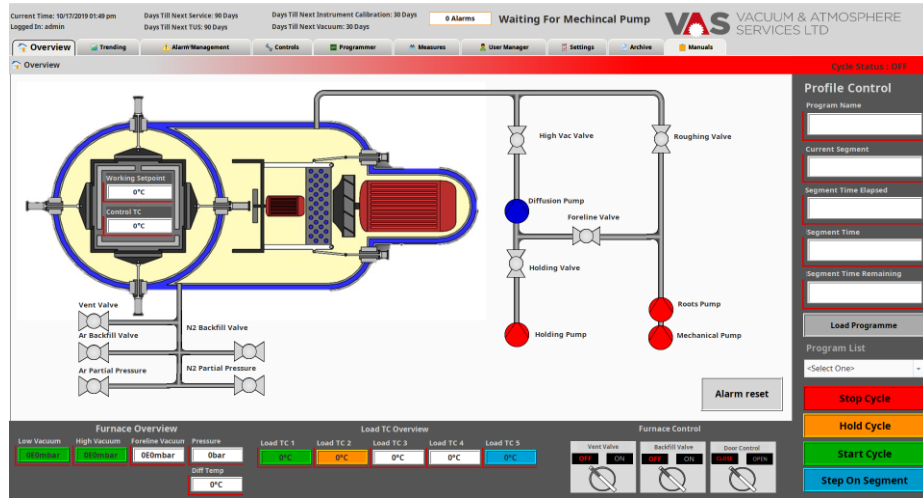


REFURBISHED TOP LOADING VACUUM FURNACE

MODEL No. CVE1830



Agents for:



Unit 30 Park Rose Ind Est, Middlemore Road, West Bromwich, B66 2DZ
 Tel: 0121 544 4385 Fax: 0121 544 3874
www.vacat.co.uk

VAS Group of companies:



TECHNICAL DATA

DIMENSIONS

Floor space required

Width 2.5m
Height 2.0 m
Depth 2.5 m

Plant gross weight 2,500 kgs

Work zone

Diameter 450 mm
Depth 762 mm

Max gross charge 90 kg

TEMPERATURE

Max. Temperature 1300 °C

Vacuum 600°C to 1200°C ±5 °C

ENERGY

Rating of heating 90Kva

Connected load 100Kva

Rated voltage (3 phase – 50Hz) 400 V

VACUUM

Ultimate vacuum (conditioned furnace) 1.0×10^{-5} mbar

Operating vacuum 5.0×10^{-4} mbar

Partial Pressure Nitrogen/Argon 0.1 to 10 mbar

Leak rate mbar/sec 5×10^{-2} mbar l / sec or >4 microns

PUMPING GROUP

MECHANICAL PUMP –

Model No. – Edwards E2M175

Capacity 175m³/h

DIFFUSION PUMP –

Model No. – Edwards E012

Capacity 4200 l/sec

COOLING FAN

Rated power 4 Kw

INERT GAS

Nitrogen quenching gas max pressure 800 Mbar

Gas consumption at max pressure 1m³ approx

Quenching gas purity 99,999 %

CYCLE FEATURES – CONDITIONED, EMPTY FURNACE

Pumping time to 10⁻⁴ mbar range < 20 min

Cooling time of furnace
from 1250°C to 150°C < 40 min

Heating time of the hot zone
from 150°C. to 1250°C. < 40 min

CONTROL SYSTEM

Controller	VCS
PLC	Siemens
Temperature/Vacuum Recorder	VCS
Over temperature safety controller	Eurotherm
Pirani Vacuum Gauge	Edwards
Penning Vacuum Gauge	Edwards
Thermocouples (Control O/Temp)	Type 'S'
Load thermocouples (12 off)	Type 'N'

WATER (To be confirmed)

Min/Max pressure cooling water	3.5 bar
Water consumption during cooling	4 m3/h
Average consumption cooling water	3 m3/h
Water inlet max. Temp.	25 °C

GRAPHITE HOT ZONE

Insulation	Graphite
Heating Elements	CFC

The work cycle of the Model No. Ipsen CVE1830 is completely automatic.

Gas fan cooling is included @ 800 mbar

Gas Quenching is included:-

- Cooling bottom to top only

The gas pressure flowing through the gas quench system is operated at @800 mbar

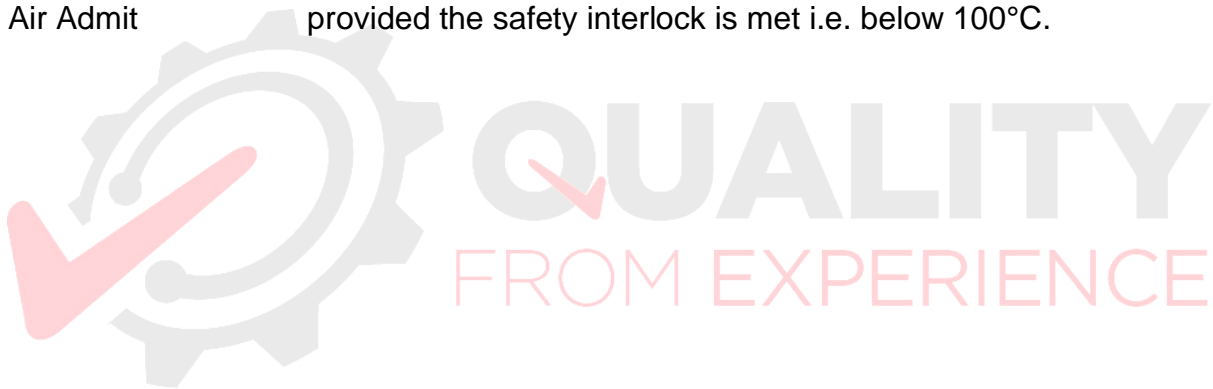
The following items are switched from the control panel.

Pumping booster pump introduced at pre-set vacuum levels.

Heating can be activated automatically provided the pre-set vacuum levels are achieved and water is available.

Cooling under vacuum, static or gas fan quench.

Air Admit provided the safety interlock is met i.e. below 100°C.



Agents for:



Unit 30 Park Rose Ind Est, Middlemore Road, West Bromwich, B66 2DZ
Tel: 0121 544 4385 Fax: 0121 544 3874
www.vacat.co.uk

VAS Group of companies:



PROPOSAL

PRICE SCHEDULE

Item 1

One (1) Vacuum Heat Treatment & Brazing Furnace Model No. CVE 1830 as generally as described within the attached technical summary.

The following upgrade works are included

- Stainless steel vessel, ultrasonically tested
- New VCS control system
- Reconditioned hot zone
- Vacuum pump overhaul
- Heat exchanger removed and pressure tested
- All new water and air hoses
- All new butterfly valves
- AMS2750 compliant

Price: POA

(This offer is made Subject to Prior Sale)

Delivery – to be quoted upon advising final of the destination

Installation / commissioning / training – to be quoted upon advising of the final destination

DELIVERY:

12-16 weeks

TERMS OF CONTRACT:

12 month warranty will apply to all new components.

All other items offered with 6 month warranty

TERMS OF PAYMENT:

To be discussed

TAXES:

The aforementioned quotation is exclusive of VAT or any other taxes / import duties that may apply.

Agents for:



Unit 30 Park Rose Ind Est, Middlemore Road, West Bromwich, B66 2DZ
Tel: 0121 544 4385 Fax: 0121 544 3874
www.vacat.co.uk

VAS Group of companies:



TRAINING

On site training at Customer site will include 3 man days where both practical and theoretical aspects of vacuum engineering will be discussed and include a seminar covering:-

1. Vacuum Terminology. Detailing a basic understanding of the terms and units used in day-to-day use of vacuum furnaces.
2. Vacuum Pumping. Detailing the basic operation of the individual vacuum pumps.
3. Furnace control and sequencing.
4. Furnace Control System
5. Vacuum furnace maintenance.
6. "Hands on" Maintenance training.

As well as the Operation and Maintenance manuals supplied with the plant, within the training programme, an additional manual will be supplied to each attendee of the seminar.

It is useful if a 'classroom' could be made available during this period.

Agents for:



Unit 30 Park Rose Ind Est, Middlemore Road, West Bromwich, B66 2DZ
Tel: 0121 544 4385 Fax: 0121 544 3874
www.vacat.co.uk

VAS Group of companies:



EXCLUSIONS

VAS's installation proposal offer is based upon purchaser's acceptance of the following responsibilities, unless otherwise agreed in price summary.

1. Pits, foundations, packers and associated foundation bolts, unless previously specified and quoted.
2. Steelwork covering pits.
3. Any additional supporting steelwork and stairs which might be requested.
4. Cranes and handling devices.
5. Sump pumps for pit where applicable.
6. Any water treatment equipment, unless previously specified and quoted.
7. Any auxiliary emergency pumps.
8. Provide adequate 3 Phase, 50 Hz, power supply and in accordance with furnace requirements.
9. Provide adequate water system including pipework
10. Provide inert gas to furnace termination point
11. Provide and install all inlet exhaust ducting from the furnace termination point i.e.. mechanical pump exhaust.
12. Provide security for all of the furnace and erection equipment against theft and malicious damage.