





# Mission, Vision and Core Values

## *M7 Autocraft*

हमारा प्यार, हमारा आधार

### *Vision:*

- *To be the best manufacturer for machined components in the country*
- *To become a INR 400 crore group company by 2019-20*

### *Mission*

- *Continuous improvement with innovative automation*
- *Deliver people excellence through world class HR practices.*
- *Diversify into other manufacturing sectors*

### *Core Values*

*Transparency & honesty towards all stake holders*

- *customers*
- *employees*
- *society*
- *environment*

Head Office:  
Village Nayal,  
Panwala,  
Dist. Solan, H.P.  
173220  
Phone: 01792 232923

Web site address:  
[www.microtumers.com](http://www.microtumers.com)





# Introduction

## Establishment - 1983

- CEO- Mr. Anil Sehgal
- ISO/TS16949 certified Company
- Head-Office – Parwanoo (Himachal Pradesh)

## Leading Manufacturers of Precision Components & Assemblies

- Catering to Automotive & Farm Equipment
- MT Grp Turnover (FY 16~17) – 146.14 Cr.
- KHM Turnover (FY 16~17) – 126 Cr.
- Total Turnover (FY 16~17) – 272.14 Cr.

## Manufacturing Plants

- Passenger Car Division (Head Office)
- Rocker Arm Division (Dedicated to M&M)
- Connecting Rod Division (Dedicated to M&M)
- KHM Drive Systems
- MT Autocraft -Manesar
- MT Autocraft- Rohtak

# MT Autocraft Plant Photographs



Parwanoo Mother Plant (60,000 Sqft)



TPD, Parwanoo (Dedicated to M&M) (20,000 Sqft)



CRD, Parwanoo (Dedicated to M&M) (10,000 Sqft)



MT Autocraft MANESAR (20,000 Sqft)



MT Autocraft Rohtak (54,000 Sqft)



KHM DRIVE SYSTEMS, Manesar (54,000 Sqft)



# Achievements

- ❖ Unit was awarded with a national award for out standing small-scale entrepreneurship by the President of India in the year 1987
- ❖ We are producing more than 1 million shaft type components per month
- ❖ We are preferred source of MSIL and most of our components are on single source basis
- ❖ Manesar unit is producing 5000 assemblies / day on JIT basis for MSIL
- ❖ More than 90% of MSIL, Maruti Powertrain & 100% of Mahindra Transmission shaft requirements are met by us
- ❖ For Honda 100% requirement of Shifting shafts is being met by us
- ❖ We have been awarded by Maruti for Vendor Performance "SPECIAL SUPPORT" for the year 2009-2010
- ❖ In Year 2012-13 we had been awarded for "FOCUSED COST DOWN" by MSIL
- ❖ In Year 2013-14 we have been awarded for "MANUFACTURING EXCELLENCE" by MSIL
- ❖ In year 2014-15 KHM has been awarded for "Overall Excellence" by MSIL
- ❖ In year 2016-17 we have been awarded "No Limits Award " by M&M



# QMS Certificates

## ISO/TS 16949 : 2009

DNV-GL

### MANAGEMENT SYSTEM CERTIFICATE

Certificate No.: 4421/2009 42/04-01/11      Valid: 07 January, 2012 – 06 January, 2015  
 IATF Certificate No.: 0209494

This is to certify that the management system of

**Micro Turners**  
 Village-Naryal, Sector-4, Patna-85, Distt-Solapur, Himachal Pradesh, India

has been found to conform to quality management system standard:  
**ISO/TS 16949:2009**

This certificate is valid for the following scope:  
**MANUFACTURE OF PRECISION TURNED COMPONENTS AND ITS ASSEMBLIES VIZ ROCKER ARM ASSEMBLIES, SHIFTING ROD ASSEMBLIES, TRANSMISSION SHAFTS**

Exclusion: 7.3 Product Design

For the issuing office:  
**DNV GL BUSINESS ASSURANCE**  
 New Delhi, India

For the issuing office:  
**Robert Knight**  
 Director General

DNV GL is a member of the DNV Group. For more information, please visit our website: [www.dnvgl.com](http://www.dnvgl.com)

## ISO 14001:2004

**CVI**  
**ENVIRONMENTAL MANAGEMENT SYSTEM CERTIFICATE**

Code of the certification body: 1-421-001-024  
 Number of the certificate: 10722-3

This is to certify that the Management System of

**M/s Micro Turners**  
 Sec-4, Patna-85, Himachal Pradesh, India

is in compliance with the Standard  
**ISO 14001:2004**

This Certificate is applicable to the following activities:

**MANUFACTURE & SUPPLY OF PRECISION TURNED COMPONENTS AND ITS ASSEMBLIES VIZ ROCKER ARM ASSEMBLIES, SHIFTING ROD ASSEMBLIES, TRANSMISSION SHAFTS**

Validation of this certificate: 07-03-2018

Ing. Jiri Galper  
 Director

Certification is granted by: **CVI, s.r.o.**, MPEC 317001, OSB of Papez, Slovakia – EU

First issued on: 07-03-2012	Current issue on: 07-03-2012	Expiry date: 07-03-2018
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For further information or possible changes in the status of the certification referred to in this certificate, please phone to the number: +421 949 812085 or e-mail to the address: [cu@cvik.sk](mailto:cu@cvik.sk) or contact:

**Veritas Cvi Certifications (P) Ltd.**  
 2/32, Sarvesh Plaza, Sector Station No. 1 Mall, Sector-12, Mahura Road, Faridabad - 121007, India  
 Phone: +91-1294-1106007    Cell: 9961008873    Website: [www.cvi.in](http://www.cvi.in)    Email: [info@cvi.in](mailto:info@cvi.in)

CONFORMANCE VERIFICATION INTERNATIONAL

## OHSAS 18001:2007

**CVI**  
**HEALTH & SAFETY MANAGEMENT SYSTEM CERTIFICATE**

Code of the certification body: 1-421-001-037  
 Number of the certificate: 10812-1

This is to certify that the Management System of

**MT Autocraft**  
 Village - Naryal, Sector - 4, Patna-85, Distt: Solapur (M.P), India

is in compliance with the standard  
**OHSAS 18001:2007**

This Certificate is applicable to the following activities:

**MANUFACTURING OF PRECISION TURNED COMPONENTS FOR AUTOMOBILE INDUSTRY.**

Validation of this certificate: 22-08-2018

Ing. Jiri Galper  
 Director

Certification is granted by: **CVI, s.r.o.**, MPEC 317001, OSB of Papez, Slovakia – EU

First issued on: 20-08-2017	Current issue on: 22-08-2017	Expiry date: 22-08-2020
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For further information or possible changes in the status of the certification referred to in this certificate, please phone to the number: +421 949 812085 or e-mail to the address: [cu@cvik.sk](mailto:cu@cvik.sk) or contact:

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CONFORMANCE VERIFICATION INTERNATIONAL



## MT AUTOCRAFT Joint Venture

KHM Drive Systems is a Japanese Joint Venture between three companies.



K- KORITU (Japan)

Designing and machining components manufacturers



H- HAYASHI KOGYO (Japan)

Precision Sheet Metal manufacturers



M- MT AUTOCRAFT (India)

Precision component and Assembly Manufacturers





## List Of Esteemed Customers



AVTEC





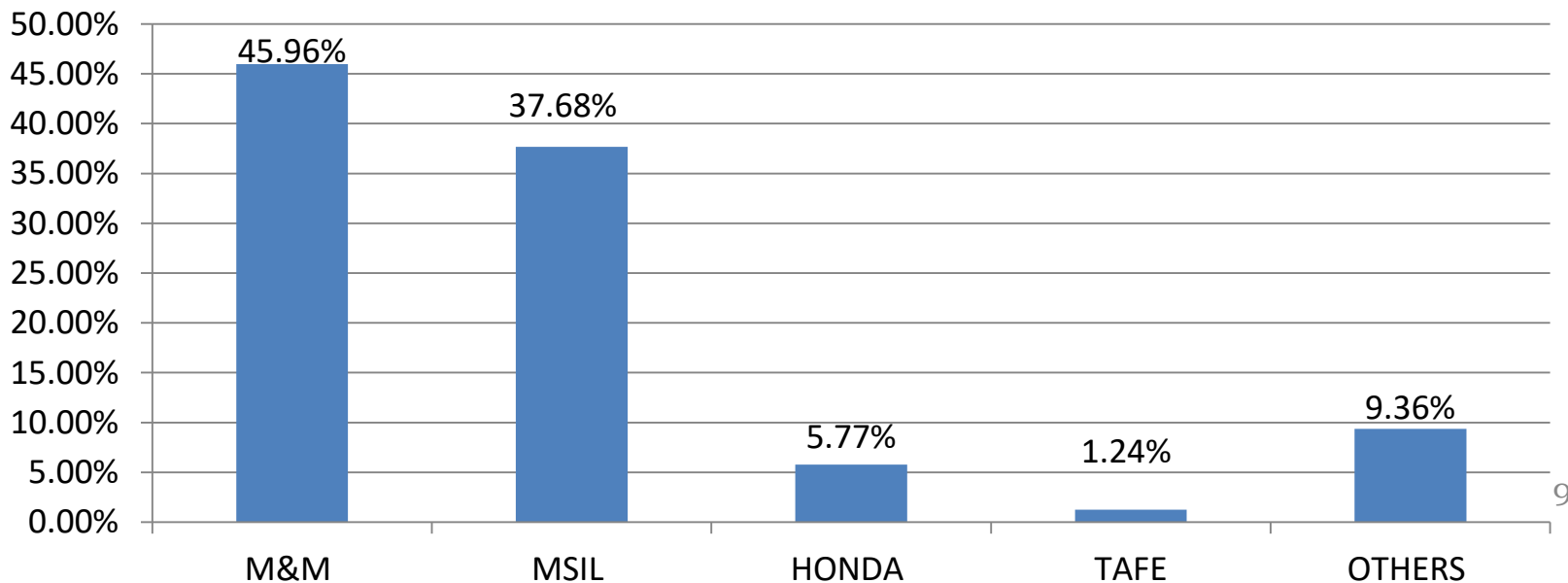


## Customers With Business Volume

Customers	AbbreviatedAs	BusinessVolume
Mahindra & Mahindra Ltd.	M&M	45.96%
Maruti Suzuki India Ltd.	MSIL	37.68%
Honda Car India	HONDA	5.77%
Tractors & Farm Equipment	TAFE	1.24%
General Motors & Ford (through Avtec Ltd.)	OTHERS	10.6%

Business Volume in %age

Business Volume





# Transmission Shafts-Product Range



## Shafts - Capability

Maximum Length	520mm
Maximum Dia	025mm
Tolerance on Grinding	0.01mm
Tolerance on CD hole	0.01mm
Roundness	0.006mm
Quantity Mfg. Per Month	2,25,000



## Rocker Shafts - Capability

Deep Hole Drilling	450mm
Tolerance on Grinding	0.01mm
Quantity Mfg. Per Month	52,000



# Honda Shafts

## ← TRANSMISSION SHAFTS---HONDA DIESEL



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Quantity Mfg. Per Month :  
14,000 Sets

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## ← TRANSMISSION SHAFTS---HONDA PETROL



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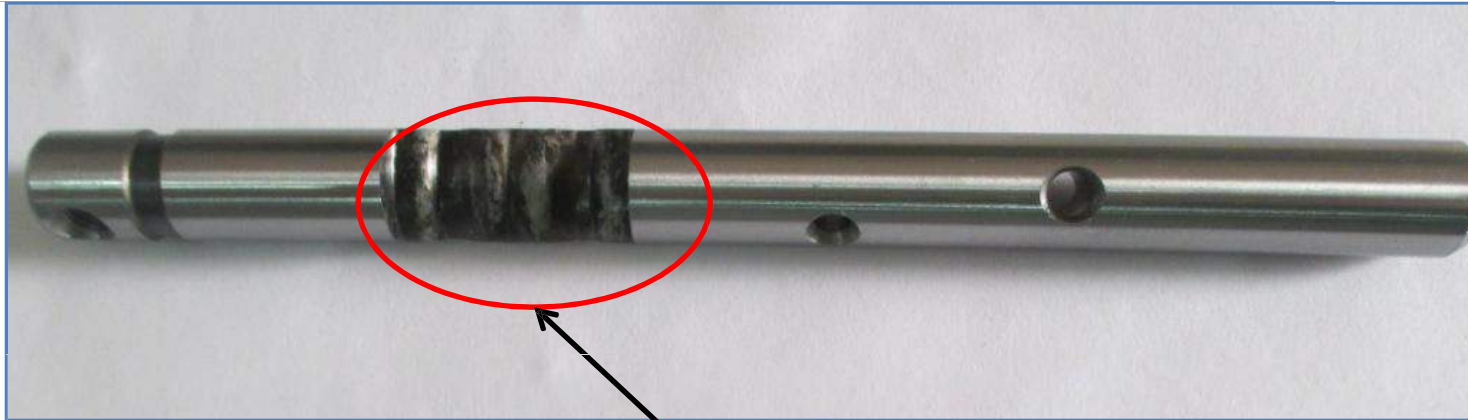
Quantity Mfg. Per Month:  
10,000 Sets

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# Transmission CAM SHAFT

↔ SHAFT FOR FORD



3D machining



# Transmission Assemblies

## ← COMMON DRILLING TYPE TRANSMISSION ASSEMBLIES



# Transmission Assemblies

## ← WELDED TYPE TRANSMISSION ASSEMBLIES



# Transmission Assemblies

## ↪ CLUTCH RELEASE SHAFTS



# IDLER SHAFTS

## ← IDLER SHAFTS





# TURNED COMPONENTS

## ↳ TURNED COMPONENTS





# INVESTMENT CASTING COMPONENTS

## ↳ INVESTMENT CASTING PARTS





# FORGING COMPONENTS

## FORGED COMPONENTS

<b>CUSTOMER</b>	<b>MAHINDRA</b>
UNIT	PARWANOO PLANT
EXISTING PRODUCTION	15,000/MONTH
MACHINES	CNC & SPM



**CLUTCH RELEASE FORK**

<b>CUSTOMER</b>	<b>MSIL</b>
UNIT	PARWANOO PLANT
EXISTING PRODUCTION	40,000 PER MONTH
MACHINES	CNC & VMC



**5<sup>th</sup> & Rev. Arm Forging**



# Transmission Assemblies

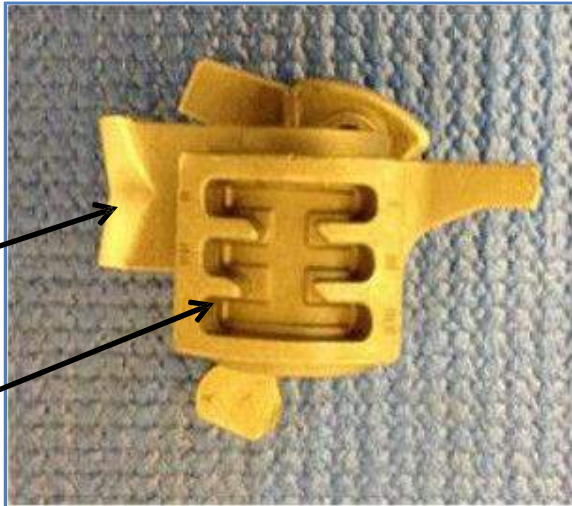
## ↳ LGSS (LEVER, GEAR, SHIFT & SELECT)

<b>CUSTOMER</b>	<b>MSIL</b>
UNIT	PARWANOO PLANT
Existing Production	25,000 / MONTH



3D machining

H Pattern machining



Coordinate inspection on VMC (Online Inspection)

Probe

Part



# INVESTMENT CASTINGS

← CAM

<b>CUSTOMER</b>	<b>MSIL</b>
UNIT	PARWANOO PLANT
CURRENT STATUS	IN MASS PRODUCTION FOR YP8 AMT
MACHINES	4th AXIS VMC MACHINE



Very critical  
machining





# INVESTMENT CASTINGS

## LEVER ENGAGE

<b>CUSTOMER</b>	<b>MSIL</b>
UNIT	PARWANOO PLANT
CURRENT STATUS	IN MASS PRODUCTION FOR YP8 AMT
MACHINES	4 AXIS VMC MACHINE





# PDC CASTING PARTS

## ↳ TRANSMISSION CASE

CUSTOMER	MSIL
UNIT	MANESAR PLANT
MACHINES	4 AXIS VMC MACHINE
VEHICLES	OMNI, EECO & GYPSY





# FORKS

## ↳ FORKS

CUSTOMER	M&M & TAFE
UNIT	PARWANOOPLANT
EXISTING PRODUCTION	40,000/ MONTH.
MACHINES	4 AXIS VMC MACHINE
ROUTE	FORGING, INVESTMENT CASTING



**FORK IN INVESTMENT CASTING**





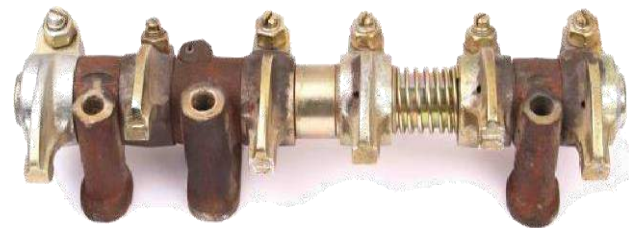


# Rocker Arm Products

## ROCKER SHAFT ASSEMBLIES

Quantity Mfg. Per Month	26,000
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These Assemblies are treated with Ultra Sonic Cleaning, assembled in dust free atmosphere and tested for performance.



# Rocker Arm Products

## FORKS

<b>CUSTOMER</b>	<b>M&amp;M</b>
<b>UNIT</b>	PARWANOO PLANT
<b>EXISTING PRODUCON</b>	2,00,000/MONTH
<b>MACHINE</b>	4 AXIS VMC MACHINE





# Connecting Rod Products

## CONNECTING ROD

Quantity Mfg. Per Month

33,000 nos

Unlike conventional setup, these Con-Rods are machined on modern VMC setup, and tested with all critical parameters along with grading



# KHM- Product Range



## SHIFTER FORKS

Capacity Planned per Month	75,000
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## SHIFTTOWER

Quantity Mfg. Per Month	40,000
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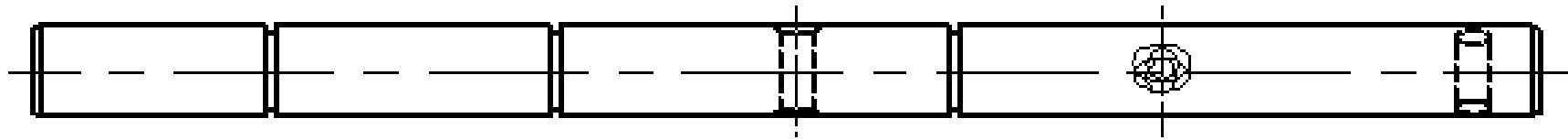


## MT AUTOCRAFT – Machining Facilities

SNo.	Machine Types	Qty (nos)
1.	Automats	15
2.	Milling Machines	39
3.	Special Purpose Machines	31
4.	Turning Centers / CNC Sliding Head	15+5
5.	Vertical Machining Centers	70
6.	Induction Hardening	28
7.	MIG Welding / Robo Welding	12+1
8.	Electroless Nickel Plating Plant	1
9.	Plasma Welding Robots (KHM)	21
10.	Servo Distortion Correction Press (KHM)	18
11.	All Electrical Drive Injection Molding Press (KHM)	2
12.	Thread & Spline Rolling Machines	2
13.	Surface & Internal Broaching Machines	3
14.	Fully Automatic Shift Tower Line (KHM)	5
15.	Centerless / Cylindrical / CNC Cylindrical Grinding	18+4+1



## 5 Axis CNC machines – Sliding auto



**Facing, chamfering, counterboring,  
reaming, grooving, back chamfering  
& total length maintained in single  
setup**

**CRITICALITY:  
Angular accuracy in 10 minute  
Hole accuracy in 15 microns**



**CNC SLIDING  
HEAD M/C  
TSUGAMI/  
HANWAMAKE**



## 4 Axis VMC machines : Japanese Make



**CRITICALITY:**  
**Angular accuracy in  
5 minutes**  
**Hole accuracy in 15  
microns**



**VMC – BROTHER JAPAN MAKE +  
CNC ROTARY TABLE (4<sup>th</sup> AXIS) NIKKEN  
JAPAN MAKE**

## OTHER STRENGTHS : SPM MACHINES



MULTI MILLING

MULTI ANGULAR DRILLING



MILLING & DRILLING



# Induction Hardening and Tempering Machine



**Vertical I.H Machine**



**Stationary I.H Machine**



**Horizontal I.H Machine**



**Tempering F/c with PLC**

# Broaching Machine



# Inspection Facilities

S.No.	Machine Types	Quantity
1	Height Master	7
2	Surface Finish Tester	4
3	Roundness Tester	1
4	Vickers Hardness Tester	1
5	Millipore Testing Machine	1
6	Profile Projector	2
7	Eddy Current Sorter	1
8	Magna Flux testing	2
9	CMM	2
10	Contour Tracer	1
11	Universal Testing Machine	1
12	Index Measurement Device	3
13	Rockwell Hardness Tester	5
14	Spectro, Image Analyzer	1



**CMM**

## INSPECTION FACILITIES



**SPECTRO**



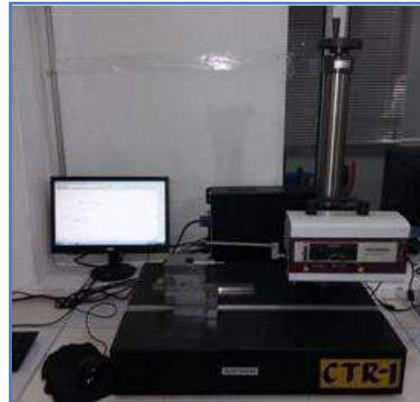
**PROFILE PROJECTOR**



**ROUNDNESS TESTER**



**EDDY CURRENT TESTER**



**CONTOUR TESTER**



**ROUGHNESS TESTER**

# Testing Facilities in Metallurgical Lab



**Micro Vickers**



**Image Analyzer**



**BHN Tester**



**Digital Rockwell M/c.**



**UTM Machine**

*Thank  
you*

