



LAKSHMI VACUUM SERVICES PVT LTD



**No. 604/2,605/2A,
MAHAKAVIBHARATHI NAGAR,
NEAR PUTHU KOVIL,
THIRUMUDIVAKKAM,
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LAKSHMI VACUUM SERVICES PRIVATE LIMITED is a part of the Lakshmi Vacuum group of Companies and is engaged in offering Vacuum Heat Treatment services across India.

Since its inception, high standards were set in attaining the goal, of achieving, total customer satisfaction, in the commercial Vacuum heat treatment sector. **LVS** currently operates state-of-art vacuum furnaces at its plant located at **CHENNAI**.

Salient features of Vacuum Heat Treatment at LVS:

- No Scaling or decarburization
- Bright surface finish.
- Uniform & gradual heating.
- Uniform temperature throughout the hot zone.
- Optimum process know – how ensures adequate soaking times, heating rate & cooling rate.
- 360°C Gas circulations throughout the workload ensure uniform properties.
- Consistent results due to fully automatic operation.
- Best obtainable microstructure owing to all of the above criticalities.
- Entire process data can be stored & retrieved for various analyses.

Process capabilities of Lakshmi Vacuum Heat Treaters:

Vacuum Hardening, Vacuum Tempering, Vacuum Annealing, Vacuum Stress-relieving, Sub-zero treatment, Vacuum Ageing, Vacuum Brazing, Post Weld Heat Treatment (PWHT).

Areas of application:

Hardening & Tempering of Pressure Die-casting Dies, Plastic Injection Moulds, Plastic Compression Moulds, Cutting Tools, Hot & Warm Forging Dies, Hot & Cold Extrusion Dies
Blanking, Forming, Stamping, Progressive Dies, Valves.

List of Steels being processed at LVS:

Hot work Steels, Cold Work Steels.
High Speed Steels, Stainless Steels (400 Series)
Precipitation Hardening Steels
All Air – Hardening Steels

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ZERTIFIKAT

TUV®

VACUUM HARDENING FURNACE – VHF 01 / 02



| Characteristics | VHF 01 | VHF 02 |
|-------------------------------|-----------------------|-----------------------|
| Chamber Size | 900mm x 600mm x 600mm | 600mm x 600mm x 400mm |
| Maximum Operating Temperature | 1350°C | 1350°C |
| Absolute Vacuum Level | 5X 10-2 Torr | 5X 10-2 Torr |
| Maximum Load Per Charge | 600Kgs | 450Kgs |

Totally PLC Controlled with Data Logger for effective process control and recording.

VACUUM HARDENING FURNACE – VHF 03 / 04



| Characteristics | VHF 03 | VHF 04 |
|-------------------------------|--------------------------|--------------------------|
| Chamber Size | 900mm x 900mm x 1200mm | 600mm x 600mm x 900mm |
| Maximum Operating Temperature | 1250°C | 1300°C |
| Absolute Vacuum Level | 5X 10 ⁻³ mbar | 5X 10 ⁻² mbar |
| Maximum Load Per Charge | 1Ton | 600Kgs |

Totally PLC Controlled with Data Logger for effective process control and recording.

VACUUM TEMPERING FURNACE – VTF 01 / 02



VTF 01

VTF 02

| Characteristics | VTF 01 | VTF 02 |
|-------------------------------|--------------------------|--------------------------|
| Chamber Size | 600mm x 600mm x 900mm | 600mm x 600mm x 900mm |
| Maximum Operating Temperature | 700°C | 700°C |
| Absolute Vacuum Level | 5X 10 ⁻¹ mbar | 5X 10 ⁻¹ mbar |
| Maximum Load Per Charge | 600Kgs | 600Kgs |

Totally PLC Controlled with Data Logger for effective process control and recording.

VACUUM OIL QUENCH FURNACE



| | |
|---------------|-------------------------|
| Hot Zone Size | Dia 800 x 800 H |
| Hot Zone | Graphite |
| Max Temp | 1100°C |
| Vacuum Level | 5x10 ⁻² mbar |
| Quench Media | Oil |

Materials Processing in Oil Quench:

- HCHCR (D3)
- OHNS
- EN24, EN31, EN8, EN19, EN9, EN42, EN44, EN45, EN351, EN353

TEMPERING FURNACE – 6 NOS



Oven -6Nos for Stress reliving/tempering upto 350/650/850°C

Testing Equipments:

Rockwell Hardness Tester- 4Nos



VICKERS HARDNESS TESTER

With load selection from 5Kgs to 50 Kgs



Portable Hardness Tester – 3nos



Surface Table (1000mm x 600mm)



METALLURGICAL MICROSCOPE

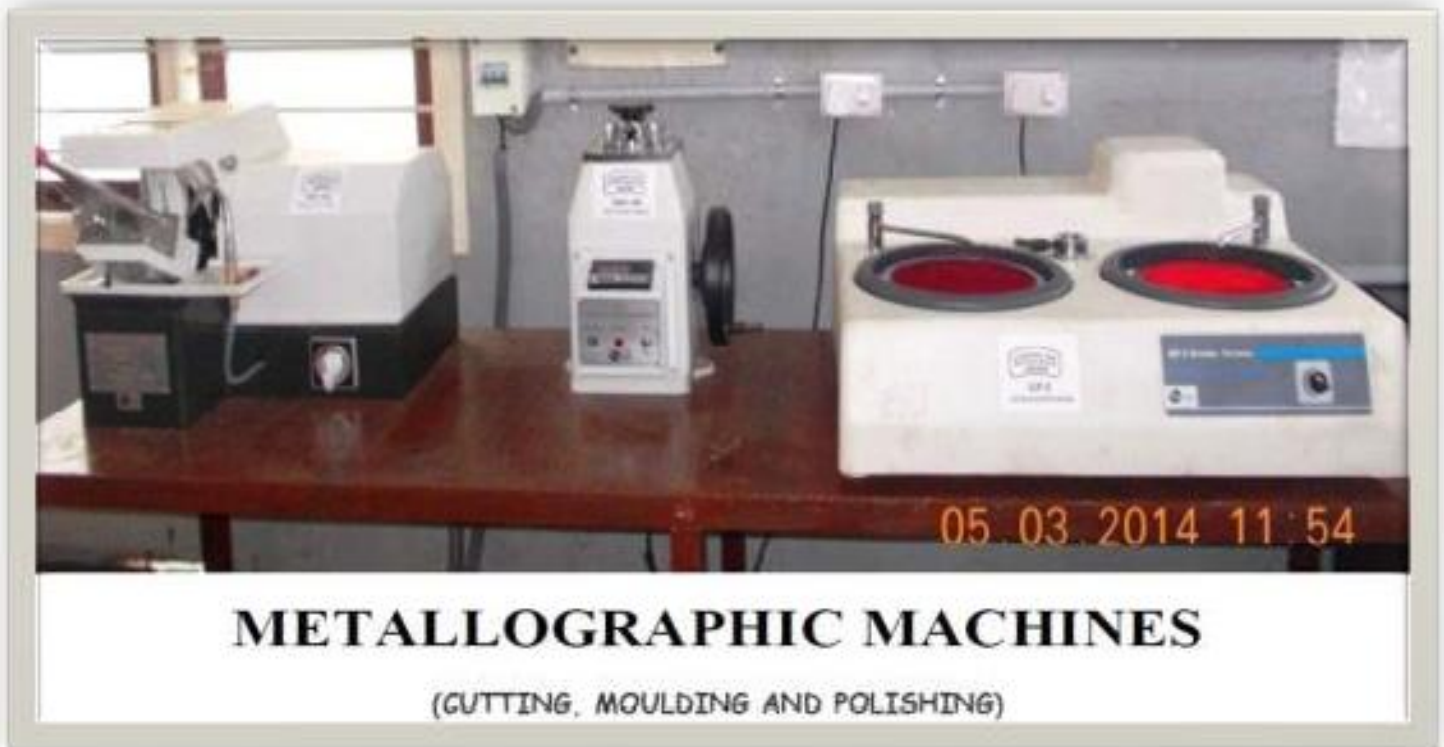


MICRO VICKERS



Min 0.01 – 1Kgs

METALLOGRAPHIC SAMPLE PREPARATION MACHINES



Some of our valuable materials and industries

- **Automobile Industries,**
- **Automotive Industries,**
- **Die Casting Industries,**
- **Plastic Moulding Industries,**
- **Valve Industries,**
- **Petro Chemical Industries,**
- **Pharmaceutical Industries,**
- **Paper Industries,**
- **And many more...**

MATERIAL PHOTOS







CONTACT DETAILS

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| Marketing Manager : | Mrs. G.Lakshmi - 8939695702 |

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|-------|-----------------|
| GST : | 33AABCL7058B1ZV |
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