



# Developing a Culture for Quality

## A case study of Thal Engineering

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THAL ENGINEERING started operations in July'96, after signing a Technical Assistance Agreement with Denso Corporation Japan, for manufacture of car air conditioners in 2000, it signed another TAA with Furukawa Electric Company, Japan for manufacturing of automotive wiring harness. In 2009 it again signed another agreement with Denso Corporation for manufacture of Aluminum Radiators.

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	<u>1997</u>	<u>2010</u>
Sales (Rs m)	300	6,305
Employees (No)	64	968
Products	Air Conditioners	Air Conditioners Heater Blower Radiators Wiring Harness Battery Cables

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Quality is Cost

Absence of Quality is a **HUGE** Cost

Quality starts from outside.....  
the Customer's perspective

**FOCUS ON CUSTOMER**

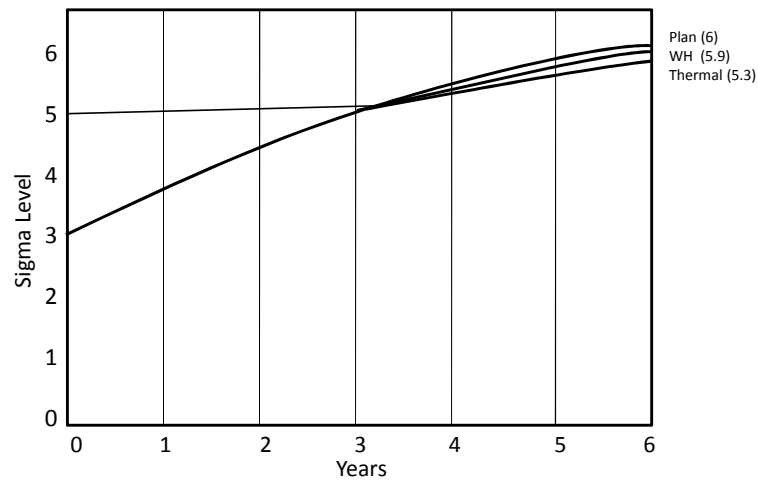
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Thal started the Journey towards  
achieving  $6\sigma$  in year 2000

it was at 3.5 sigma level at the time

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## CUSTOMER SIGMA LEVEL

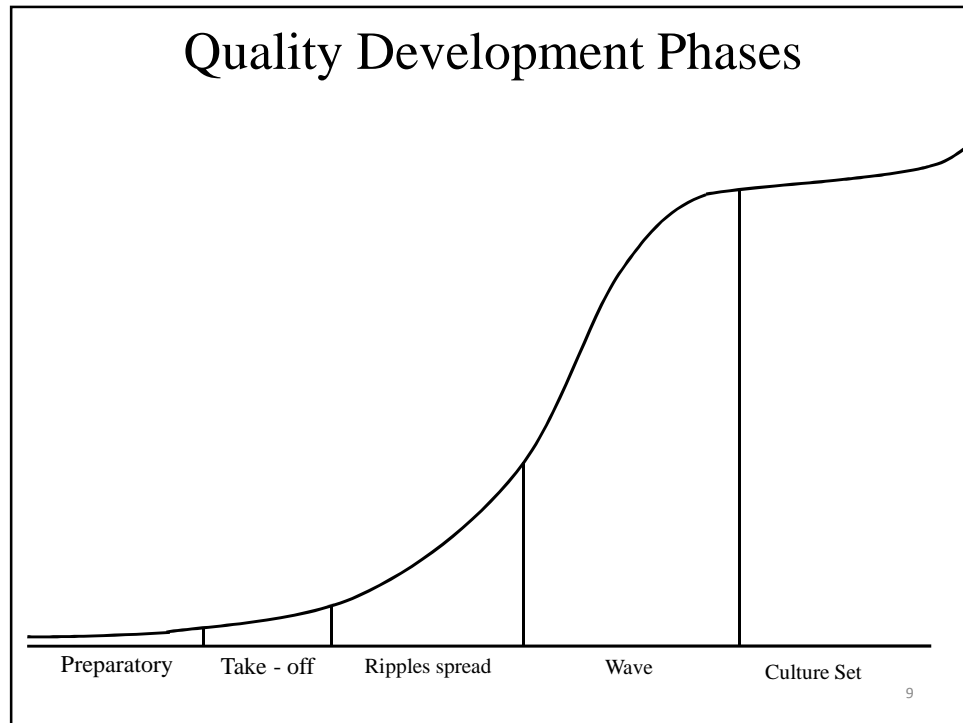


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## WHY ?

- Market Leader in Quality
- Fulfil a personal vision I had
- Export

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## PREPARATORY PHASE

Education Level  
Systems Level  
Quality Level  
Cultural Level  
Leadership Level

## TWO TYPES OF QUALITY

Customer Quality: The features that  
Customers want

Engineered Quality: The problems  
customers do not  
want

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Six Sigma can never happen unless the whole organization is fully committed and involved. Each process is broken down into smaller elements which has a defined beginning, ending and velocity which can be controlled to the degree that almost zero defect is possible consistently over a long period of time.

This is the essence of  $6\sigma$

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## DRIVERS OF QUALITY

1. Customer
2. Process
3. Employee
4. Culture

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## THAL'S KEY STEPS

Move towards SIX SIGMA

Progressively HEIGHTEN QUALITY AWARENESS

Developing People

Develop a CARING, SHARING & RESPONSIVE Culture

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## CULTURE DEVELOPMENT

- Mission & Vision
- Meetings on Values
- Du-Be-Du
- Chit Chat
- Thal Nama
- Intranet
- 24/7 availability of CE
- Games, Picnics, Parties
- Gemba
- Seekho-Seekhao & Trainings
- Night-out
- Sachi Kahani
- Wall of Heroes
- Safety Walk
- Celebration of achievements
- Check list approach

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## CULTURE DEVELOPMENT

- GJD Card
- Kaizen Award
- Ownership Award
- CE's Award
- Employee of the month award
- Thalocity Award
- Productivity Award
- No rooms, no walls, no tie, same uniform, same table, same food, same canteen
- Merit, the only criteria for growth
- Multi tier teams & meetings
- Personal issues also attended by Company
- Annual objectives + milestone metrics
- Climate survey + Exit Interviews

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## DEVELOPING PEOPLE

- Training ——— OJT
  - In-house by outside trainer
  - Outside Training
  - Foreign Training
- Training School
- Dekh – Ke – Aao
- Seekho Seekhao
- Computer Scheme
- Book Allowance
- Library
- Skill Competition
- Recognition & Awards
- Stretch Objectives
- Kaizen
- Across tiers teams & meetings
- Listening to People

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## HEIGHTEN QUALITY AWARENESS

1. Training to all employees, STMs and JTM's in 7 QC tools
2. Control Charts wherever possible
3. Ishikawa diagram
4. Cp and Cpk
5. Practice of 5 S+1
6. Practice of FMEA, R&R
7. VM boards to highlight status of KPIs
8. Kaizen Award
9. Champions, Salar & Mujahids

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## MOVE TOWARDS SIX SIGMA

- Hire a MBB
- SIX SIGMA COUNCIL.....CEO+all HODs available in Company
- SIX SIGMA WORKING COMM.....all managers
- SIX SIGMA ROAD MAP
- CUSTOMER SIX SIGMA (VOC)
- Books & Magazines ..... available in company
- IDENTIFICATION OF CTQs.....based on Customer needs
- SELECTION OF PROJECTS
- New Tools added as DOE,QFD, Templates

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## SLECTION OF PROJECT

	<u>Score</u>	<u>Weightage</u>	<u>Weighted Score</u>
1. Benefit on raw material $\eta$		0.13	
2. Benefit on manpower $\eta$		0.13	
3. Benefit on power $\eta$		0.13	
4. Benefit on space $\eta$		0.13	
5. Benefit to customer		0.20	
6. Effect on environment		0.10	
7. Availability of resources incl.team		0.08	
8. Time to complete		0.05	
9. Value of 6 $\sigma$ approach		<u>0.05</u>	
		1.00	

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## 6σ PROJECTS:

- Completed to date: 24
- Savings generated: Rs 35.7 million

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