame Ionized Detector (FID).

Moreover, the gas chromatograph is configured with a 10-ports valve for sampling, two 6-ports valves for switching and a 8-ports liquid valve all located in the GC auxiliary oven.

DANI DGA-033 is the ready-to-go solution to attain the maximum performance in the shortest time for your analysis of Permanent Gas, CO₂, Hydrocarbons, COS, H₂S, and CS₂

Master DGA-033

SAMPLE TYPE:

Gas

TYPICAL DETECTED COMPOUNDS:

O₂, N₂, CO₂, COS, H₂S, CS₂, methane, ethane, propane, *i*-butane, *n*-butane, *i*-pentane, *n*-pentane, *n*-hexane;

OFFICIAL METHODS MET:

KEY FEATURES & BENEFITS:

Typical components of interest in this type of gas analysis are: O₂, N₂, CH₄, CO, COS, H₂S, CS₂, methane, ethane, propane, *i*-butane, *n*-butane, *i*-pentane, *n*-pentane and *n*-hexane.

With this analyzer it is possible to separate and analyze these compounds or part of them.

Higher sensitivity and precision are obtained through the use of the μ TCD and FID detectors;

All the analytical parameters can be controlled by the DDS Clarity™ Chromatography Station Software;

EXPERIMENTAL PARAMETERS FOR PERMANENT GAS, CO₂, HYDROCARBONS AND SULPHUR COMPOUNDS

Master GC Analyzer

Columns	Channel 1	Plot Q (3m, 1/16 OD) Molsieve (3m, 1/16 OD)
	Channel 2	Plot Q (3m, 1/16 OD)

GC Oven

Temperature	1) T : 35°C, Time: 15 min, Rate: 30°C/min 2) T: 200°C, Time: 11 min
-------------	--

Injector A: PK

Temperature	250°C
Carrier Gas	Helium
Flow	10 ml/min

Injector B: SL/IN

Temperature	250°C
Carrier Gas	Helium
Split Ratio	1:25
Flow	8 ml/min

Det A: FPD

Temperature Control DBB	250°C
Detector Head Temperature (Aux Temp 2)	130°C
H ₂ Flow Rate	200 ml/min
Air 1 Flow Rate	160 ml/min
Air 2 Flow Rate	160 ml/min
Aux Flow Rate (N ₂)	15 ml/min
Photomultiplier voltage	0.72 kV
Range	1
Min. Half-Peak Width	0.60 s
Digital Acquisition Rate	25 Hz

Det B: FID

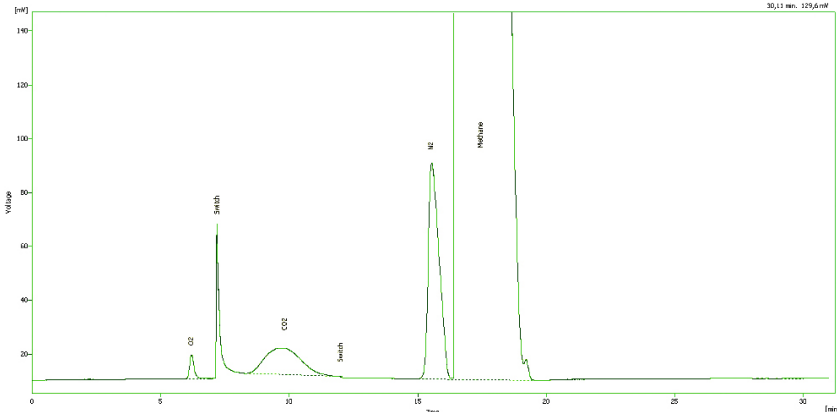
Temperature	300°C
Aux Flow Rate (N ₂)	25 ml/min
H ₂ Flow Rate	40 ml/min
Air Flow Rate	280 ml/min
Range	10
Min. Half Peak Width	0.60 s
Digital Acq. Rate	25 Hz

Det C: μTCD

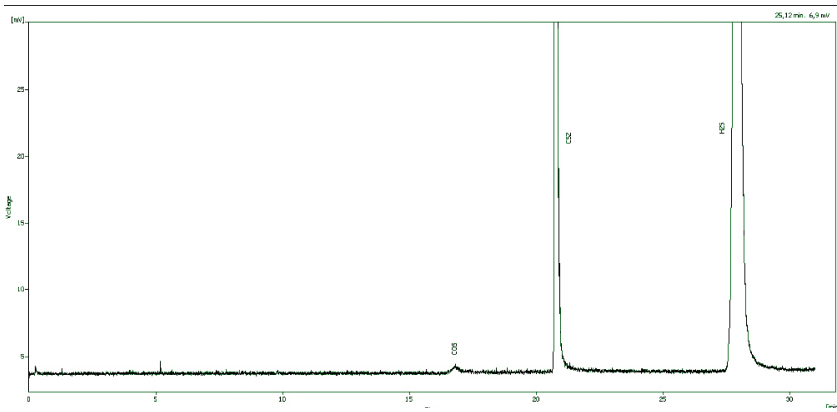
Temperature Control	160°C
Main Filament Temperature	190°C
Main Filament Safety	Injector A
Min. Half-Peak Width	0.60 s
Digital Acquisition Rate	25 Hz
Signal Zeroing	10 mV

Auxiliaries

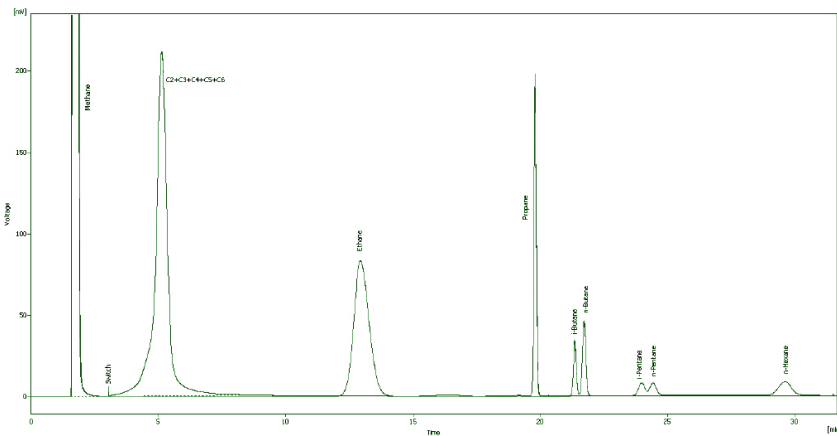
Aux Temp 1- for Aux Oven	80°C
Aux Temp 2 - For Detector Head temp FPD	130°C
Aux Gas (N ₂) - for Backflush	1.7 bar



μTCD (Chn 1) chromatogram of the gas standard mixture



FPD (Chn 1) analysis of sulphur compounds mixture



FID (Chn 2) analysis of C6 hydrocarbons mixture



SULFUR ANALYSIS

По вопросам продажи и поддержки обращайтесь:

Архангельск (8182)63-90-72
Астана (7172)727-132
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Казань (843)206-01-48

Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81

Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54

Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93

Единый адрес для всех регионов: drs@nt-rt.ru || www.danimaster.nt-rt.ru