



**INDO-GERMAN
VACU TREAT PVT. LTD.**

**Aichelin
UNITHERM**

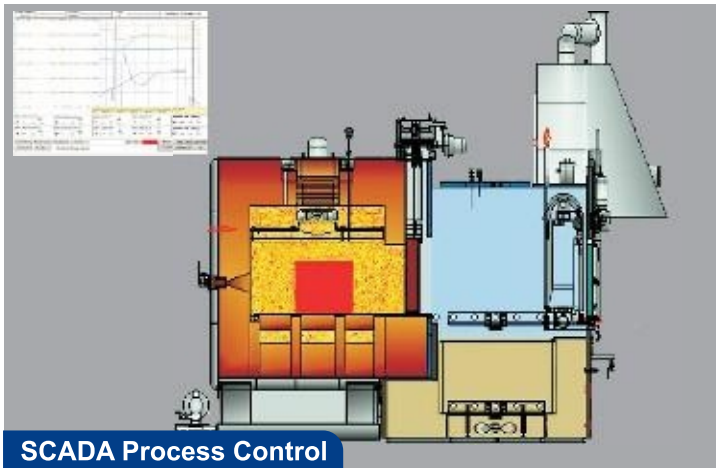
industrial furnace solutions
Heat Treatment Systems India Pvt. Ltd.
Furnace Manufacturing Division



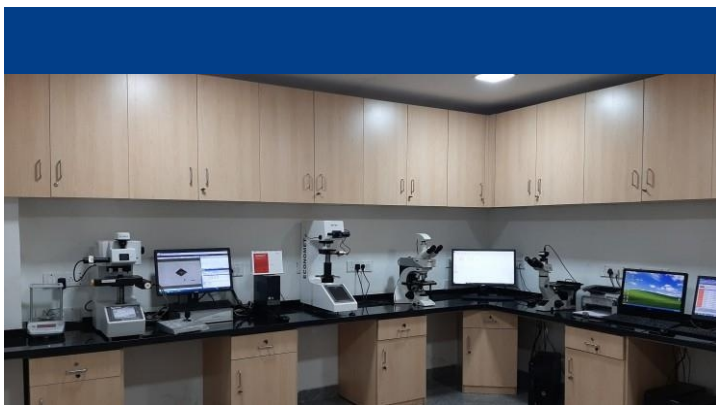
Sealed Quench Furnace



Gas Nitriding Furnace



SCADA Process Control



Fully Equipped State of Art Metallurgy Labs

About Unitherm Engineers Ltd

Unitherm Engineers Limited is largest commercial heat treatment services provider in India. Four plants at Pune (West India), Bengaluru (South India), Bhiwadi (North India) and Chennai (South India) are strategically located close to automotive OEMs and component manufacturers in major automotive hubs in india

Unitherm has established itself as "One stop" heat treatment solutions provider for range of engineering products. Proven competence in providing heat treatment services!

Company employs highest number of metallurgists across all the operational departments. Experienced and qualified team of metallurgists ensures shorter process development time. Get it right first time!

Infrastructure

Plant	Furnace Type	Make	No. of Furnaces	Gross Capacity
Chennai	Sealed Quench Furnace	Unitherm	3	3 x 600 Kg
	Sealed Quench Furnace	Unitherm	2	2 x 1500 Kg
	Gas Nitriding	Unitherm	2	2 x 1500 Kg
Pune	Sealed Quench Furnace	Unitherm	9	9 x 600 Kg
	Sealed Quench Furnace	Unitherm	6	6 x 1200 Kg
	Gas Nitriding	Unitherm	1	1 x 1200 Kg
	Gas Nitriding	Unitherm	2	2 x 1500 Kg
	Steam Treatment	Unitherm	2	2 x 600 Kg
Bengaluru	Sealed Quench Furnace	Unitherm	11	11x 600 Kg
	Gas Nitriding	Unitherm	4	4 x 1500 Kg
Bhiwadi	Sealed Quench Furnace	Unitherm	4	4 x 1500 Kg
	Sealed Quench Furnace	Unitherm	1	1 x 1200 Kg
	Gas Nitriding	Unitherm	3	3 x 1500 Kg
	Cryogenic Treatment (Upto -120 deg)	Unitherm	1	1 x 1500 Kg

Services Offered

Gas Carburizing with Vestibule Cooling
 Carbo-Nitriding
 Gas Nitro-Carburizing / Gas - Nitriding & Post Oxidation
 Case Hardening
 Hardening under Protective Atmosphere

Ancillary Services

Shot Blasting
 Steam Treatment
 Sub-zero Treatment

Laboratory

Microscope with image analyzer
 Auto - Micro Vickers Hardness tester
 Digital Rockwell hardness tester
 SCADA system - for real-time process monitoring & control

Certifications

All Plants are IATF 16949:2016 certified
 Compliance with CQI-9 heat treatment requirements
 All our plants are approved by major automotive OEMs
 -and tier 1 suppliers

USP

Experience and qualified team of metallurgists at all locations

Shorter development time & quick turnaround from concept to delivery

Large capacity available at all locations to cater to new/growing requirements

Flexibility of operations due to approval on multiple furnace & variety of quenching oils

Online automatic SCADA process control & monitoring for all processes
Compliance with CQI-9 heat treatment requirements

Joint venture partnership with leading European industrial furnace manufacturer Aichelin, Austria.



Sprockets

Steel Grades Processed / Applications

Heat Treatment / Applications	Grades
Gas Carburizing Applications: Transmission Components (First, second and third stage gear, Pinion, input shaft, Output shaft, Balance Idler, Sprag Clutch, CV Cages, Gear Oil Pump Drive, Different Spider etc...)	20MnCr5 16MnCr5 SAE 8620H SAE 8625H En353 25CrMo4 SCM 420 SCM 415 etc.,
Carbo-Nitriding Applications: Gears & Shafts Roller & Bearings, Synchro rings, Sintered parts etc...	16MnCr5 20MnCr5 SAE 52100 Sintered parts etc.,
Gas Nitriding Applications: Gears Coupling Bolts, Head Machines, Connecting rod/ Supporting rod, Crank shaft, Camshaft, PDC Dies, Plastic Moulds etc...	42CrMo4 EN 19 EN 24 H-13 (PDC Dies) P-20, P-22 (Plastic Moulds) etc.,
Gas Nitro-Carburizing Applications: Gears & Pinions, Valve components, Dies & toolings	42CrMo4 EN 19 En 24 etc.,



Gears



Transmission Components



Bearings

COMPLETE BUSINESS SOLUTIONS

Heat Treatment Technologies

Atmospheric Heat treatment
 Vacuum Heat Treatment
 Plasma Nitriding / Gas - Nitriding
 Steam Treatment
 Sub Zero Treatment

Customer Contact Points

Sales & Marketing
 Engineering
 Quality
 Supply chain/Customer Service Support

Specialities

Plants at multiple locations
 Strong team of qualified metallurgists
 Customer Specific Solutions

Value Added Services

Shot Blasting
 Basic Final Inspection
 Customer Specific Packing
 Logistics Management

Quality Management

IATF 16949 Certified
 CQI 9 Certification (by Tier 1 & OEMs)
 Customer audits
 ISO : 14001 (Bengaluru)

Technical Support

Technical Recommendations
 Development and Qualifications
 New Products / Processes
 Technical Seminars

End Customers:



We will partner with global companies for introduction of state-of-art technologies in the domestic market

Pune Plant

Unitherm Engineers Limited
 Gat No.257, Village
 Kharabwadi, Post: Chakan,
 Taluka: Khed, Dist.: Pune,
 Maharashtra – 410501
 Mobile: +91 8308847051,
 +91 7666900438

Bengaluru Plant

Unitherm Engineers Limited
 Plot No, 47E, Bommasandra
 Industrial Area, Road No.6, Off
 Hosur Road, Bengaluru -
 560099, Karnataka. India
 Mobile: +91 9008621009

Bhiwadi Plant

Unitherm Engineers Limited
 Plot No. E-43, G-2, Industrial
 Area, Khush Khera, Tehsil
 Tijeras, Bhiwadi, Dist., Alwar,
 Rajasthan - 301707 India.
 Mobile: +91 8209355628,
 +91 9521525858

Chennai Plant

Unitherm Engineers Limited
 Plot No L-7/1C & L-7/1D,
 SIPCOT Industrial Park,
 Aerospace, Vallam Vadagal,
 Sriperumbudur,
 Kancheepuram – 602105.
 Mobile: +91 8197647189

Group Companies

Indo-German Vacu Treat Pvt Ltd - Commercial Vacuum heat treater | www.igvtvacutreat.com
 Aichelin Unitherm Heat Treatment Systems India Pvt Ltd - Heat Treatment Furnace Manufacturer | www.au-india.com
 Unitherm Nova Coating - PVD Coating Services Provider | www.unc-india.com