

Bajaj Auto Limited

(Aurangabad Division)

Waluj



GC-1000



XCD-125

Welcomes

You All



Passenger

Platina-125



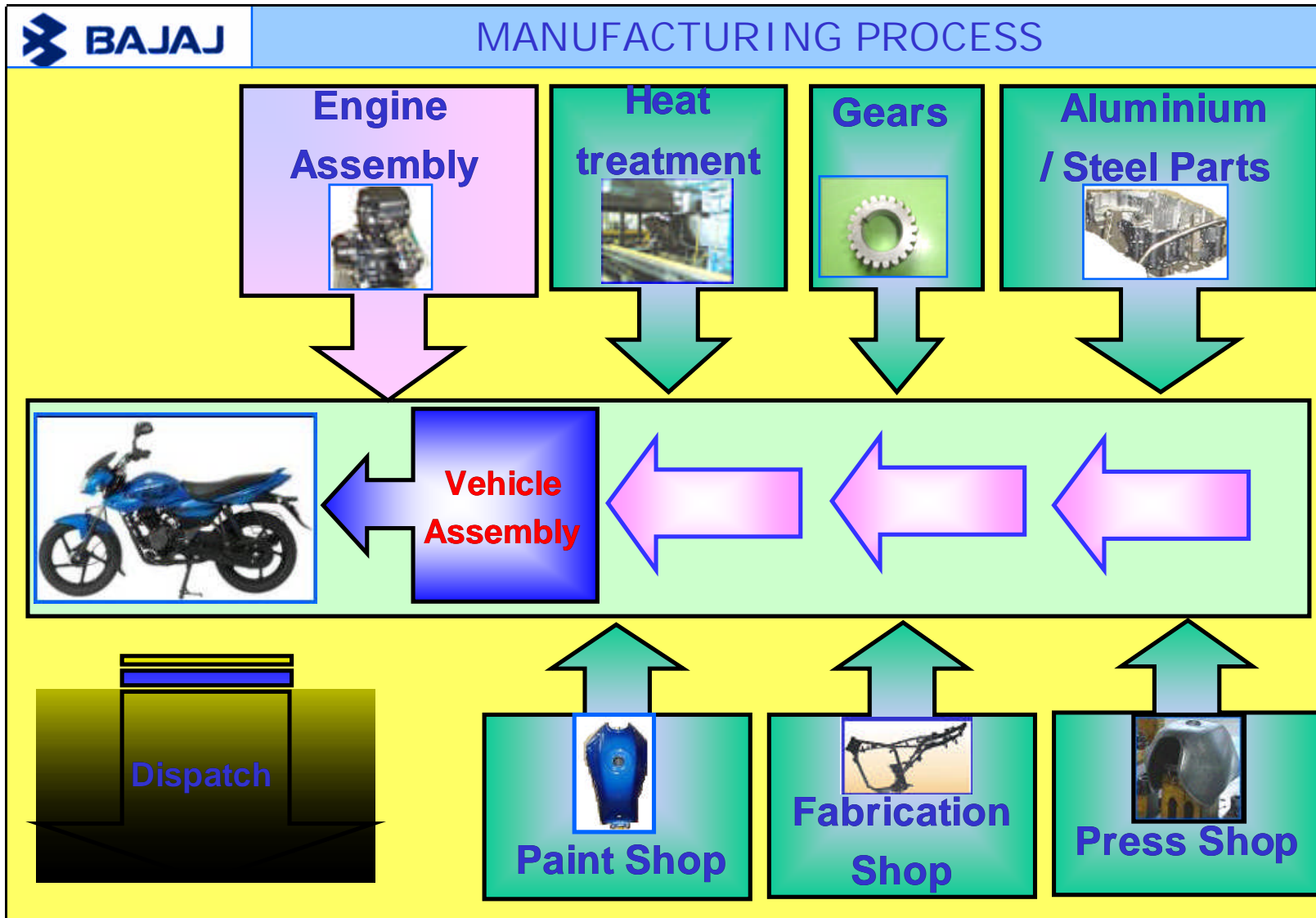
- ØCompany profile
- ØManufacturing process
- ØWater Conservation Target
- ØWater Conservation Approach
- Øwater Conservation Methodology
- ØInnovative projects
- ØOther Projects
- ØResults
- ØSustenance
- ØAchievements
- ØFuture Projects

- **World class Manufacturing Plant at Waluj, Pant nagar & state of art plant at Chakan**
- **Wide Range of Two wheelers & Three wheelers**
- **ISO 9001(Quality system), ISO 14001 (Environment system) & OHSAS 18001-1999(Occupational Health & Safety Assessment Series) certifications**
- **Total Productive Maintenance(TPM) Philosophy in the organization**
- **Largest Exporter of Two & Three wheelers**
- **Sales – 24.51 Lacs Vehicle during FY 2007 –2008**
- **Turnover of Rs. 91688 Million**

Strength - Workmen	-	3265 Nos.
Strength - Staff/ Managers	-	744 Nos.
Total Plant Area	-	600 Acres.
Total Connected Load	-	40 MW.
Machines/ Equipments	-	3200 Nos.

Modern Machines/ Equipments include:

- Ø NTC/ Mazak/ Nigatta/ Fortuna/ AMS/Schautd/HMT
Fanuc Robot drill
- Ø ABB Sweden Robot for Resistance Welding
- Ø SAMES Bell Applicator/ Kawasaki Paint Robot.
SMG/ Heilbronn Press.



YEAR	TARGET M³ / Vehicle	ACHIEVED M³ / Vehicle
2004-05	0.71	0.65
2005-06	0.61	0.62
2006-07	0.60	0.58
2007-08	0.55	0.54
2008-09	0.52	

EARLIER + **ADDITIONAL**
(3 R)

Conserve + Reduce

Preserve + Reuse

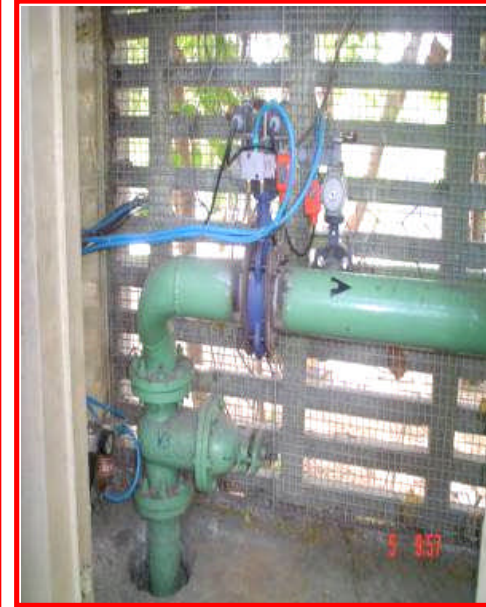
Reserve + Recycle

LESS ...
MORE ..

WATER CONVERSATION
WATER CONSERVATION

Sr. No.	Activity	Methodology	Tools used
1	Audit	To identify areas of water conservation potential	Weekly / Monthly data through Pie charts & brainstorming
2	Analysis	To identify equipments where water conservation is possible	Daily/weekly water consumption recording through bar charts, graphs
3	Action Plan	Identify activities for individual equipments with time frame	Resource planning & activity charts
4	Implementation	Action for procurement & implementation	6W2H Way Activity Charts
5	Evaluation	To analyze plan V/S Actual	Gap Analysis & countermeasures

Automation of localized Water storage system



Before : Additional 40 HP Pump running for 1.5 Hrs/Day

After : PLC Controlled auto system Provided

Benefits – Saving of 140 Cub. Meters/Year

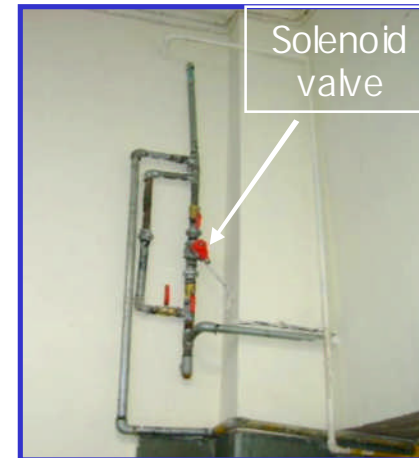
Elimination of water wastage by providing timer for water supply

Before

Continuous water available during non use time also for hand wash area.



After



Provided Timer circuit & solenoid valve to make water available only during Lunch/ Dinner/Breakfast time

Total Qty : 80 No.s of Taps

Benefit: Saving of 730 Cub. Mtr / Year



Pump set



Before : Fresh Water/ TTP Water Used for Process & Horticulture

After : Rain water Pond of Capacity 7000 Cub.mtr. Constructed

Benefits – Saving of 45000 Cub. Meters/Year

Optimisation of Paint Sludge Pit Cleaning in MCD Paint Shop

Before

**Manual Paint
Sludge Removal**

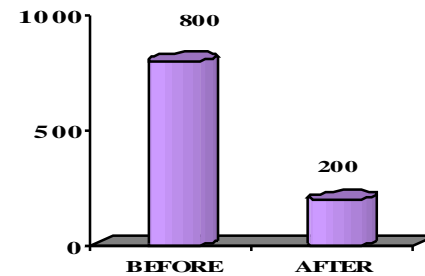
Sludge pit cleaning Frequency:
Quarterly.

After



Sludge pit cleaning Frequency:
Yearly.

Benefit: Water saving - 600 Cubic Mtr / year.



Installation of Screw compressors- Without Cooling Towers

Before



Reciprocating Compressor – Needs Cooling Tower 24 Hrs

After



Provided Atlas Copco screw Compressor. This being air cooled, cooling tower is not required

Investment : **Rs. 18 Lacs**

Water Saving : **6000 Cub.Mtr / Yr**

Installation of Spot cooling System to replace Old type ARP system

Before



ARP was used for shop cooling

After



Modular spot coolers used for shop cooling

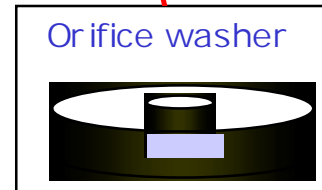
Benefit: Saving of 1500 Cub. Mtr

Orificing to Tap water of all basins

Before



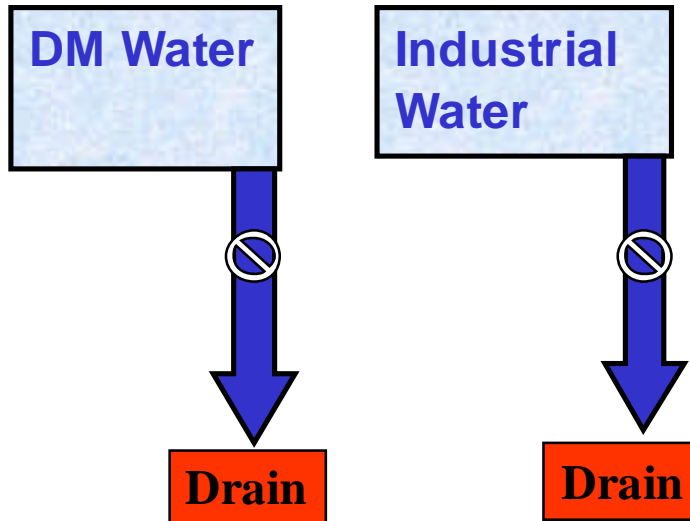
After



Total Qty : 120 Nos. of Taps

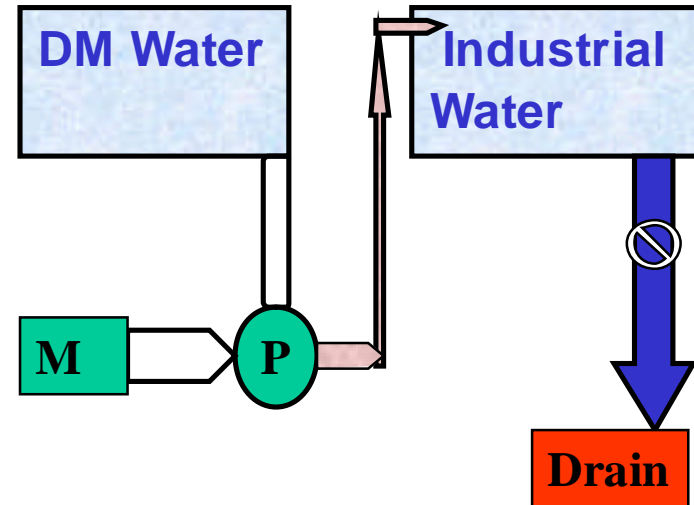
Benefit: Saving of 1200 Cub. Mtr/ Year

Before



DM water & Industrial water tanks drained per week. Total water requirement 140000 ltrs /week

After



DM Water transferred to Industrial Water Tank. after making pipe line modification Hence only DM Water required 70,000 Ltrs. Per week

Investment – Rs. 0.3 Lacs

Water Saving -3640 M³ / Annum

Before



After



Investment ---- Rs 40 lacs

Saving TTP water ---- 150 m³ /day

- WE ARE A ZERO DISCHARGE COMPANY.

- WE MEET LEGAL REQUIREMENTS AS PER
FOLLOWING ACTS :

- The water (Prevention & control of pollution) Act – 1974

- The water (Prevention & control of pollution) Cess act- 1977

- The Environment (Protection) Act- 1986 & Amendment rules 2000



**At Source
Ni – Cr.
Separation
Plant**

**Tertiary
Treatment
Plant**



**Sludge
Dewatering
Plant**

**Effluent
Treatment
Plant**

Before

ETP water was
used for
horticulture
activity only



TTP Plant

AfterTTP Water storage
Tank

Use of TTP water for paint shop
Sedimentation tank top up & tank cleaning

Fresh water Saving – 46,000 m³ /annum

- Ø No water discharged outside the company.
- Ø Tree & shrub Plantation- More than One Million
- Ø Wind Mill Installation – 65 MW (138 Nos.)
- Ø Upgradation of Effluent treatment Plant (ETP)
- Ø Installation of tertiary treatment plant
- Ø Installation of Nickel/Chrome heavy metal separation plant

ØCell cost meetings are conducted Monthly to monitor cell wise expenses like Tools,Energy & water consumption

ØWater consumption reviewed Monthly for planning further improvements and monitoring existing plans.

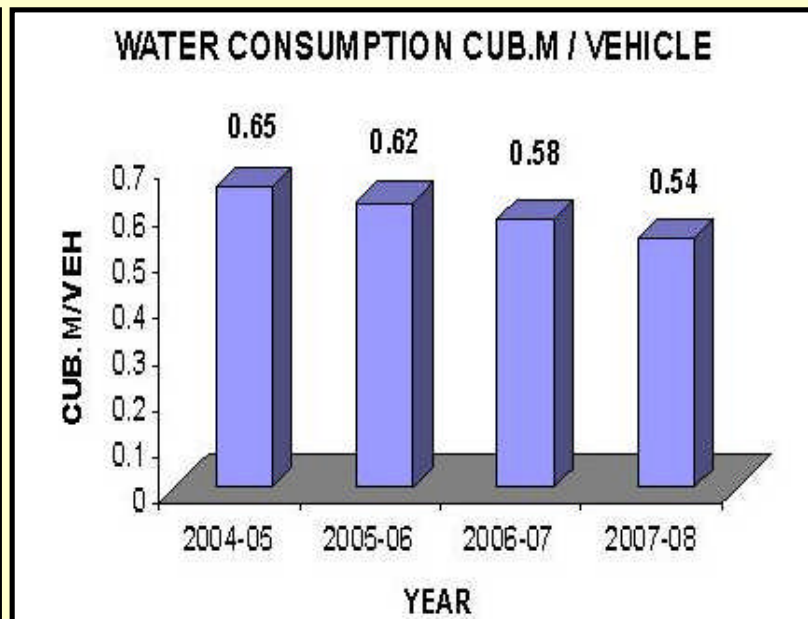
ØConducting Audit for Water leakage and Immediate Preventive actions.

ØAnnual reports of water saving generated to set goals for next year.

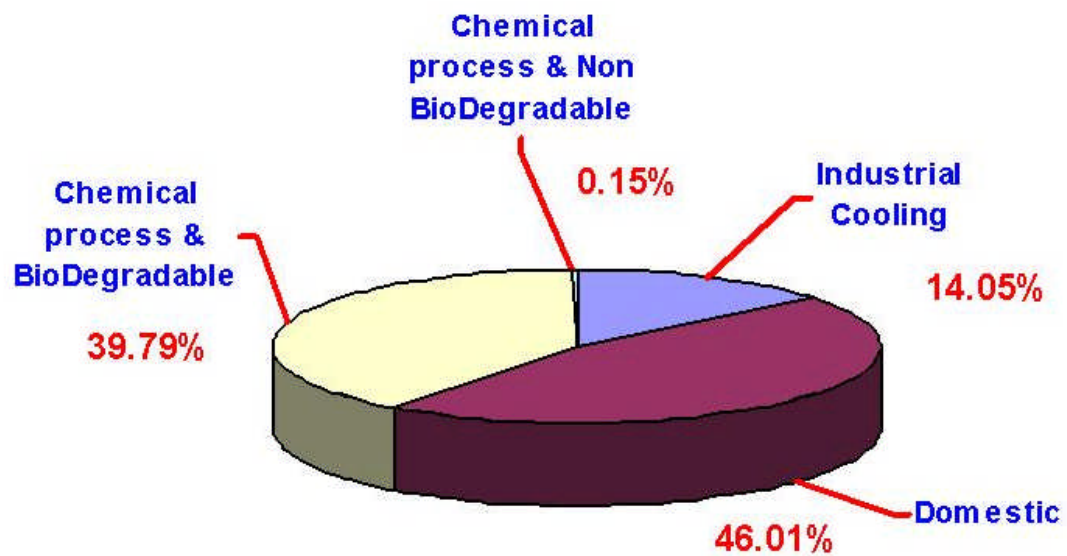
Training and Awareness Programs

- **Training through Class Room programs.**
- **Awareness through Poster Display.**
- **Social Awareness through Company Bulletins.**
- **Organising various Poster Competitions, Kaizen Competitions .**
- **Suggestion Box.**

Year	Water Consumption Cub. Mtr/ Veh.	% Reduction over Base Year
2004-05	0.65	Base Year
2005-06	0.62	5
2006-07	0.58	11
2007-08	0.54	17



Distribution of water usage



Total Identified Projects - 8 Nos.
Expected Saving - 100 m³ /day
Total Investment (Estimated) - Rs 50 lacs

Sr. No.	Projects in hand
1	Replacement of old underground main water line (@ 600 mtrs)
2	Installation of RO Plant for Paint shop 3 Wh.
3	Rain Water Harvesting for Individual Shops
4	Installation of VFD for main water supply pumps
5	Installation of Fanless cooling towers