New Instruments and Research for Analysis

NEPTUNE
SERIES 800

FAST RESIDUAL SOLVENT ANALYZER FOR THE TOBACCO, PHARMACEUTICAL AND FOOD FLEXIBLE PACKAGING

*The **NIRA NEPTUNE SYSTEM** is a fast Headspace Gas Chromatograph, specifically designed for the tobacco, pharmaceutical and food packaging industries.*
The NIRA Neptune system comes in two versions: ***"Table Top"*** *and* ***"Process"*** *Version.*

Table Top Version

Process Version

BENEFITS

- ***Fast analysis*** *and* ***less production cost.***
- ***Able to analyse*** *printed flexible materials* ***in 7 minutes (total time).***
- ***Able to analyse*** *coated or laminated printed flexible materials* ***in 12 minutes (total time).***
- ***Drastically optimize your production cost*** *by reducing waste materials and intervention time.*

USER FRIENDLY

- ***Completely automatic;*** *anyone can use it, even the machine operator directly inside the production area.*

REMOTE CONTROL

- ***Ethernet connection; remote data checking can be made by anyone*** *inside the factory.*

VERSATILITY

- ***Able to analyse the purity of the solvents*** *and the solvent quality inside the inks.*
- ***Able to analyse the inks, adhesives and solvents*** *purchased before their use.*

ALL IN ONE

- ***TABLE TOP VERSION:***
  Headspace + GC + Embedded PC, all in one single unit.

- ***PROCESS VERSION:***
  Headspace + GC + Embedded PC + air treatment system, all in one single unit.

in accordance with EN 13628

www.nirainstruments.it

MODELS & COMPOSITION

The instruments is offered in two different versions: Process and Table Top Version.
Both of them comes with the same technical features and they give the same analytical results, but the Process Version comes already with some extra accessories (air treating systems) in order to avoid the Ultra Pure air cylinders. These extra accessories can be purchased as optional parts for the Table Top Version as well. Both versions require Ultra Pure air and Ultra Pure Hydrogen gas for Gas Chromatography.

NEPTUNE Process Version

The instrument is housed inside a standalone pulpit, and it is complete with:

- Ultimetal capillary column 50m x 0.53
- Printer
- Kit of 50 sample receptacles (vials)
- Air purifier
- Air oxidizer
- Anti explosion monitoring device
- Hydrogen generator (optional)

This system can be installed alongside the machine, inside the workshop.

NEPTUNE Table Top Version

The instrument is assembled inside a metallic box that can be laid on a table or bench a few meters away from the printing machine (requires external utilities: power supply, compressed air, ultra-pure air and hydrogen gas for GC) complete with:

- Ultimetal capillary column 50m x 0.53mm
- Printer
- Kit of 50 sample receptacles (vials)

ACCESSORIES:
- Precision cutter of 100 cm^2 samples
- Additional kit of sample receptacles
- Standard mixture for calibration
- Syringe for standard mixture introduction (5 µl)

OPTIONAL FOR TABLE TOP VERSION:
- Air purifier
- Air oxidizer

TECHNICAL SPECIFICATIONS

DETECTOR	*Flame Ionization*
DESORBER	*Accept only 20 ml vials*
DESORBER TEMPERATURE RANGE	*From 50°C to 150°C (Selectable)*
ANALYTICAL CHAMBER TEMPERATURE RANGE	*From 50°C to 150°C (Selectable)*
LOWER DETECTABLE LEVEL	*0,01 mg/m²*
ACCURACY	*±1% FS*
LINEARITY	*±1% FS*
REPEATIBILITY	*±1% FS*
LONG TERM STABILITY	*±1% FS*
ENVIRONMENTAL WORKING TEMPERATURE	*+5 + 40 °C*
RESPONSE TIME FOR PRINTED FLEXIBLE MATERIAL	*7 min.*
RESPONSE TIME FOR COATED FLEXIBLE MATERIAL	*12 min.*
RESPONSE TIME FOR LAMINATED FLEXIBLE MATERIAL	*12 min.*
SERVO GASSES REQUIRED	*Ultra-pure air and ultra-pure hydrogen for G.C.*
HYDROGEN CONSUMPTION	*50 cc/min.*
HYDROGEN PRESSURE REQUIRED	*40 psi (3 bar)*
FLAME IONIZATION DETECTOR AIR CONSUMPTION	*500 cc/min.*
SERVO AIR PRESSURE REQUIRED	*60 psi (4 bar)*
VISUALIZATION	*TFT Screen 10,4"*
POWER SUPPLY	*230 Vac, 50/60 Hz, 500 VA*
DIMENSIONS (Process Version)	*600x1100x1900 mm (L x W x H)*
WEIGHT (Process Version)	*170 Kg*
DIMENSIONS (Table Top Version)	*500x600x400 mm (L x W x H)*
WEIGHT (Table Top Version)	*40 Kg*

N.I.R.A.
NEW INSTRUMENTS and RESEARCH for ANALYSIS s.r.l.
Head Office: Via Locatelli, 113 - 20853 Biassono (MB) - Italy
Phone: +39 039.24.97.856 - Fax +39 039.24.90.049 e-mail: info@nirainstruments.it