



unit^herm
ENGINEERS LIMITED





About Unitherm Engineers Ltd

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

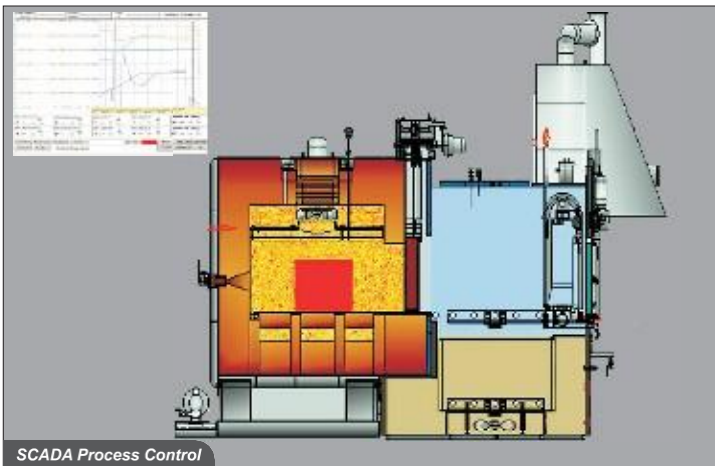
Unitherm has established itself as “One stop” heat treatment solutions provider for range of engineering products. Proven competence in providing heat treatment services!

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
Pune	Sealed Quench Furnace	Unitherm	9	9 x 600 Kg
	Sealed Quench Furnace	Unitherm	5	5x 1200 Kg
	Gas Nitriding	Unitherm	1	1 x 600 Kg
	Gas Nitriding	Unitherm	1	1 x 1200 Kg
	Steam Treatment	Unitherm	1	1 x 600 Kg
Bangalore	Sealed Quench Furnace	Unitherm	8	8 x 600 Kg
	Gas Nitriding	Unitherm	1	1 x 1500 Kg
Bhiwadi	Sealed Quench Furnace	Unitherm	3	3 x 1500 Kg
	Sealed Quench Furnace	Unitherm	1	1 x 1200 Kg
	Gas Nitriding	Unitherm	1	1 x 1500 Kg



Services Offered

- Gas Carburizing
- Carbo-Nitriding
- Gas Nitriding
- Gas Nitro-carburizing
- Hardening under protective atmosphere
- Steam Treatment

Ancillary Services

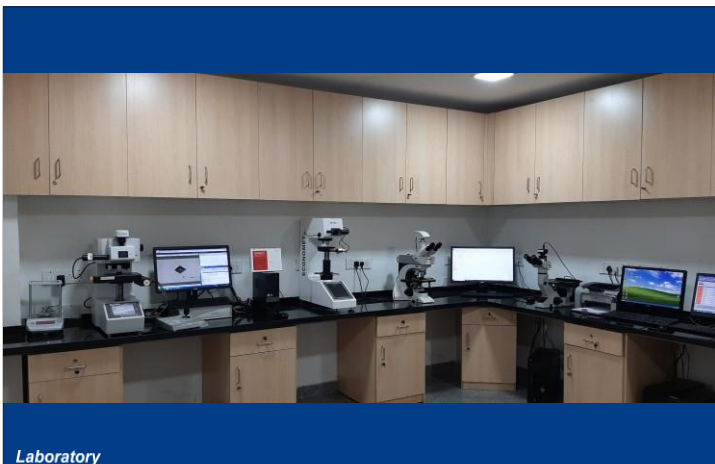
- Shot Blasting
- Shot Peening
- Sub-zero Treatment

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

- Experienced 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 furnaces & 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.



Gears

Steel Grades Processed / Applications

Heat Treatment / Applications	Grades
<p>Gas Carburizing</p> <p>Applications: Transmission Components (First, second and third stage gear, Pinion, Input shaft, Output shaft, Balance Idler, Sprag Clutch, CV Cages, Gear Oil Pump Drive, Differential Spider etc...)</p> <p>Engine Components (Crank pin, Piston rockshaft, tappets, push rods etc...)</p> <p>Bearings (Inner ring, Outer ring, needle roller bearing, Plunger etc...)</p>	<p>20MnCr5</p> <p>16MnCr5</p> <p>SAE 8620H</p> <p>SAE 8625H</p> <p>EN 353</p> <p>25CrMo4</p> <p>SCM 420</p> <p>SCM 415 etc...</p>
<p>Carbo-Nitriding</p> <p>Applications: Gears & Shafts, Rollers & bearings, Synchro rings, Sintered parts etc...</p>	<p>16MnCr5</p> <p>20MnCr5</p> <p>SAE 52100</p> <p>Sintered parts etc...</p>
<p>Gas Nitriding</p> <p>Applications: Gear, Coupling Bolts, Head Machines, Connecting rod/ Supporting rod, Crank shaft, Camshaft, PDC Dies, Plastic Moulds etc...</p>	<p>42CrMo4</p> <p>EN 19</p> <p>EN 24</p> <p>H-13 (PDC Dies)</p> <p>P-20, P-22 (Plastic Moulds) etc...</p>
<p>Gas Nitro-Carburizing</p> <p>Applications: Gears & Pinions, Valve components, Dies & tooling</p>	<p>42CrMo4</p> <p>EN 19</p> <p>EN 24 etc...</p>



Transmission Components



Bearings



Sprockets

COMPLETE BUSINESS SOLUTIONS

Heat Treatment Technologies

- Atmospheric Heat Treatment
- Vacuum Heat Treatment
- Plasma 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 packaging
- Logistics Management

Quality Management

- IATF 16949
- CQI-9 Certification (by tier-1 & OEMs)
- Customer audits

Technical Support

- Technical recommendations
- Development and qualification of new products / processes
- Technical Seminars



Grutti Carlo India Pvt Ltd



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Pune Plant

Unitherm Engineers Limited
Gat No.257, Village Kharabwadi,
Post: Chakan, Taluka: Khed ,
Dist: Pune, Maharashtra - 410 501

Bangalore Plant

Unitherm Engineers Limited
Plot No. 47 E, Bommasandra
Industrial Area, Road No. 6,
off Hosur Road, Bangalore,
Karnataka – 560 099

Bhiwadi Plant

Unitherm Engineers Limited
Plot E- 43, G2, Industrial Area
Khushkhera, Bhiwadi, Tehsil Tijara,
Dist: Alwar, Rajasthan – 301 707

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

Innovae 3D – Into additive manufacturing | www.innovae3D.com