FAST RESIDUAL SOLVENT ANALYSIS

NEPTUNE 803

Tabletop model

- Quickly analyse residual solvents from single or complex films (5 to 10 minutes).
- Usable by unskilled personnel.
- Check the solvents, inks and adhesives composition.
- EN 13628 and ASTM 1884 compliant.

Process model

TURN RESIDUAL SOLVENT ANALYSIS INTO NEPTUNE 803

Skilled technician required

Traditional Lab GC

Response time in 45 min.

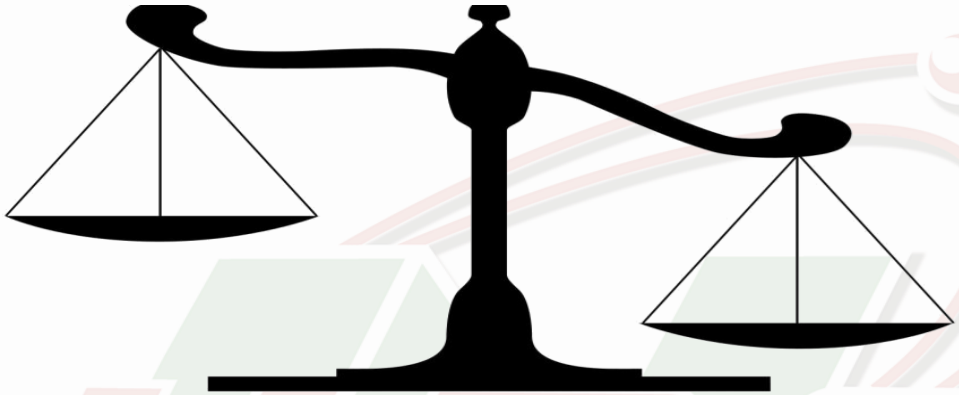
Usable by press operators

Neptune803

Response time 7 min.

The speed of the Neptune analyser allows production to correct for high concentrations of residual solvent, starting with the first roll produced.

COMPARISON WITH STANDARD GCs



TRADITIONAL LAB GC

- Response time from 45 to 50 min.
- Slow and complex sampling.
- Need frequent span checks.
- Complex software and report reading.
- For skilled personnel only.
- Works in clean and temperature-controlled environment only.
- No fault alarm recording.

NEPTUNE GC

- Response time from 7 to 14 min.
- Quick and easy sampling.
- Stability up to 6 months.
- Guided software and easy reports.
- Anyone can use it.
- Works in harsh environment (made for production areas).
- 24h/24h alarm recording.

HOW TO USE IT?

Neptune 803 quickly extract and measure residual solvents from single or multilayer films automatically

Cork·base¶

Reel¶

Die·cut¶

100·cm·2·sampled·reel¶

Film·insertion·in·test·tube¶

Insertion·in·desorber·body¶

Analysis·cap·closure¶

Automatic·analysis·Start-up¶

Simply cut a known film sample and insert it into the headspace. Neptune will print and create a .pdf file report with the results, directly on your corporate network within 7 minutes.

SIMPLE & COMPLETE REPORTS

Date and time

Information

Single solvent Concentration

TOTAL RESIDUAL SOLVENT in mg/m^2

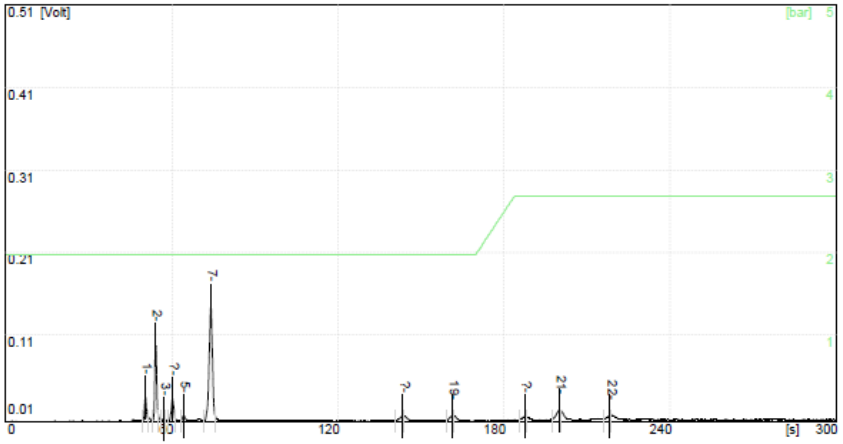
Analysis conditions

LABORATORIO
15/11/2017 13:35:09

Sn. 02461216
Neptune V.1.0.0.0 Firmware 0.11

RAPPORTO ANALISI FILM

N 994
Macchina Commessa Bobina Imballaggio



Tempo Incubazione [min.] 5 Area Film Campione [cm²] 50

Rapporto Risultati

N.	Name	Conc [mg/m²]	V [%]	Area	R.T. [s.]	R.T.Ref. [s.]
1	Metanolo	0.53	7.45	2334	50.35	50.40
2	2-Etanolo	1.21	17.02	7644	54.05	54.15
3	3-Iso-Propanolo	0.06	0.84	403	57.10	57.65
?	?-?	0.15*	2.11	3042	60.15	00.00
5	5-n-Propanolo	0.08	1.13	631	64.15	64.50
7	7-Etil Acetato	3.92	55.13	19979	74.05	74.05
?	?-?	0.06*	0.84	1306	143.60	00.00
19	19-n-Butil Acetato	0.18	2.53	1307	161.50	161.35
?	?-?	0.05*	0.70	1050	187.70	00.00
21	21-Dowanol Pma	0.71	9.99	2768	200.25	198.95
22	22-m-Xylene	0.16	2.25	1516	218.55	217.35

*Valore Riferito ad Acetato di Etile

Tot.Conc [mg/m²] 7.11

Condizioni Operative

	Min	Max	Delta
TempFid [°C]	89.8	90.3	0.5
AirFid [bar]	1	1.02	0.02
H2Fid [bar]	1	1	0
Carrier [bar]	2	2.7	0.7

	Min	Max	Delta
AirFidFlow [ml/m]	244	250	6
AirAuxFlow [ml/m]	-3	430	433
H2FidFlow [ml/m]	21	22	1
CarrierFlow [ml/m]	16	32	16

Incubazione

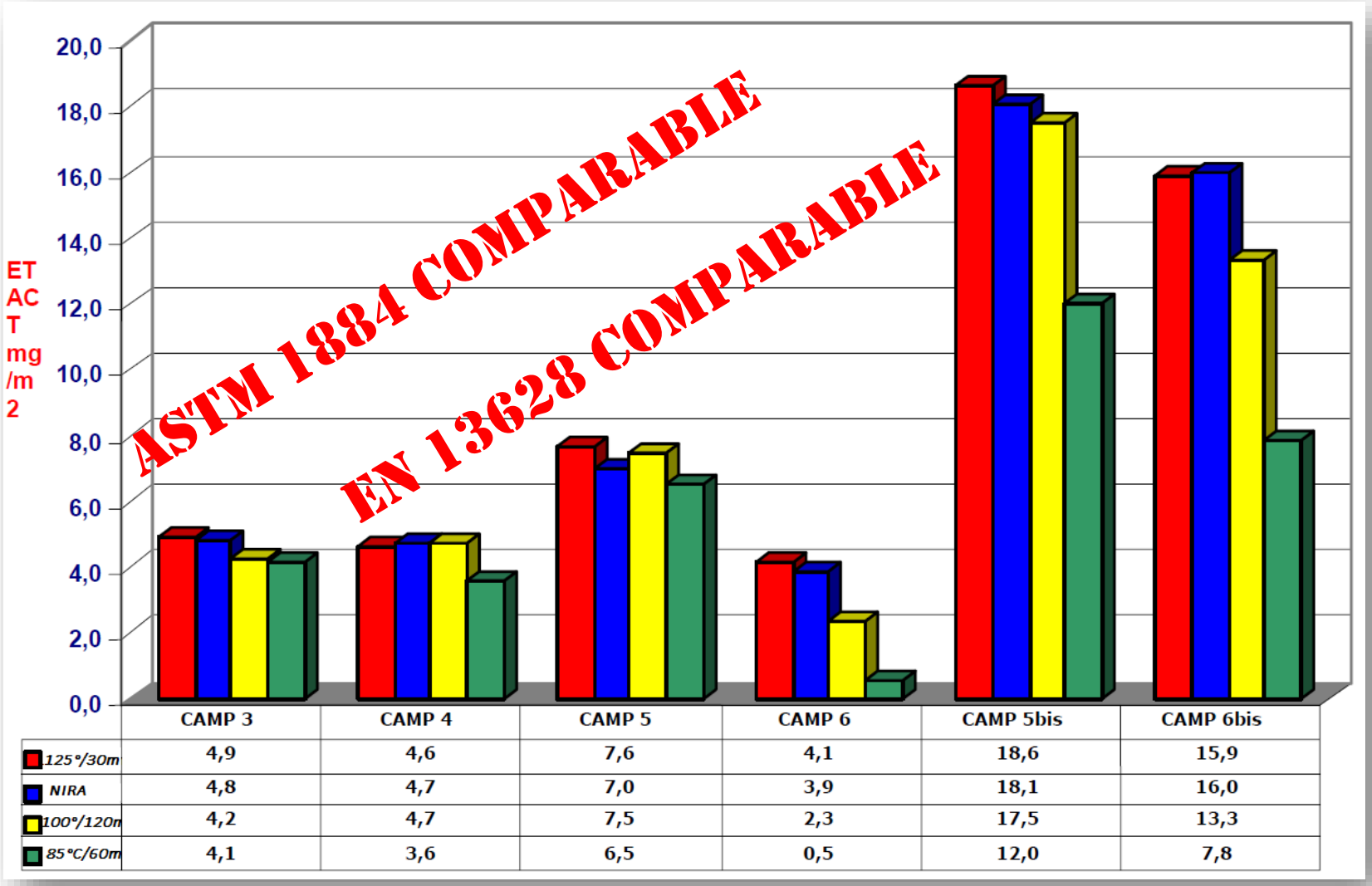
Fine Pressurizzazione [bar] 1.03 OK

	Min	Max	Delta
TempDesorber [°C]	142.7	145.4	2.7
SamplePress [bar]	0.03	0.29	0.26

Lavaggio

Flusso Lavaggio [ml/m] 0 OK

COMPARABLE RESULTS TO THE MAIN EUROPEAN AND US STANDARDS



	CAMP 3	CAMP 4	CAMP 5	CAMP 6	CAMP 5bis	CAMP 6bis
125°/30m	4,9	4,6	7,6	4,1	18,6	15,9
NIRA	4,8	4,7	7,0	3,9	18,1	16,0
100°/120m	4,2	4,7	7,5	2,3	17,5	13,3
85°C/60m	4,1	3,6	6,5	0,5	12,0	7,8

REQUIREMENTS

Our FID systems requires hydrogen and compressed air

Hydrogen 4,5 grade pure (3 bar)

40 Liters gas cylinder or optional H_2 generator

CONSUMPTION = 50 ml/min.

Air from your network (3 bar)

Nira filtering system

CONSUMPTION = 1 m^3/hour

Power supply 230V or 115V

CALIBRATION AND MAINTENANCE

We worked hard to minimize maintenance and calibration frequencies, obtaining record results.

Every 6 months: Calibration check, the procedure is guided from the software and takes just few minutes using a single injection of a customized standard mixture.

Once a year, ask for a service visit from our staff.

COMPETENCE IN AFTERSALES

Our service department work worldwide every day, on 6 different kind of Nira instruments:

- E-mail, remote and phone service.
- More than 500 interventions performed per year.
- More than 1000 instruments serviced worldwide.
- Less than 5 working days to organize an intervention within Europe, 10 worldwide.