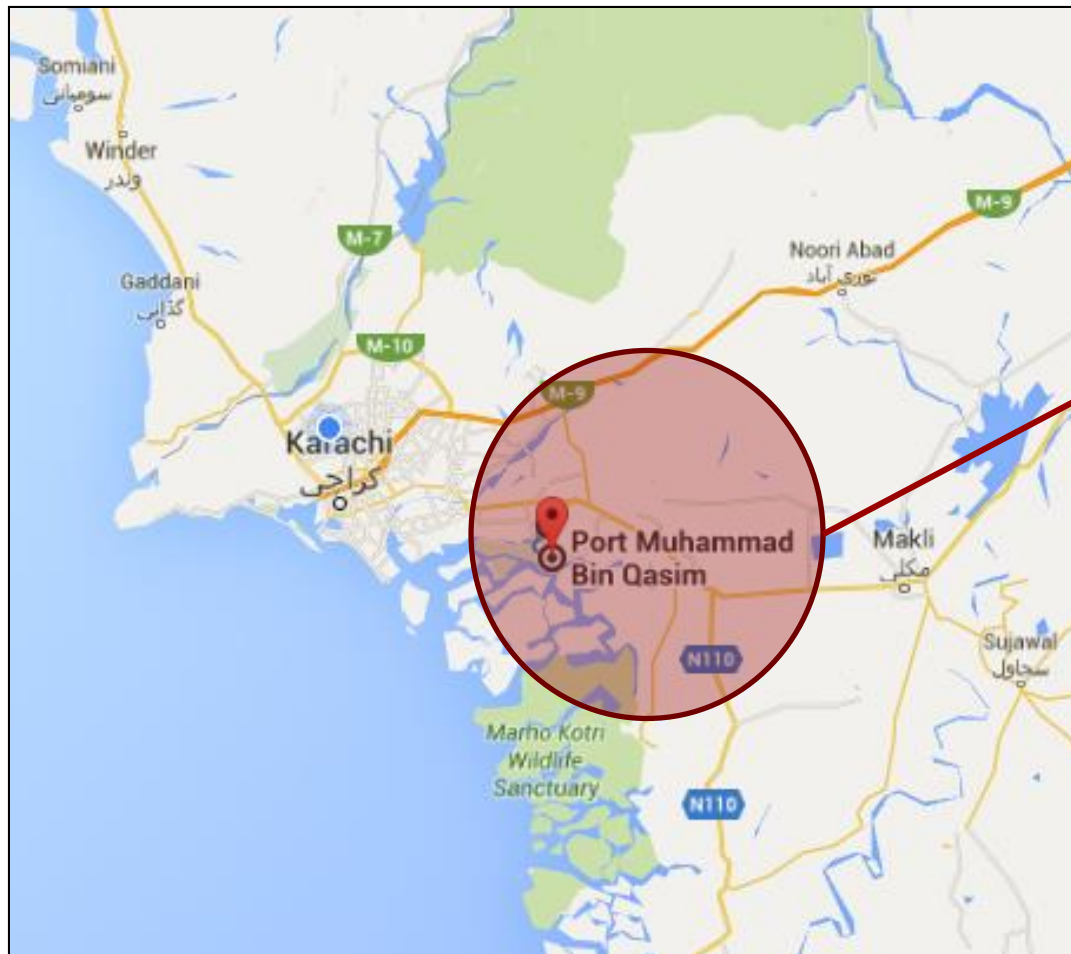


**NES**  
ENGINEERING



Noor Engineering Services (Pvt.) Ltd.

# SITE LOCATION MAP



LOCATION MAP

Pakistan-Karachi-PORT MUHAMMAD BIN QASIM



**Noor Engineering Services**

Plot # DSU 32/3 & 32/10, Downstream Industrial Estate, Bin Qasim, Karachi, Pakistan

Tel: (92-21)34723580 | Fax: (92-21)34723582

Email: [info@nes.com.pk](mailto:info@nes.com.pk)

Web: [www.nes.com.pk](http://www.nes.com.pk)

# COMPANY PROFILE

## ABOUT US

Customer satisfaction is our company's primary objective. To attain this satisfaction, management as well as all partners are dedicated to follow the guidelines specified below:

- Continuous fulfillment of customer requirements and specifications,
- Customer oriented delivery period for all products at the required quality levels,
- Employment of highly motivated, well trained and flexible staff,
- Economical and quality ensuring cooperation with our suppliers,
- Development of new products, improvement of existing products,
- Use of all available resources for improvement and development,
- Adherence to TS regulatory and o
- Bringing continu

These quality guide everyday work. To

In accordance with quality of his work awareness is a per can work with the r

All partners of NES are committed to earning out and to respect the principles of this quality policy.

Critical Automobile Components at Quality that is uncompromised, in Quantities that are required and at a price that is competitive.

**Quality - Quantity - Price**

## OUR VISION

- Expand range of products by satisfying our customers through QCDM,
- Keep abreast with modern manufacturing techniques in both man & machine technologies.
- Continue to provide a motivating working environment for all partners.



# BRIEF HISTORY & ACHIEVEMENTS

YEAR	NEW DEVELOPMENT	ACHIEVEMENTS & AWARDS
1991	NES Established	NES Established
1992	Started Propeller shaft manufacturing of ST-308 (Van/pickup)	
1995	Started Propeller shaft manufacturing of SJ-410 (Jeep 4x4)	<ul style="list-style-type: none"> <li>Conferred Vendor Performance Award by Pak Suzuki</li> </ul>
1996	Started Propeller shaft manufacturing of Shehzore Truck	<ul style="list-style-type: none"> <li>Conferred Vendor Performance Award by Pak Suzuki</li> </ul>
1997	Signed TAA with HAMANA PARTS MANUFACTURE CO., LTD., Japan	
1998	Started Gear Shift Control lever manufacturing of ST-308 & SB-308	
2001		<ul style="list-style-type: none"> <li>Conferred Vendor Performance Award and Mehran Revival Award by Pak Suzuki</li> </ul>
2002		<ul style="list-style-type: none"> <li>Conferred Vendor Performance Award by Dewan Farooque Motors</li> </ul>



# BRIEF HISTORY & ACHIEVEMENTS

YEAR	NEW DEVELOPMENT	ACHIEVEMENTS & AWARDS
2003	Started Hub Front Axle manufacturing of Toyota Corolla.	
2005	Started Hub Front Axle manufacturing of SB-308 & SF-410 for Pak Suzuki.	<ul style="list-style-type: none"> <li>• 100% Timely Supply of Components by Pak Suzuki.</li> <li>• Best quality award by Dewan Farooque Motors</li> </ul>
2006	Started Hub Front Axle manufacturing of Coure for Indus Motor Company.	<ul style="list-style-type: none"> <li>• 100% Timely Supply of Components by Pak Suzuki.</li> <li>• Best quality award by Dewan Farooque Motors</li> </ul>
2007	Started Gear Shift Control lever manufacturing of RH-413 for Pak Suzuki.	<ul style="list-style-type: none"> <li>• Best Vendor Performance award by Pak Suzuki.</li> <li>• Vendor Performance Award by Toyota Motor Company</li> </ul>
2008		<ul style="list-style-type: none"> <li>• Best Vendor Performance award by Pak Suzuki.</li> <li>• Best Quality award (Zero PPM) by Toyota Motor Company</li> </ul>
2009	Started Engine & Rear Sprockets manufacturing for Pak Suzuki MCD.	<ul style="list-style-type: none"> <li>• Shifted Plant from Korangi to Port Qasim</li> </ul>
2010	Started Column Comp Steering parts manufacturing of SB & ST for Pak Suzuki.	<ul style="list-style-type: none"> <li>• Best Vendor Performance award by Pak Suzuki.</li> </ul>
2011	Started Engine & Rear Sprockets manufacturing for Atlas Honda OEM & SPD Division.	<ul style="list-style-type: none"> <li>• Vendor Appreciation Award by Pak Suzuki for achieving good quality of components</li> </ul>


# BRIEF HISTORY & ACHIEVEMENTS

YEAR	NEW DEVELOPMENT	ACHIEVEMENTS & AWARDS
2012	Signed TAA with HAMANA PARTS MANUFACTURE CO., LTD., Japan	<ul style="list-style-type: none"> <li>Vendor Appreciation Award by Pak Suzuki for achieving good quality of components</li> </ul>
2013	Started Hub Front Wheel manufacturing of Civic & City for HACPL.	<ul style="list-style-type: none"> <li>Vendor Appreciation Award by Pak Suzuki for achieving good quality of components</li> <li>Hub Front wheel Rotary Bending Test passed 1<sup>st</sup> time in Pakistan for HONDA 2HC &amp; 2PK.</li> </ul>
2014		<ul style="list-style-type: none"> <li>Quality Award by Pak Suzuki in Recognition of Outstanding Quality Performance.</li> </ul>
2015		<ul style="list-style-type: none"> <li>Hub Front wheel Rotary Bending Test passed for HONDA 2SV.</li> </ul>
2015		Quality Award by Pak Suzuki in Recognition of Outstanding Quality Performance.
2016	<ul style="list-style-type: none"> <li>Started commercial production of Brake Disk Assy manufacturing of 2SV for HACPL. (Apr, 16)</li> <li>Plan to Start commercial production of Gear Shift Cont. Lever of YN-3 for Pak Suzuki. (Jun, 16)</li> </ul>	<ul style="list-style-type: none"> <li>Capacity Enhancement up to 50 %</li> </ul>

# FOUR WHEELER PRODUCTS



# 4 WHEELER PRODUCT LIST

CUSTOMER	PRODUCT NAME	MODEL	STATUS
<b>PAK SUZUKI MOTOR COMPANY LTD</b> 	PROPELLER SHAFT	ST 308 (Van / Pickup)	In Production
		SJ410 (Jeep 4x4)	Model Obsoleted
	GEAR SHIFT CONTROL LEVER	ST 308 (Van / Pickup)	In Production
		SB-308 (Mehran)	In Production
		SF-410 (Cultus)	In Production
		SY (Baleno)	Model Obsoleted
		RA-410 (Alto)	Model Obsoleted
		RH-413 (Liana)	Model Obsoleted
		YN-3 (Swift)	In Production
	HUB FRONT WHEEL	SB-308 (Mehran)	In Production
		SF-410 (Cultus)	In Production
		RA-410 (Alto)	Model Obsoleted
	COLUMN COMP STEERING	ST 308 (Van / Pickup)	In Production
		SB-308 (Mehran)	In Production
	SHAFT COMP & ROD COMP	SF-410 (Cultus)	In Production





**FOUR  
WHEELER  
PRODUCTS**







**Suzuki Cultus**  
Product name: Rods & Shaft  
Comp extensions



# 4-WHEELER PRODUCT LIST



CUSTOMER	PRODUCT NAME	MODEL	STATUS
<b>INDUS MOTOR COMPANY</b> 	HUB FRONT WHEEL	Corolla 557	Model Obsoleted
		Corolla 557-N	Model Obsoleted
		Corolla 242-L	In Production
		Coure	Model Obsoleted
<b>HONDA ATLAS CAR PRIVATE LTD</b> 	Front Brake Disk Assy	2SV New Civic	In Production
	HUB FRONT WHEEL	2HC Civic	Model Obsoleted
		2PK City	In Production
		2SV New Civic	In Production
<b>DEWAN FAROOQUE MOTORS</b>	PROPELLER SHAFT	Shehzore	Model Obsoleted
	ENGINE MOUNTING	Shehzore	Model Obsoleted

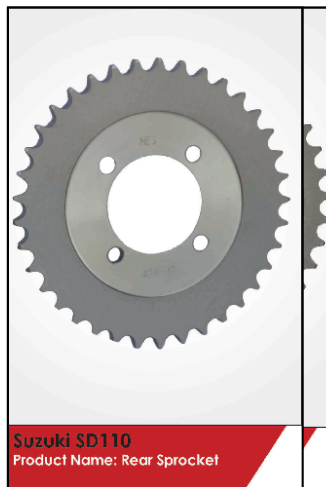




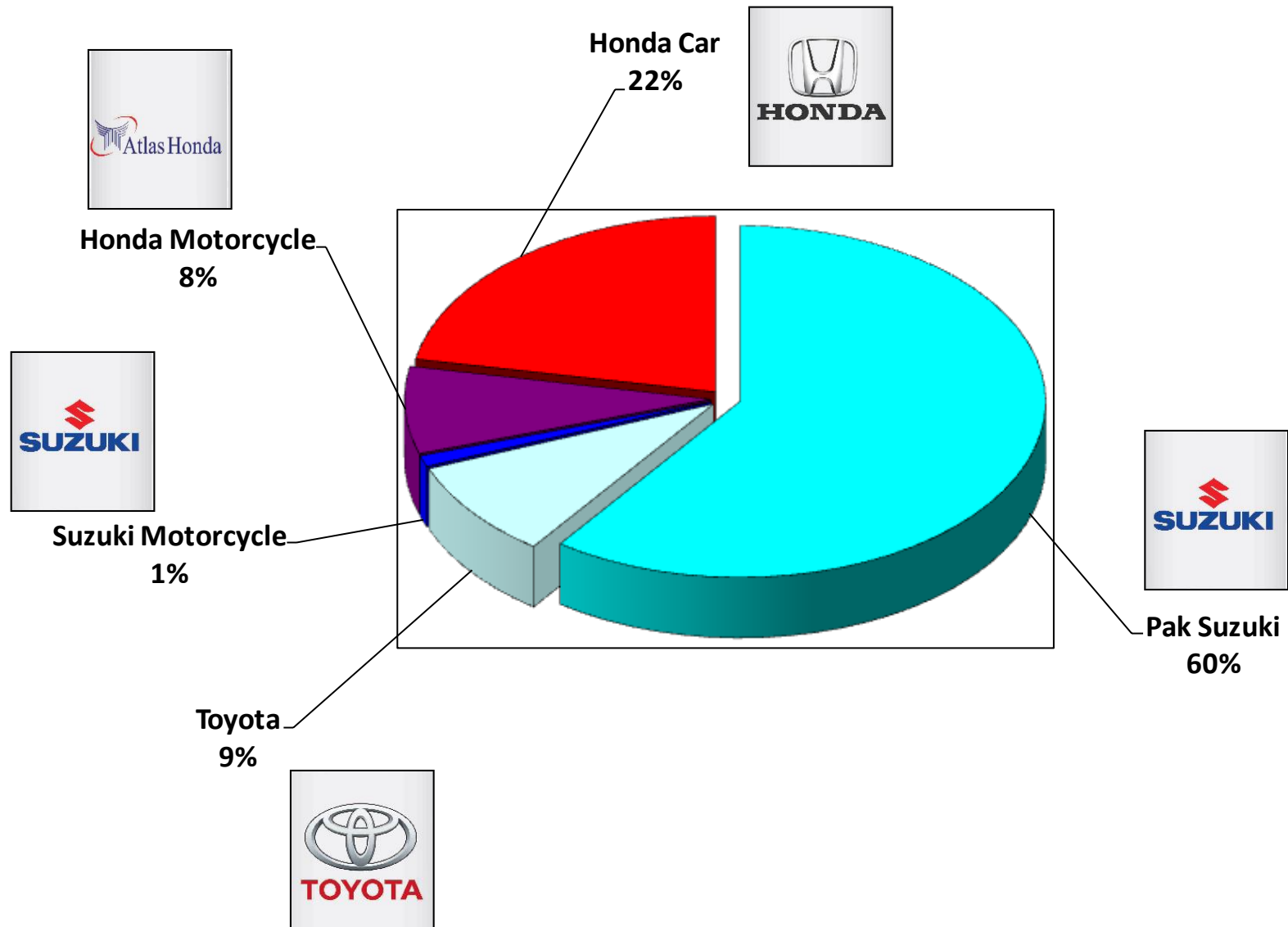
# **TWO WHEELER PRODUCTS**

# 2 WHEELER PRODUCT LIST

CUSTOMER	PRODUCT NAME	MODEL	STATUS
<b>PAK SUZUKI</b> 	ENGINE SPROCKET	SD-110 (Sprinter)	In Production
		GS-125	In Production
		GS-150	In Production
		A-100	Model Obsoleted
	REAR SPROCKET	SD-110	In Production
		GS-125/150	In Production
		A-100	Model Obsoleted
<b>ATLAS HONDA</b> 	ENGINE SPROCKET	CD-70	In Production
		CG-125	In Production
	REAR SPROCKET	CD-70	In Production

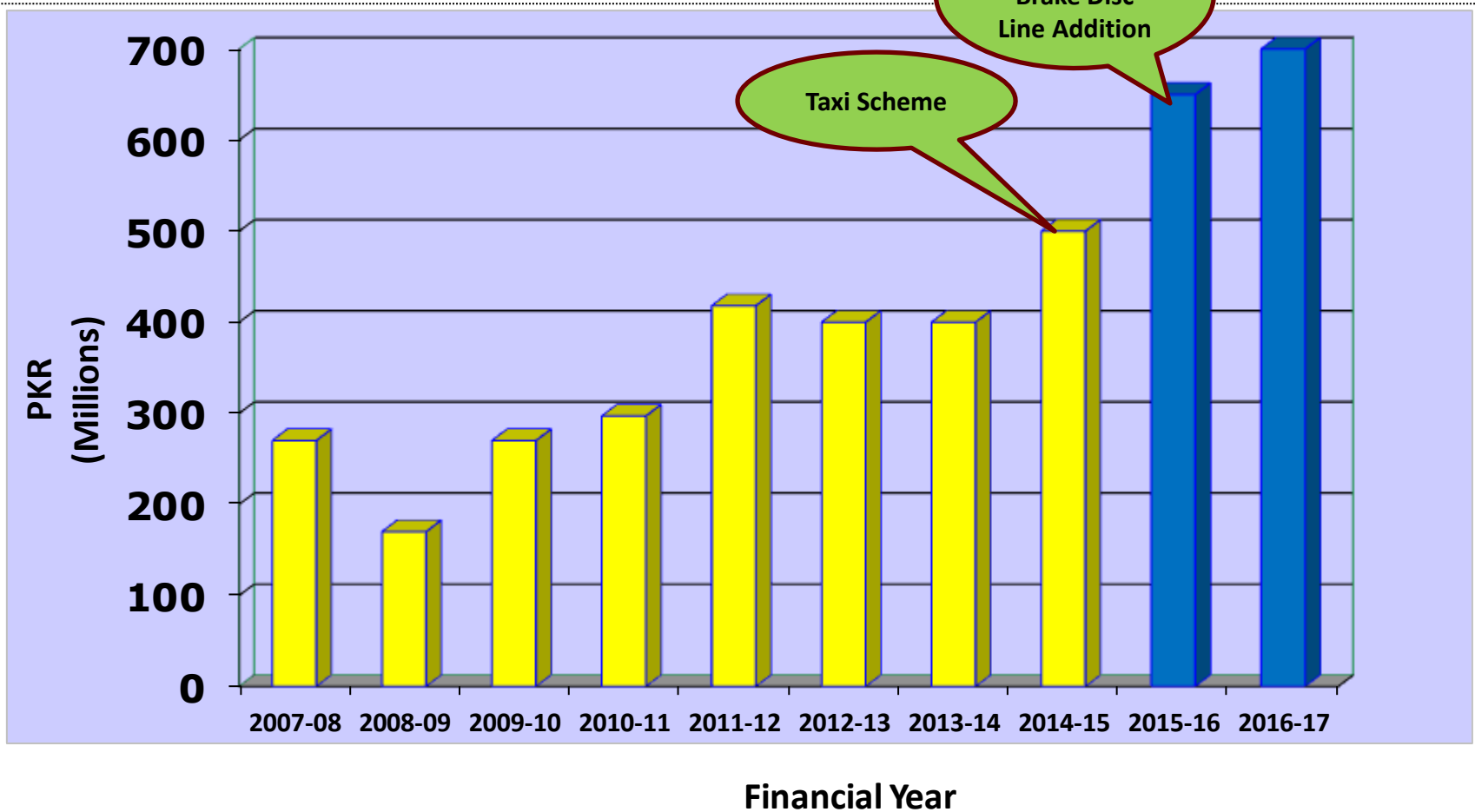


# CUSTOMERS SHARE W.R.T. SALE





# ANNUAL SALES



# QUALITY CERTIFICATION



URS CERTIFICATE NO: 31003

Certified by **URS** (United Registrar of Systems)

Successfully implemented in July-2008

Successfully Audited in June, 2009

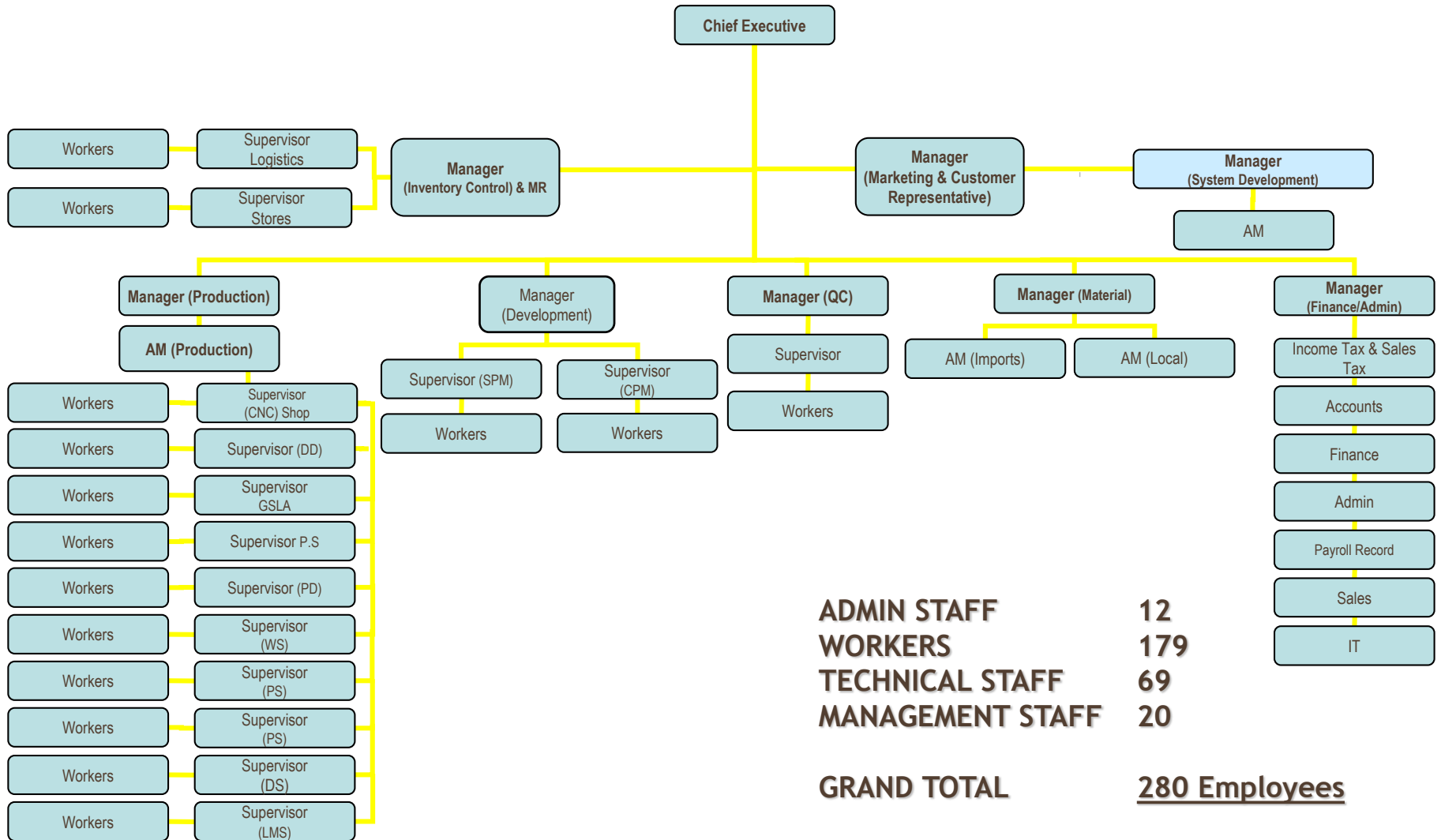
Successfully Audited in June, 2010

## Quality Policy

Management and employees of NES are committed to producing high quality parts for all its valued customers by meeting applicable standards and requirements.



# ORGANIZATIONAL CHART



## Managing Director

**Jawaid Shaikh**  
**BE Aeronautical Engineering & Design**  
**LOUGHBROUGH University of Technology UK**

**1977 – 1989 : Aircraft Engineer at Pakistan International Air line**  
**1989 – To Date : Managing Director at Noor Engineering Services Pvt Ltd**  
**2006 – To Date : Managing Director at JINKWANG JAZ (PVT) LTD**

## COO (Technical Division)

**Farhan Ahmed**  
**BE Mechanical Engineer**  
**ME Industrial Manufacturing**  
**NED UET Karachi, Pakistan**



### **2004 to date**

Working with NES in Production management , planning & new product development section and since 2014 leading the whole technical division in which Production, Maintenance, Development, Inventory management are key areas.

### **CERTIFICATION & SKILLS**

- Production Management (JETRO Japan)
- Six Sigma green belt certified.
- QCDMSE Management
- Productivity improvement techniques
- Project Management
- Layout Planning
- 5'S & KAIZEN Activities

## COO Admin & Marketing

**Ahmed Ali Shaikh**  
**BE Mechanical Engineer**  
**ME Industrial Manufacturing**  
**NED UET Karachi, Pakistan**



### **2003 to date**











Working with NES in Marketing, Quality, HR Logistics & Finance section and since 2014 leading the whole Admin division.

### **CERTIFICATION & SKILLS**

- Basic Accounting & Finance modules
- QMS
- QCDMSE Management
- TS-16949 Audit training
- Process Improvement (Japan)
- Inventory management.
- Project Management
- ERP System



# CUSTOMERS RELATIONSHIP

	2016	2011	2006	2001	1996	1991	YEARS
						1992	24 Years
							13 Years
			2003				
							07 Years
		2009					
							13 Years
			2003				
							04 Years
	2012						

# SAFETY (ACCIDENT & INCIDENT)

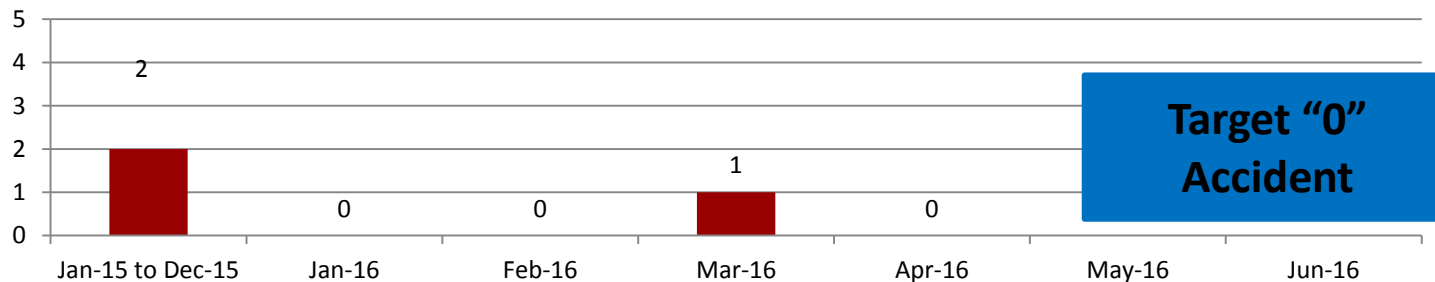
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## Accident & Incident History Sheet

### A) No. Of Accidents

SR #	NES Department	Jan-15 to Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16
1	Hub line	0	0	0	0	0		
2	Sprocket Line	1	0	0	0	0		
3	Press Shop	1	0	0	1	0		
4	Bush/Forging Line	0	0	0	0	0		
5	Rolling Shop	0	0	0	0	0		
SAFETY is a priority at NES and company's Safety policy is stringently followed"								
6	Grinding Shop	0	0	0	0	0		
11	Degreasing shop	0	0	0	0	0		
12	Maintenance	0	0	0	0	0		
13	Quality control	0	0	0	0	0		
14	Pipe cutting Shop	0	0	0	0	0		
15	Tool Room	0	0	0	0	0		
NES TOTAL ACCIDENT		2	0	0	1	0		

### A) No. Of Accidents



# SAFETY

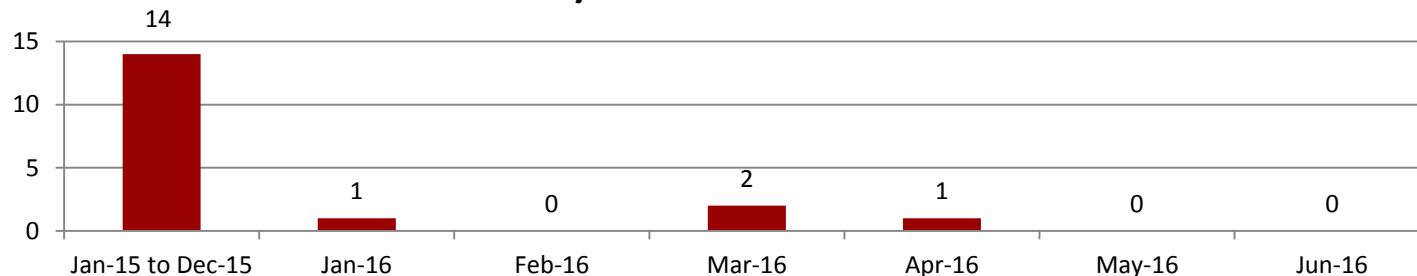
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## Accident & Incident History Sheet

### B) NO. Of Incident

SR #	NES Department	Jan-15 to Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16
1	Hub line	0	0	0	0	0		
2	Sprocket Line	5	1	0	0	0		
3	Press Shop	2	0	0	1	0		
4	Bush/Forging Line	0	0	0	0	0		
5	Brake Disc Assembly line	0	0	0	0	1		
6	Welding shop	2	0	0	0	0		
7	Propeller Assembly shop	0	0	0	0	0		
8	Gear Shift Lever Assembly shop	0	0	0	0	0		
9	Paint shop	0	0	0	0	0		
10	Galvanizing shop	0	0	0	0	0		
11	Degreasing shop	0	0	0	1	0		
12	Maintenance	3	0	0	0	0		
13	Quality control	0	0	0	0	0		
14	Pipe cutting Shop	2	0	0	0	0		
15	Tool Room	0	0	0	0	0		
<b>NES TOTAL INCIDENT</b>		<b>14</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>1</b>		

### B) NO. Of Incident



# SAFETY Awareness TRAINING & SKILL DEVELOPMENT





# OEE (Overall Equipment Effectiveness)

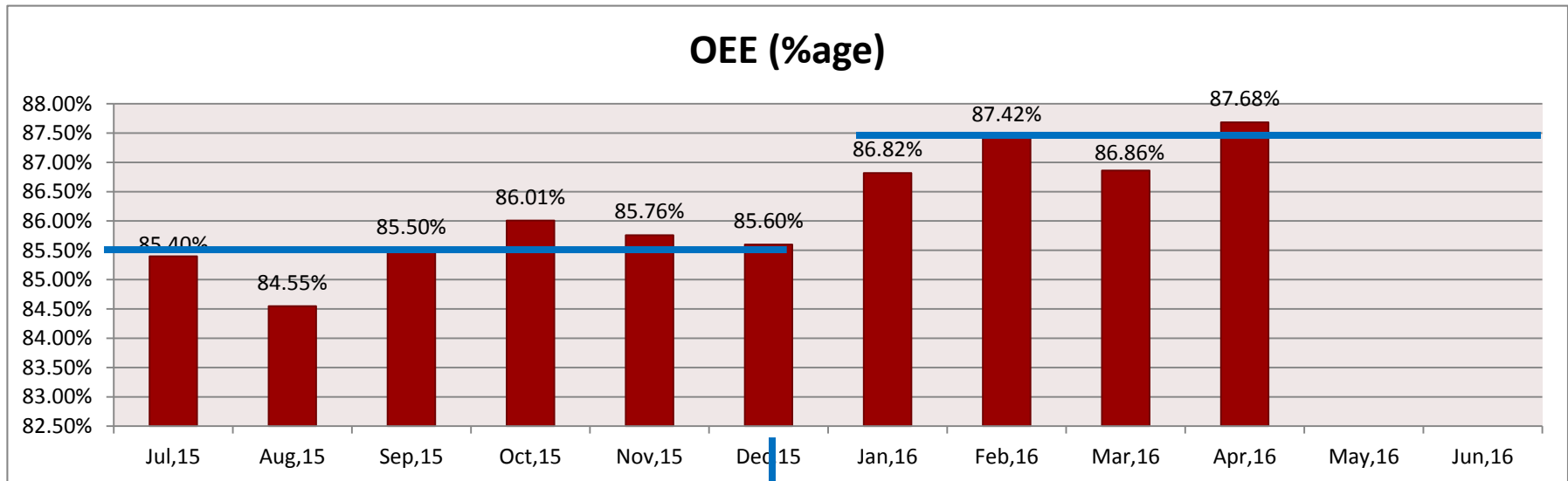
Noor Engineering Services Pvt Ltd.

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OEE(OVERALL EQUIPMENT EFFECTIVENESS)												
Description	Jul,15	Aug,15	Sep,15	Oct,15	Nov,15	Dec,15	Jan,16	Feb,16	Mar,16	Apr,16	May,16	Jun,16
OEE (%age)	85.40%	84.55%	85.50%	86.01%	85.76%	85.60%	86.82%	87.42%	86.86%	87.68%		
Availability	93.0%	91.0%	92.6%	92.5%	92.1%	93.0%	93.5%	94.0%	94.3%	94.2%		
Performance	92.0%	93.0%	92.4%	93.2%	93.2%	92.1%	92.9%	93.1%	92.2%	93.2%		
Quality (RTY)	99.8%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%		



**Target 85.5%**

**Target 87.5%**

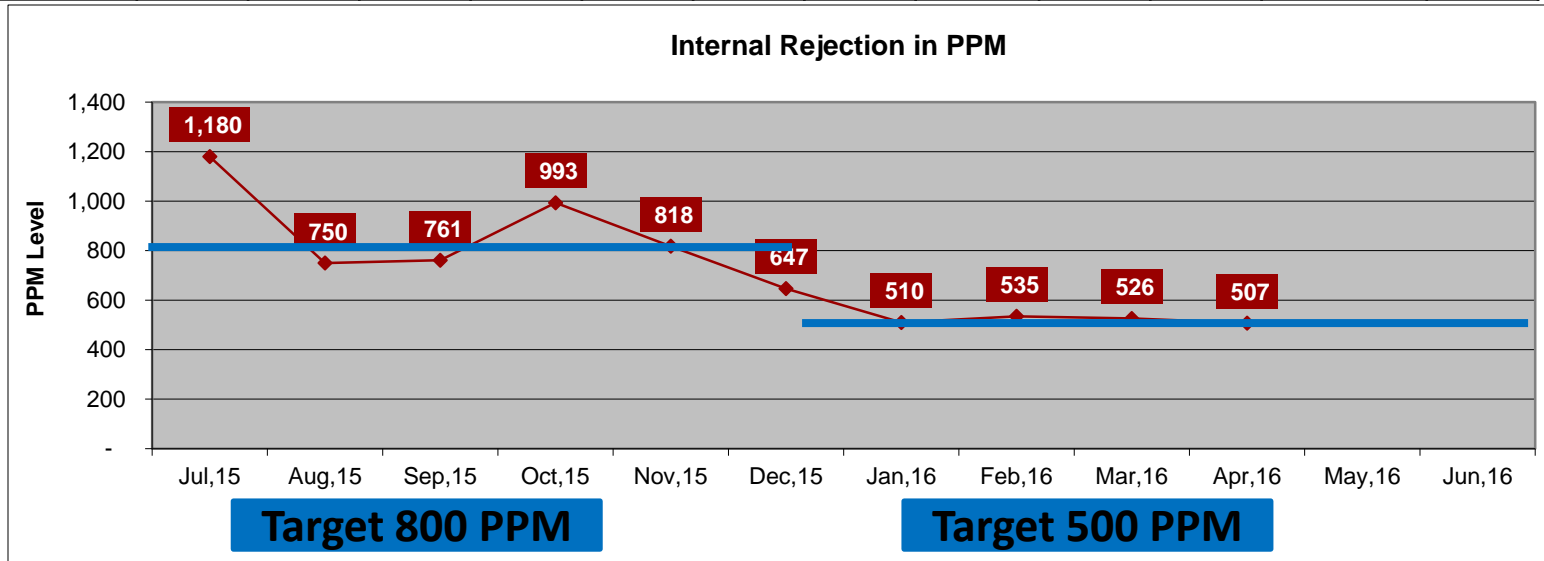
# First time Quality (FTQ) at NES

NOOR ENGINEERING SERVICES (PVT) LTD

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## (FTQ) Internal Rejection in NES for the Year of 2015 ~ 2016

DESCRIPTION	Jul,15	Aug,15	Sep,15	Oct,15	Nov,15	Dec,15	Jan,16	Feb,16	Mar,16	Apr,16	May,16	Jun,16
FTQ %	0.12%	0.07%	0.08%	0.10%	0.08%	0.06%	0.05%	0.05%	0.05%	0.05%		
PPM Level	1,180	750	761	993	818	647	510	535	526	507		



### NES PPM TARGET SINCE 2008:

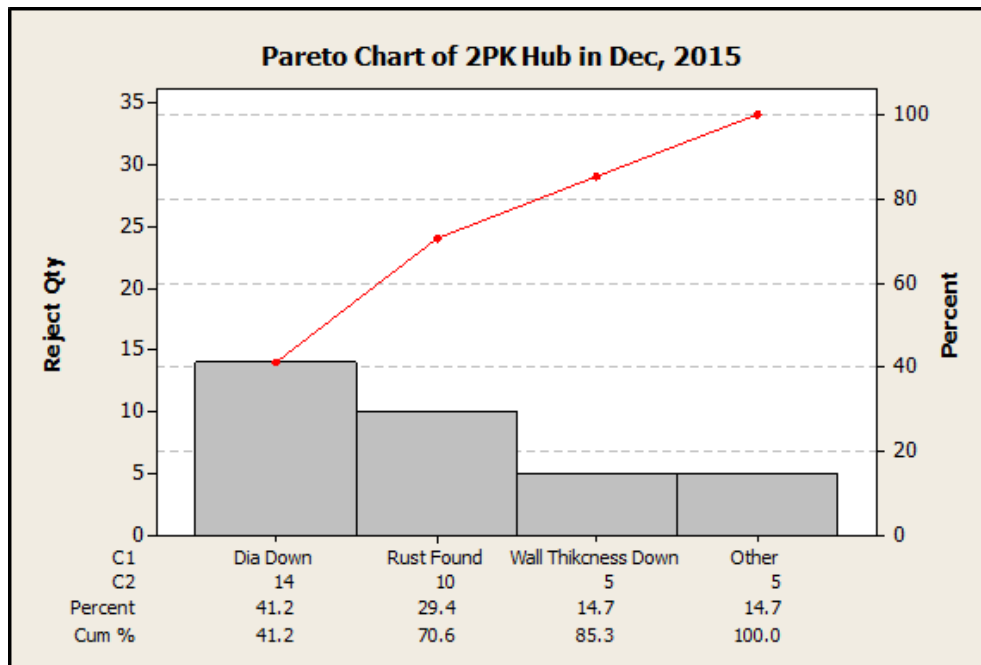
Jan,08 to Jul,10	5000 PPM
August,10 to October,12	2500 PPM
Nov,12 to Dec, 13	1000 PPM
Dec,13 to Dec, 14	900 PPM
Dec,14 to Dec,15	800 PPM

Total Rej  
Total Manufactured  
PPM April,16

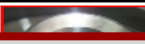

<b>247</b>
<b>487,111</b>
<b>507</b>

# PARETO ANALYSIS

2pk Hub Rejection in Dec, 2015			
Part name	Standard Defects Name	Reasons of Rejection	Qty Rejected
2pk Hub	Dia Down	Dia 38.0 Size down	7
		Dia 64 down	7
	Rust Found	Rust Found	10
	Wall Thikcness Down	wall Thickness Down	5
	Pcd Out	Pcd out	3
	Dent Problem	Dent found on Dia 38	1
	M-6 Thread damage	M-6 Thread damage	1
TOTAL			34



# ROOT CAUSE ANALYSIS

ROOT CAUSE ANALYSIS (Defect Investigation Report)											
<b>4-M C.P (Change Point) Management</b>		Description & Sketch				<b>5-Why Analysis</b>		<b>QC Circle</b>			
		SERVICES PVT LTD Checked: _____ Approved: _____ Nauman Sb (PID)		DATE 25 + 1 + 2016 AGRI AUTO Parts Inspection Dept.							
<b>② Survey result</b> <b>1 Defective</b> During Verification it is found that broach is miss during Process by lack of concentration by Operator  <b>2 Process</b> During Process the lack of concentration of worker lead to cause of these Problem No checkpoint is available to verify the seal position after filament.  <b>3 Standard</b> Standard of WIP is not followed and can cause this rejection.  <b>4 Drawing</b>		<b>③ Cause of occurrence</b> Broaching is missed during Process because of wrong process flow of part i.e. part was not went through broaching operation.  <b>2. →Why</b> Batch Wise production can cause process mis problem.  <b>3. →Why</b> Part handling mechanism is not good.  <b>4. →Why</b> At Inspection stage inspector negligence is causing this problem  <b>5. →Why</b> No POKA YOKE device is available to avoid this problem.		the same defects.  Line should be on LEAN Manufacturing to control the WIP in between Process.  Poka Yoke device is need to be incorporated to verify the finish good.  Operator training is required to avoid this process violation defect.		Countermeasure Date 15/1/16 15/1/16 2/1/2016		<b>⑦ Confirmation of Countermeasure effect</b> Confirmation method Process audit will be performed on monthly basis to verify the effective implementation of propose countermeasure.  Identification method : Yellow mark on Bin  Countermeasure parts Continuity ( ) Lot or ( ) month do quality check		Implement in charge 20/2/16 Mr. Majid	
<b>5. 4 M</b> Man Worker is changed and new worker is working for last three months. Machines NO change in Equipment Materials NO change in Material Methods NO change in Method		<b>④ Cause of outflow</b> <b>1. Direct cause</b> Batch wise production & No POKA YOKE device is available to avoid this problem.  <b>2. →Why</b> line is not on LEAN manufacturing and ERROR PROOF concept is not Implemented.		Check Standardize <input checked="" type="checkbox"/> NEOS <input checked="" type="checkbox"/> OPS		Check Horizontal development <input checked="" type="checkbox"/> MOS		<b>Quality Head Comments</b> (system Reflect the contents of the mechanism) POKA YOKE devices are incorporated & line is also balanced & running on LEAN MANUFACTURING mechanism and no such possibility is left which can cause this problem again at customer end.  Findings of measures Statement NO Findings		The quality assurance manager sign 	

Any Change in 4-M Get Approved From OEM

Reflection of countermeasure in similar products.



# RISK ANALYSIS

## Process FMEA Worksheet

Model/Type/Model Year :  
Honda part no. : 44600-TBC-000

Supplier name : Nour Engineering Services (Pvt) Ltd.  
Supplier address (factory location) : DSI# 32/3 & 32/10, Down Stream Industrial  
Process FMEA was carried out by (dept or person) : DEVELOPMENT, QUALITY CO  
Identification : If parts are of Honda specified parts, enter a code (JIS, JIS Q, NIS, etc.)  
Completion confirmation : with consideration given to acceptance level of risk

Scope of Risk Evaluation			
No.	Process Name	Function of the Process (what does this)	Failure Mode
10	ROUGH TURNING	Machining	
20	Pre-Drilling	Machining	
30	1st Side Machining & hole Drilling	Machining	(10) ø64.0 up & Down (2) 5 Hole ø12.1 up (2) 5 Hole ø12.1 Down (3) 5 Hole prod out ø14.3
40	2ND SIDE MACHINING	Machining	(1) Bearing ø 48 up (1) Bearing ø 48 down Wall thickness 4.0 down
50	5 Hole counter & chamfer	Drilling	(36) 5 hole counter out ø
60	TAPPING (1 HOLE M0.6)	Tapping	(27) Hole Tapping M6 x 1.0 Half tapping of M6 x 1.0
70	1 Hole Chamfer	Chamfering	Burr Found on M6 Tap
80	Broaching	Broaching	
90	Semi-final Inspection	Inspection	Dent found on ø 48 Rust found
100	Bolt Pressing	Pressing	Bolt Thread Damaged
110	Final Inspection	Inspection	Dent found on ø 48 Rust found
120	IDENTIFICATION MARK (Etching)	Marking	Clear Display of
130	Packing	Packing	
140	Storage	Storage	
150	Delivery	Delivery	

## Risk Priority Number (RPN = S \* O \* D)

Rank

RPN

Response

10

436 ~ 1000

1-Top priority.  
2-Immediate measures required

9

8

130 ~ 435

1-High priority.  
2-Implement measures.

7

6

27 ~ 129

1-Moderate priority.  
2-Monitor the occurrence of a failure mode and implement measures accordingly

5

4

8 ~ 26

1-Low priority.  
2-Implement measures where time and resources allow.

3

2

1

1 ~ 7

1-Accept as a remaining risk.  
2-No further measures required.

y (D)

Criteria

to Honda, process control not

, process contrl cannot detect

e shipping

detect failure by current process

process control may overlook

control tools may detect failure

tatistical tools

tatistical tools

devices

easy and no attention is required.

Seriousness (S)

Rank	Evaluation Criteria
10	Failure mode of parts that impairs the safety of Honda products and leads to a fatal accident and/or involves a violation of regulatory requirements (without predictability)
9	Failure mode of parts that impairs the safety of Honda products and leads to a fatal accident and/or violation of regulatory requirements (with predictability)
8	Failure mode of parts that cause loss or deficiency of primary performance, Failure mode that leads to a serious accident
7	Failure mode of parts that may cause loss or deficiency of primary performance, Failure mode that may lead to a serious accident
6	Failure mode of parts that may but may not necessarily cause loss or deficiency of performance, function, or structure of Honda products
5	Affected Honda products are usable or operable but at a reduced level of performance or function
4	Lead to multitudes of warranty claims against Honda products with respect to fit and finish, appearance, noise in use or operation, feeling
3	Lead to warranty claims against Honda products with respect to fit and finish, appearance, noise and feeling in use or operation
2	Lead to complaints against fit and finish, appearance, noise and feeling when in use or operation
1	No discernible effect or effect can be ignored.

EVALUATION CRITERIA

Rank	Evaluation Criteria
10	1/5 or more
9	1/3 or less
8	1/8 or less
7	1/20 or less
6	1/80 or less
5	1/400 or less
4	1/2,000 or less
3	1/15,000 or less
2	1/150,000 or less
1	1/1,500,000 or less

Rank

EVALUATION CRITERIA

Rank	Evaluation Criteria
10	Failure cannot be detected before delivery to Honda, process control not available
9	Failure is likely to be flowed out to Honda, process contrl cannot detect failure
8	Extremely difficult to detect failure before shipping
7	detected by periodic sampling, difficult to detect failure by current process control
6	detected by regular sampling inspection, process control may overlook
5	detected by 100% final inspec., process control tools may detect failure
4	detected in subsequent process, through statistical tools
3	detected in subsequent process, through statistical tools
2	detected within the process, through QA devices
1	detected within the process. Detection is easy and no attention is required.

Risk Priority Number (RPN = S \* O \* D)

Rank	Response
436 ~ 1000	1-Top priority. 2-Immediate measures required
130 ~ 435	1-High priority. 2-Implement measures.
27 ~ 129	1-Moderate priority. 2-Monitor the occurrence of a failure mode and implement measures accordingly
8 ~ 26	1-Low priority. 2-Implement measures where time and resources allow.
1	1-Accept as a remaining risk. 2-No further measures required.



**OUR**  
**TECHNOLOGY**

# HUB FRONT WHEEL LAYOUT

**Raw Material IN**

**ROUGH MACHINING AREA**

**LINE # 02**

**LINE # 01**

**HUB  
MA**

**Manufacturing on LEAN  
Mechanism**

**All Quality Q-Point's Process  
Capability is controlled and  
 $CPk \geq 1.3$**

**LINE # 03**

**Finish Good OUT**



# 01- HUB FRONT WHEEL MACHINING FACILITY



**CNC Turning Facilities**  
Hub Front Wheel  
Specification: Horizontal C-Axis



**CNC Turning Facilities**  
Hub Front Wheel  
Specification: Horizontal



**Drilling Facilities**  
Hub & Disc Assy  
Specification: Gangue Drilling



**Marking Facilities**  
Hub & Disc Assy  
Specification: Traceability Marking Machines



**Broaching Facilities**  
Hub Front Wheel  
Specification: Broaching Machine

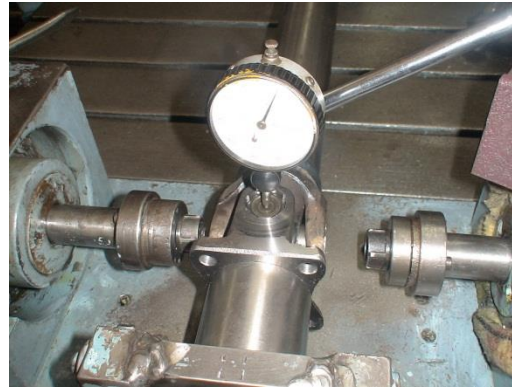
100% Traceability codes engraved  
with critical dimension value.

NES, PART NAME, LINE NO, PART  
NO, DIA SIZE, DATE & TIME

# PROPELLER SHAFT ASSY SHOP MACHINING FACILITIES



**Bearing Fitting Press**



**Caulking Press**



**Yoke Press Machine**



**Schenck's Balancing Machine**



**Double End Co2 Welding Machine**



## 02- PROPELLER SHAFT COMPONENTS MACHINING SHOP



**YOKE & FLANGE Machining**



**CNC Horizontal Turning Center**



# PROPELLER SHAFT ASSY SHOP MACHINING FACILITIES



Yoke Press Machine



Double End CO 2 Welding



Caulking Press



Bearing Press Machine

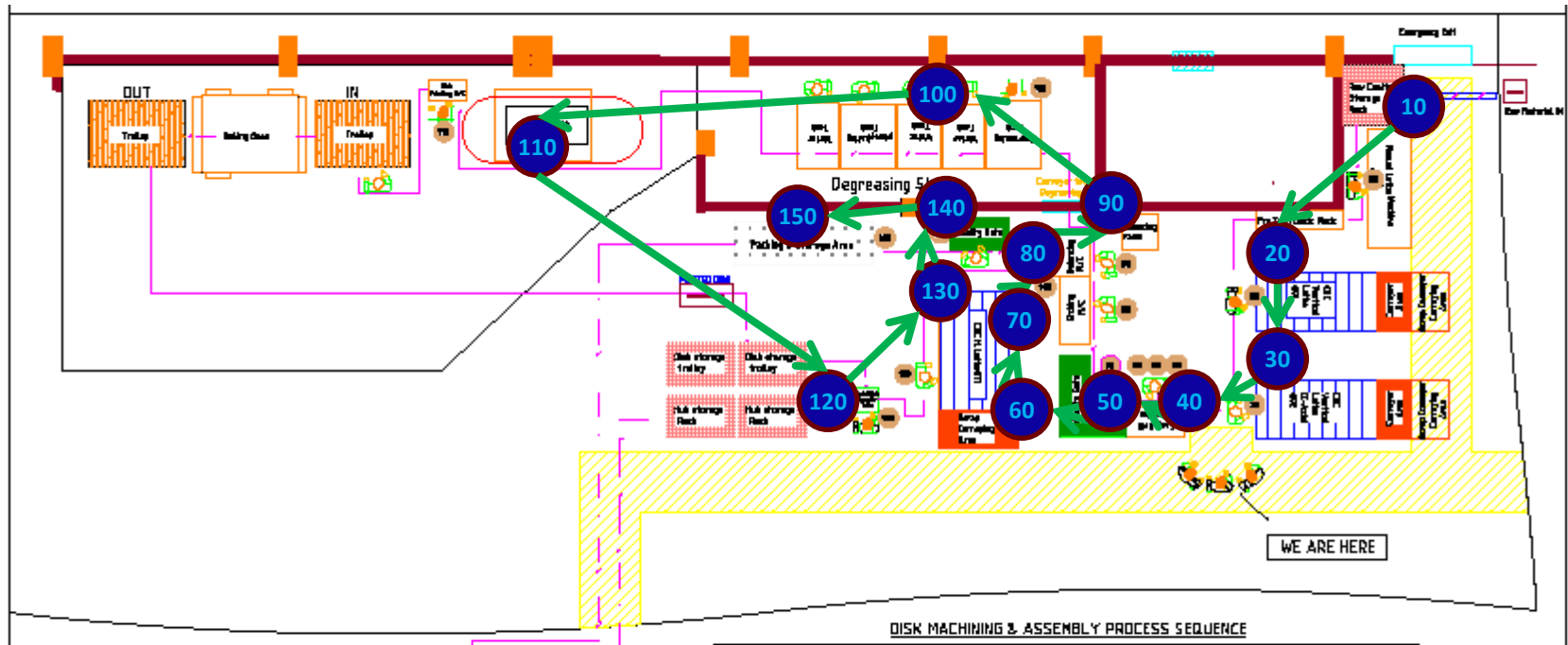


Mass Balancing Machine



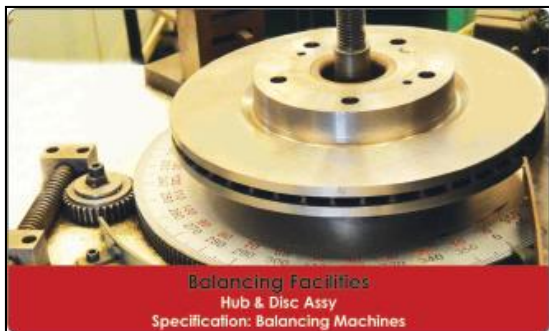
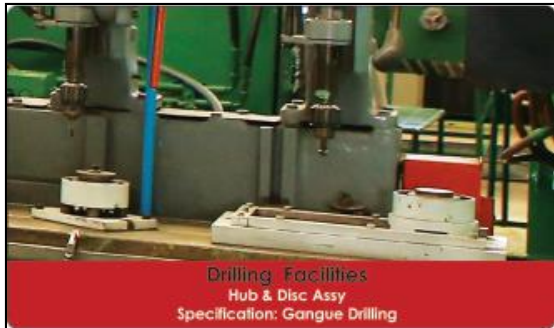
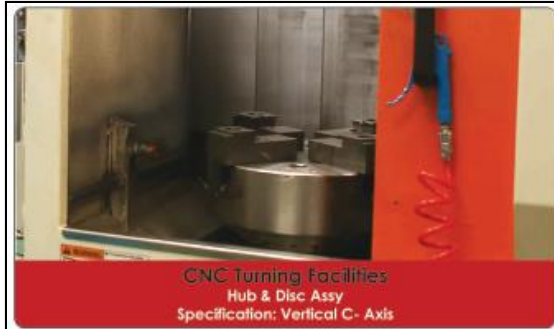
Painting & Baking

# FRONT BRAKE DISC MACHINING SHOP



10	Rough Turning	60	2-Hole Chamfering	120	ASSEMBLY OF DISC & HUB
20	1 <sup>st</sup> side machining with 8 Hole Drilling	70	INSPECTION	130	Facing & Burnishing
30	2 <sup>nd</sup> side machining	80	Marking	140	Balancing with HUB
40	8-Hole Chamfering	90	Balancing	150	Final Inspection
50	2-Hole Tapping	100 110	Surface Treatment (degrease & Phosphate + Painting)		

# FRONT BRAKE DISC MACHINING FACILITIES



100% Traceability codes engraved  
with critical dimension value.

NES, PART NAME, LINE NO, PART NO,  
DIA SIZE, DATE & TIME



# GENERAL MACHINING FACILITIES



**(Stoving Paint) Painting & Baking**



**Shearing Machine**



**Mech. Press  
(50Ton to 250 Ton)**



**Auto Co2 Welding  
Machine**



**Gear Teeth Cutting  
(Hobbing Machine)**

# RESEARCH & DEVELOPMENT

1- Designing and manufacturing of TOOLS, DIES, MOLDS, JIGS & FIXTURES.

- PRO-E
- Master Cam
- Mechanical Desktop



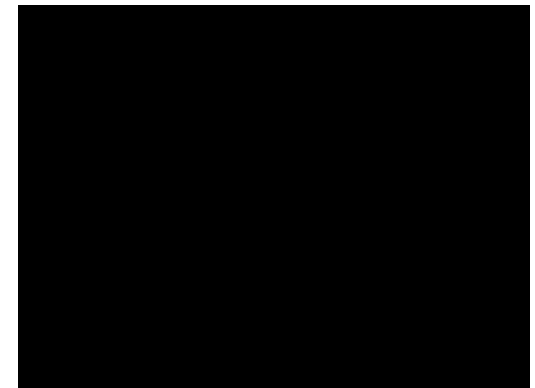
2- Designing & Manufacturing of automation of machines and new special purpose machines as per requirement.



**Automatic  
Deburring M/C**



**Automatic Painting & Baking  
Machine**





# DEVELOPMENT MACHINING FACILITIES



**Surface Grinding Machine**



**EDM**



**Wire Cut Machine**



**CNC Machining Center**



# DEVELOPMENT MACHINING FACILITIES



**Heat Treatment**



**Cylindrical Grinding Machine**

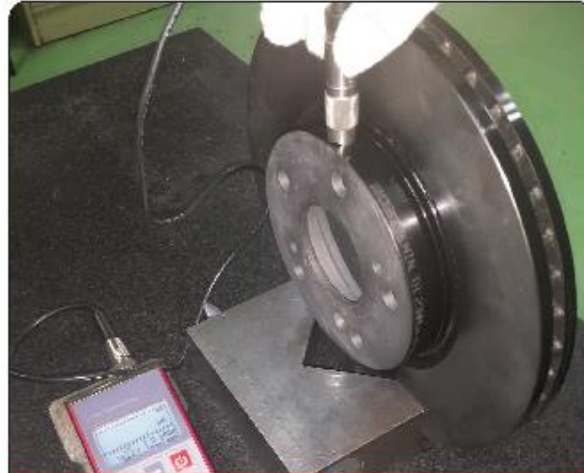


**CNC Machining Center**

# QC FACILITIES



Hardness Tester



Paint Thickness Checker



Endurance Testing Equipment



Checking Instruments  
Measurement



Surface Roughness Tester  
Surface Tester



# QC FACILITIES



Height Gauge  
Measurement



Coordinate Measuring Machine  
Measurement

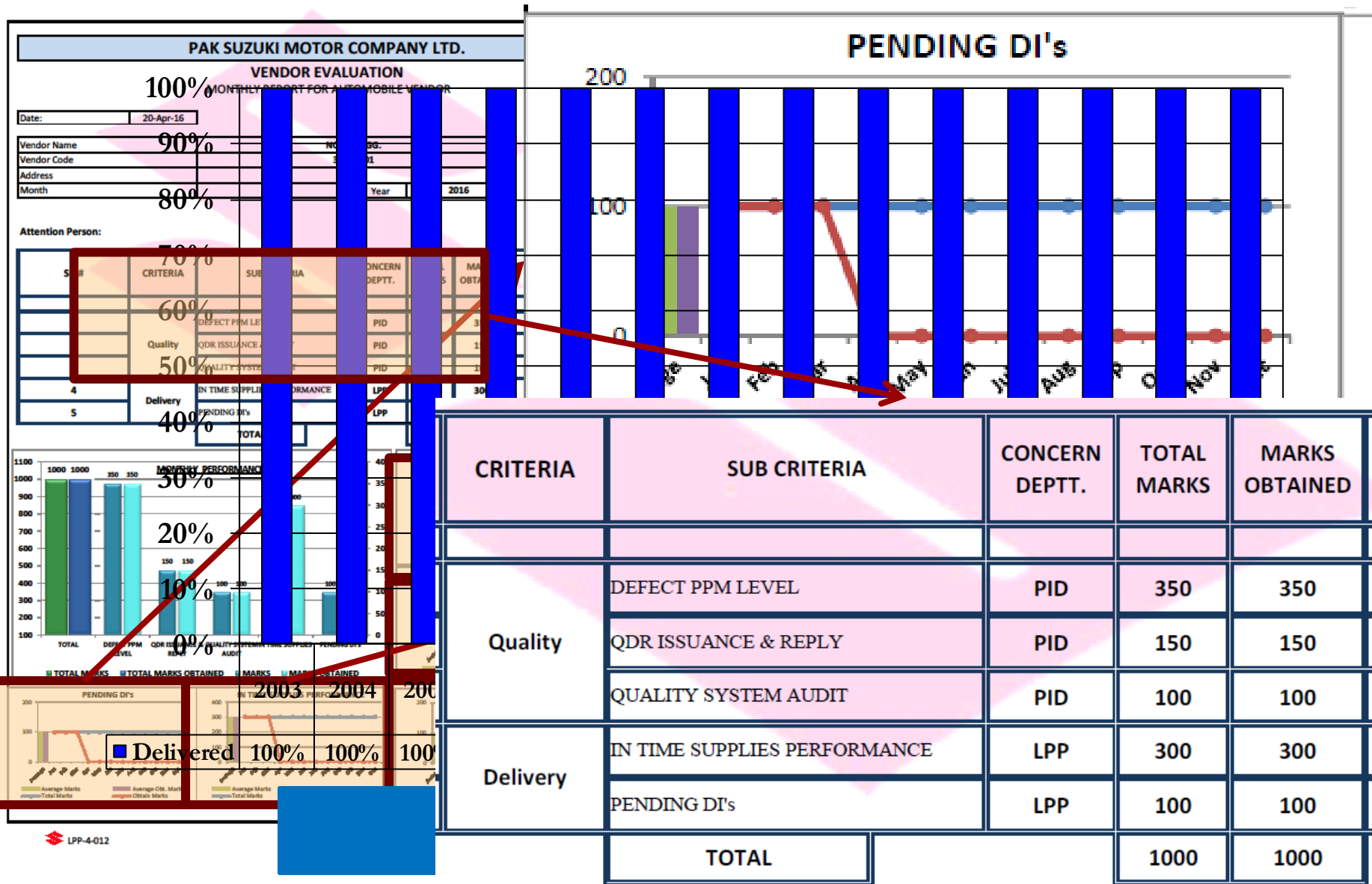


Checking Fixture  
Measurement

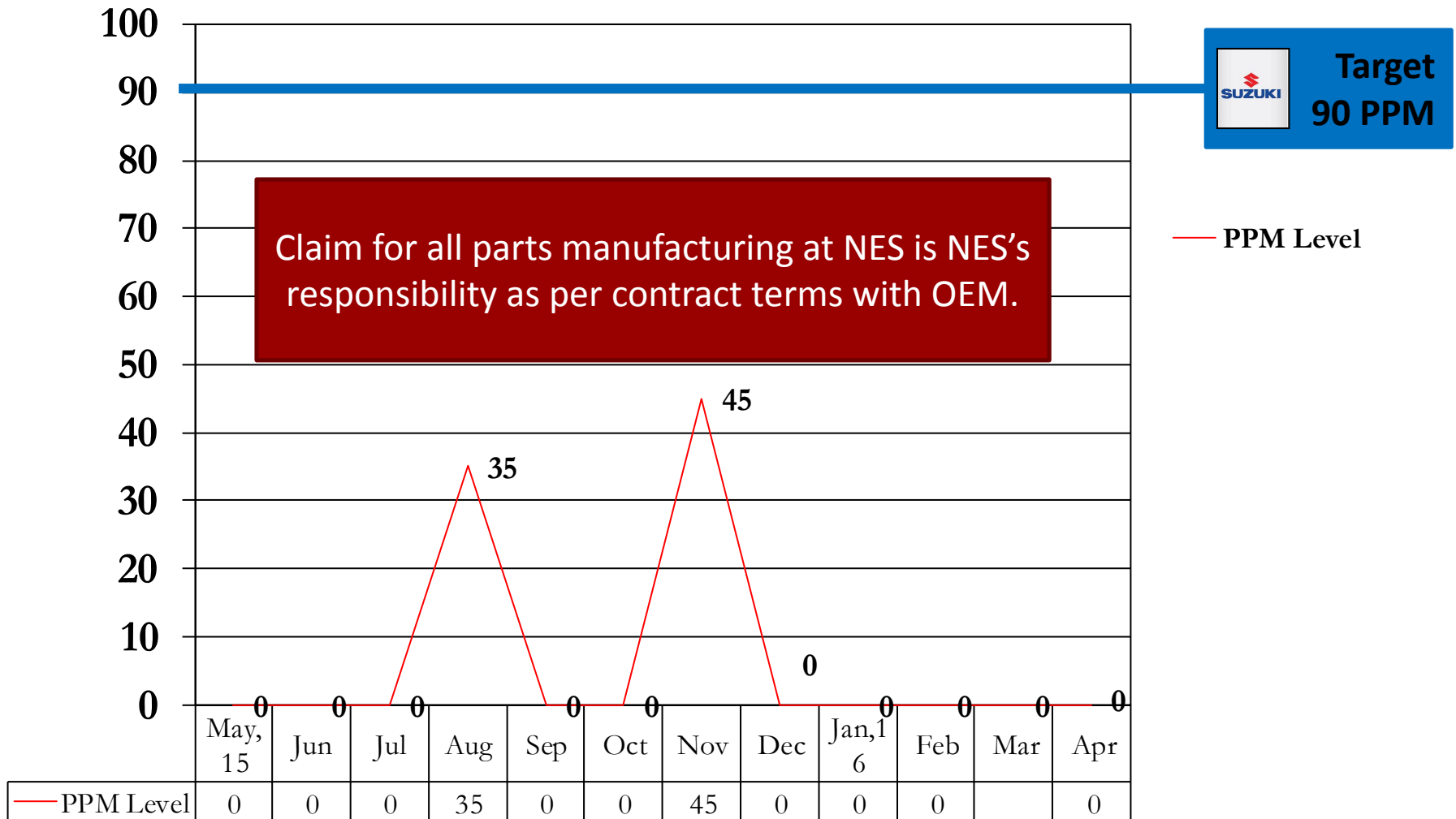


Hub Checking Equipment  
Measurement

# DPR (Delivery Performance Report) PAK SUZUKI



# PPM LEVEL TO PAK SUZUKI Apr, 2015 to Mar, 2016



# DPR (Delivery Performance Report) HONDA Car



## Evaluation Report Apr-16

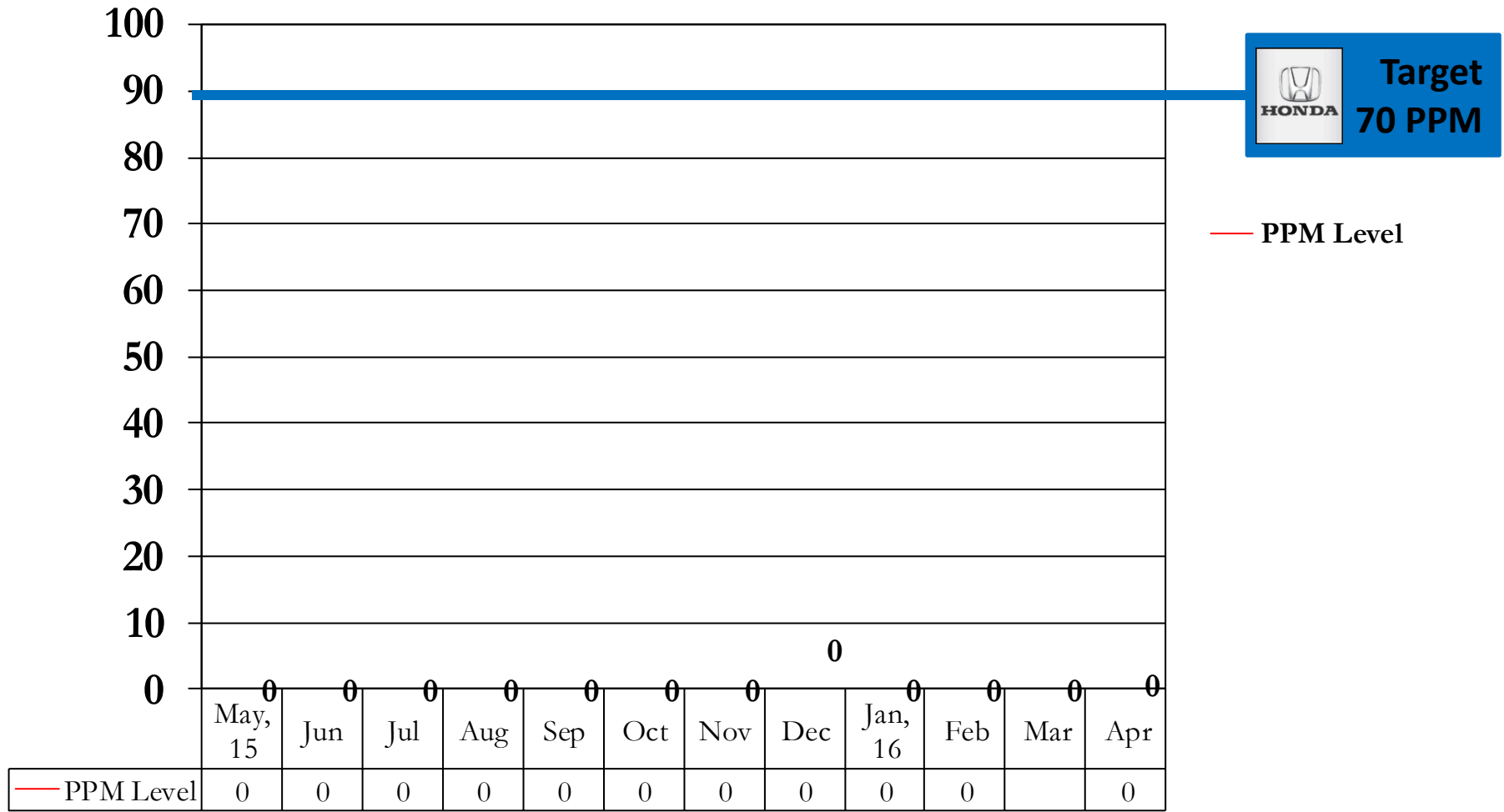


Supplier Name : Noor Engg.

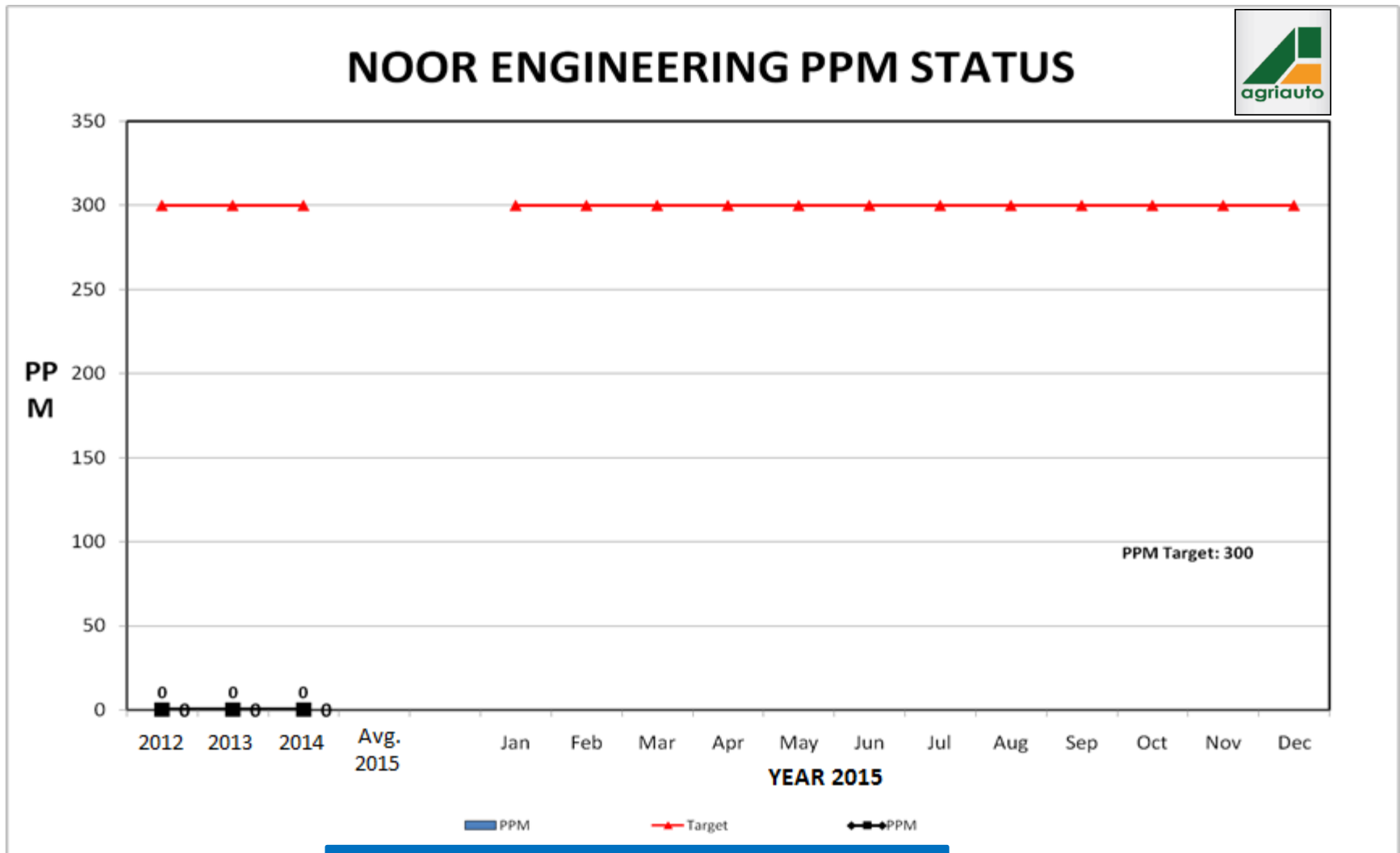
Sr #	Parts Number	Parts Name	Problem	Total Rejection	Importance Rank			Number of Problems				GQI Points	Level	Total Receiving	Remarks
					A	B	C	A	B	C	D				
													Best	7080	
Total Points												0			



# PPM LEVEL TO HACPL Apr, 2015 to Mar, 2016

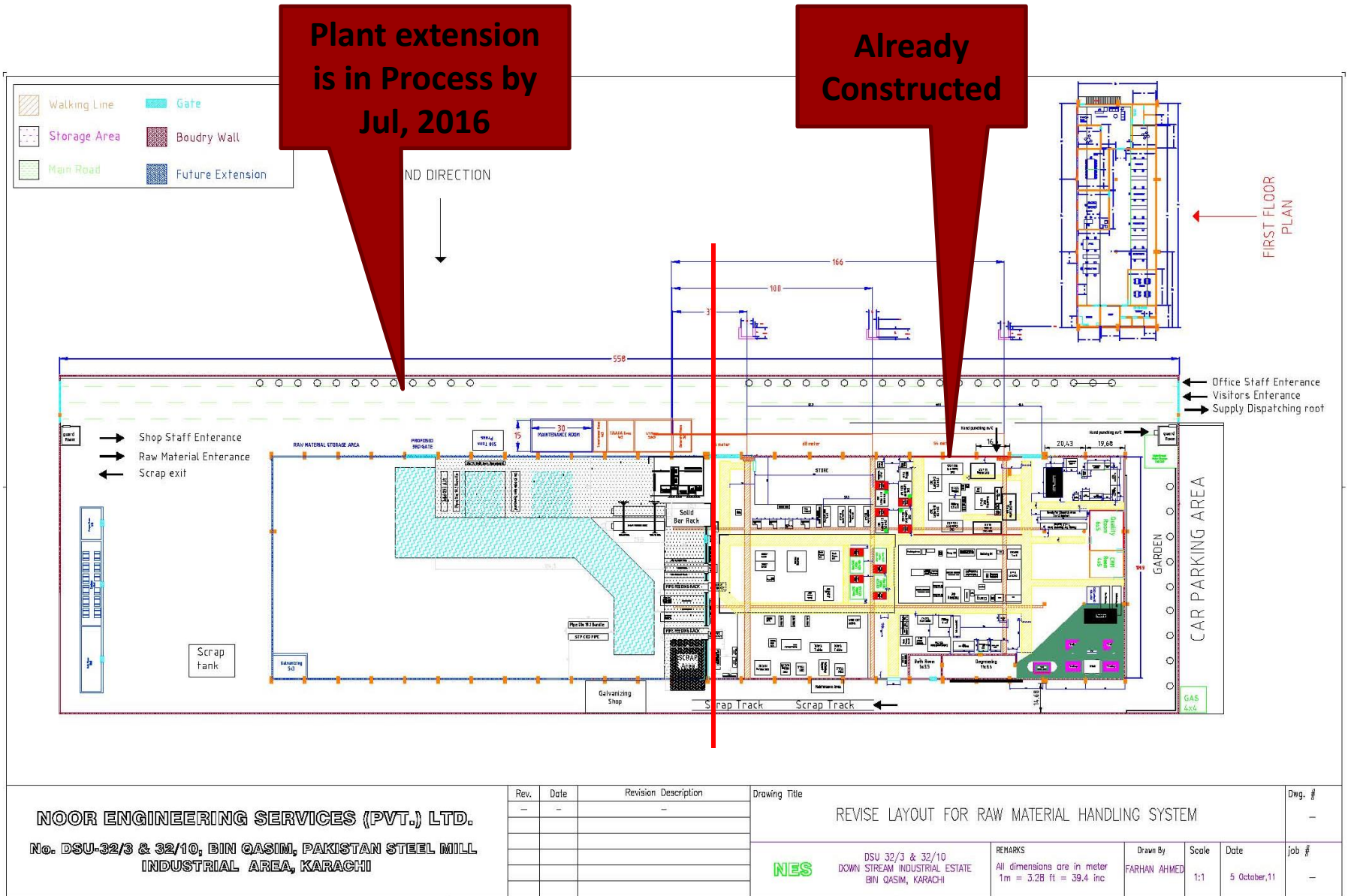


# PPM LEVEL TO Indus Motor Company 2009 — till to date

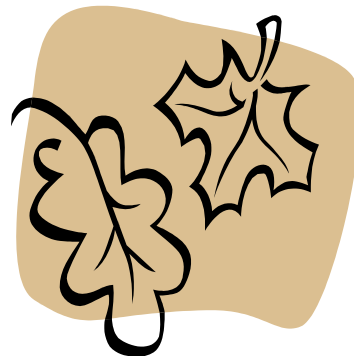


Zero PPM whole model 557-N

Zero PPM since 242-L (New Model)



**STRIVING TOWARDS  
BRIGHTER FUTURE**



**Thank you very much**