

# **Training your workshop team**

Ian Bushby - DECA (Chairman)

Ron Edmonds - Hendrickson

Vinh Lam - Knorr Bremse

Bill Fulton, Caterpillar

Karl Marke - BPW Transpec

Doug Devlin - Eaton



# **2007 Technical and Maintenance C o n f e r e n c e**



**R o n E d m o n d s  
G r o u p P r o d u c t M a n a g e r**



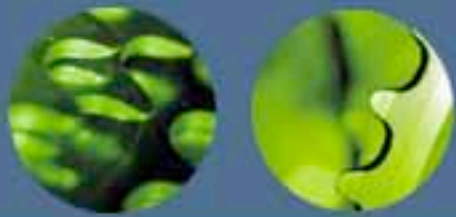
# HENDRICKSON

Hendrickson National Training Program



*The Power of*

**Reliable**  
**Exceptional Quality**  
**Durability**

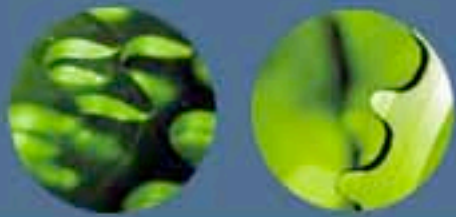


## Hendrickson National Training Program

In 2006 Hendrickson launched a series of entry level courses around Australia designed to help mechanics, apprentices, sales, service and spare parts people better understand how suspensions systems on trucks and trailers work, particularly from a Hendrickson perspective.

The need has been growing and we thought we had a real chance to give something back to the industry by running schools that **give** practical training.



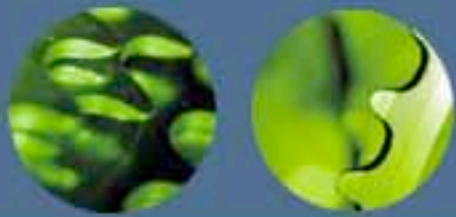


## Hendrickson National Training Program

Hendrickson have committed to continuing the courses throughout 2008. we appointed Bob Cadden as training officer, responsible for structuring and running the courses.

Bob found in 2007 there are gaps in the skill levels right across the country and we believe that our courses needed to cover a greater range from the basics to servicing to installation and audit level.



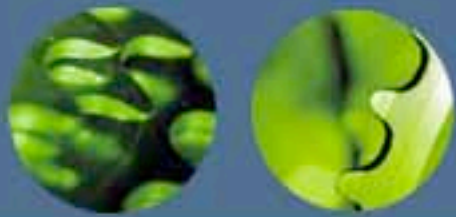


## Hendrickson National Training Program

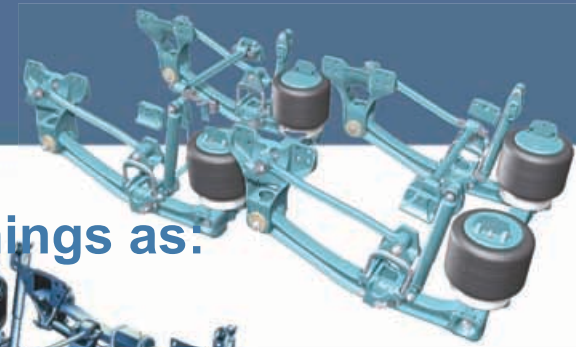
We take students right from the basics, the theory of all types of suspensions, components and their part in the performance of the equipment.

Hendrickson has been collecting feedback for two years from the students and the industry to shape the courses to what is required in tomorrow's transport industry.

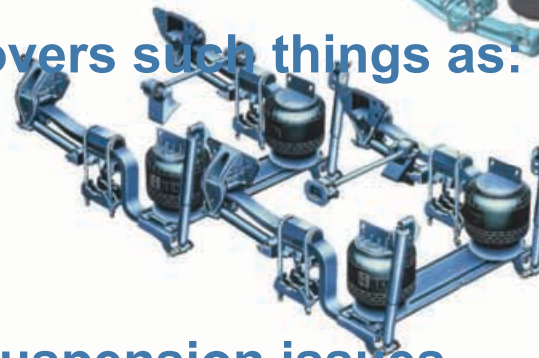




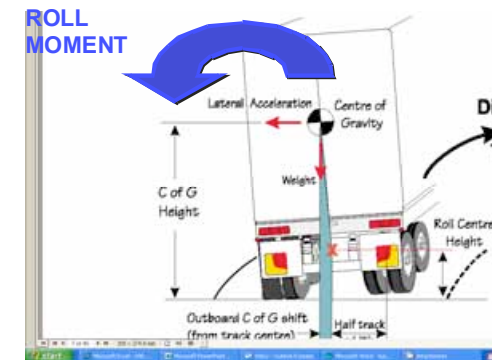
# Truck



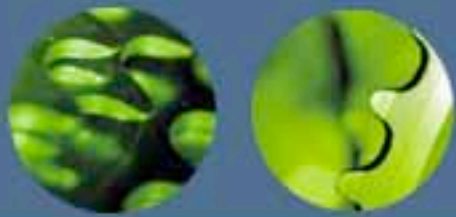
- The truck system program covers such things as:
  - roll stability
  - load sharing
  - air vs spring vs rubber
  - and many other specific suspension issues.
- It also focuses on Hendrickson suspensions like the HAS, HN and Primaax, covering:
  - appropriate applications
  - setting up
  - service and maintenance.



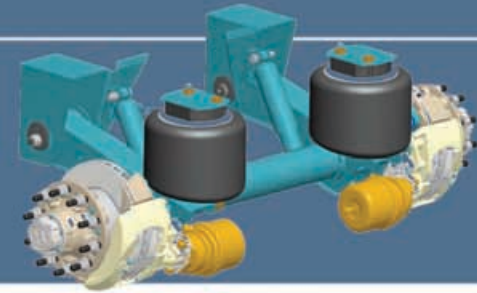
## Hendrickson Training



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# Trailer



- The trailer program covers issues such as:
  - making the load road friendly
  - spring vs air suspension
  - axle and suspension vs complete modules
  - lift axles.
- Applications for the Hendrickson Intraax and HT models, including maintenance and repairs, are an important part of the course.



## Hendrickson Training



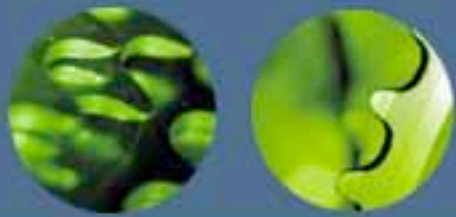
Wear Washers

- ✂ Repeat the process for the other side and assemble.
- ✂ Place the Wear Washers on to the Trailing Arms and gently jack the bush into place.
- ✂ Take care not to dislodge the Wear Washers in this process.

### Hint:

If the you have difficulty keeping the Wear Washers in place during assembly, Secure them with masking tape.

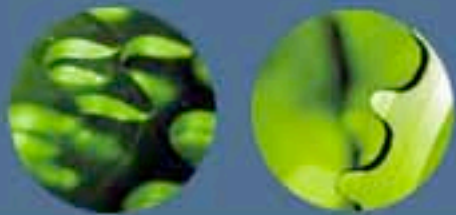
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# Locations

**In 2008, the courses will be held at various locations around Australia, with over 10 schools booked**





# 2008

Due to the success of the Hendrickson National Training Program in 2007, we will continue to provide training schools throughout 2008 and beyond.

In our show bag this year you will find an “Expression of Interest” form. Please complete & return this form to us, and we will contact you with further details.

## 2008 NATIONAL SUSPENSION TRAINING PROGRAM

### **EXPRESSION OF INTEREST**

**TO:** Hendrickson Asia Pacific Pty Ltd  
Fax No: 03 86950028  
Date: \_\_\_\_\_

**FROM:**  
Company Name: \_\_\_\_\_  
Contact Name: \_\_\_\_\_  
Company Address: \_\_\_\_\_

Phone No: \_\_\_\_\_  
Fax No: \_\_\_\_\_  
Email: \_\_\_\_\_

**PREFERENCES:**  
Preferred Date/s: \_\_\_\_\_  
Preferred Location/s: \_\_\_\_\_

### **ATTENDEES:**

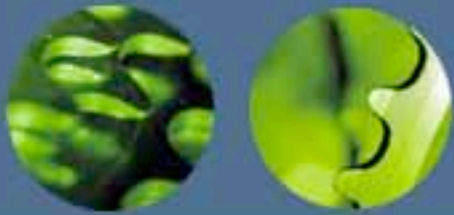
Anticipated No. of Attendees:

Truck :

Trailer :

Both Truck & Trailer :

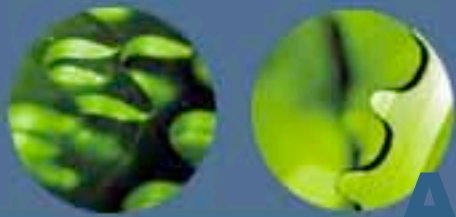

For more information please call: 03 9767 3400



# **Air Brake Training**

**Vinh Lam**

Engineering Manager - CVS



# Air Brake Training

## Knorr-Bremse has a long tradition with Air Brakes

1945

Das Berliner Werk der Knorr-Bremse wird nach dem 2. Weltkrieg enteignet und demontiert.



Aktie der Knorr-Bremse AG aus den zwanziger Jahren

1985-1993

Das AAR DB-60 Ventil öffnet der Knorr-Bremse die Tür zum U.S.-Schienenfahrzeugmarkt. Grundlegende Umstrukturierung und Globalisierung des Unternehmens machen Knorr-Bremse zu einem der weltweit führenden Unternehmen der Bremstechnologie.

1945-1953

Die Entwicklung und Fertigung von Bremsgeräten wird im westlichen Teil Deutschlands wiederaufgenommen. München wird Firmensitz des Unternehmens.



1923 rüstete Knorr-Bremse als erstes Unternehmen in Europa Lastkraftwagen mit Vierrad-Druckluftbremsen aus

1996

Die pneumatisch betätigte Scheibenbremse für Nutzfahrzeuge geht in Großserienproduktion.



**BOSCH**

1960-1980

Knorr-Bremse gestaltet maßgeblich die Bremsentechnologie für Schienen- und Nutzfahrzeuge. Mit dem KE-Steuerventil setzt die Knorr-Bremse den neuen UIC-Standard.



Hauptverwaltung der Knorr-Bremse in München

1999

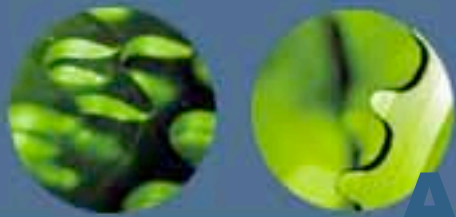
Der Knorr-Bremse Konzern überschreitet die Umsatzschwelle von 2,5 Mrd. DM.



2002

Acquisition of Bendix

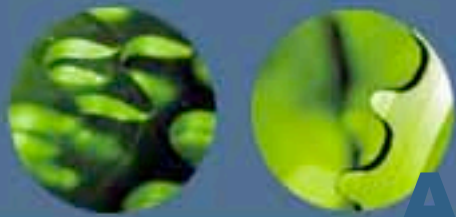




## Air Brake Training

- Courses & Training provided since 2004
- Developed for the Maintenance Industry as the principle attendees
- Plus, a diverse range of students from:
  - OE Truck Manufacturers / Queensland Transport Vehicle Inspectors / Police / RTA / TAFE Teachers / Workshop Mechanics / Parts Interpreters / Sales People / Fleet Operators, etc

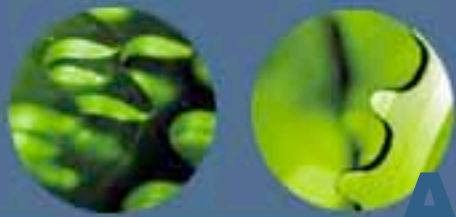




## Air Brake Training

- Training Sessions Available:
  - Bendix Air Brake Training School (2 days)
  - Product Information Evenings (typically 2 hrs)
  - Customised Product Training
- Self Training Material:
  - Videos
  - Training DVD's with Workbooks
  - Interactive Training CD's



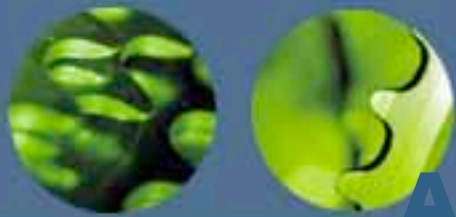


## Air Brake Training

### Bendix Air Brake Training School

- 2 day curriculum, tailored to new and experienced technicians – covers:
  - Fundamentals of compressed air
  - Operation & Service of Bendix air brake components of dual air brake systems
  - Air Disc Brakes & Drum Brakes
  - Trailer Systems
  - ABS & Traction Control basics

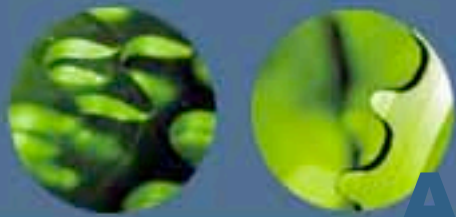




## Air Brake Training

- Practice and interaction with brake boards



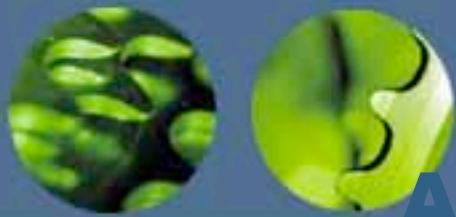


## Air Brake Training

### Bendix Air Brake Training School

- Comprehensive Bendix Training Manual
- Assessment (exam) on day 2
- Certificate awarded





## Air Brake Training

- More information is available:
  - Knorr-Bremse Trade Exhibit Stand
  - Contact us direct: 1300 309 991



2007 ATA / ARTSA  
Technical & Maintenance Conference

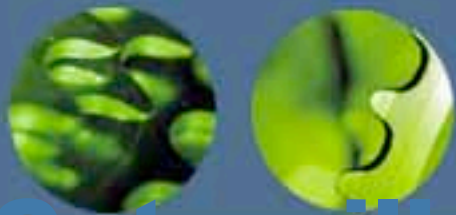


**Bill Fulton**  
General Manager  
Truck Engines  
Asia Pacific

**Caterpillar Inc.**

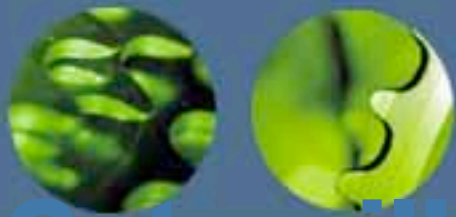
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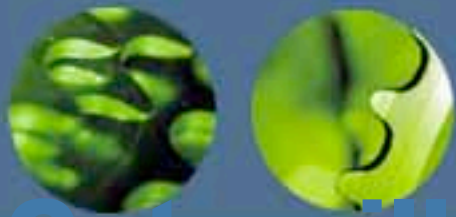
# **Caterpillar Engine Training**

- Caterpillar Service Learning
- Caterpillar Institutes / Dealers
  - Some Dealers have JV with Caterpillar which is termed Caterpillar Institute
  - Other Dealers have their own internal training departments



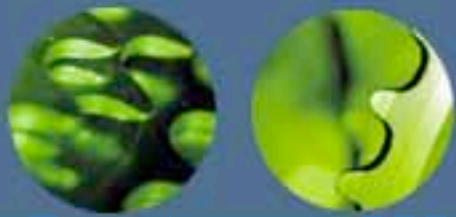
# **Caterpillar Service Learning**

- Provides in depth technical training for Caterpillar Dealer workshop service personnel covering:
  - Systems Operation
  - Testing and Adjusting
  - Troubleshooting
  - Advanced diagnostic
  - Chassis Dyno testing



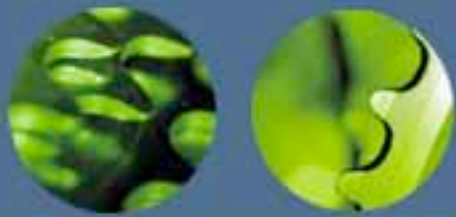
# **Caterpillar Service Learning**

- Courses provided:
  - Certified Truck Engine Analyst
  - ACERT On Highway Truck Engines
  - Applied Failure Analysis



## **Caterpillar Institutes / Dealers**

- Caterpillar Institutes are Registered Training Organisations that provides both apprentice and post trade training for Caterpillar Dealers, TEPS Dealers and customers.
- Other Dealers have a similar business model that provides the same service but are not a JV



## **Caterpillar Institutes / Dealers**

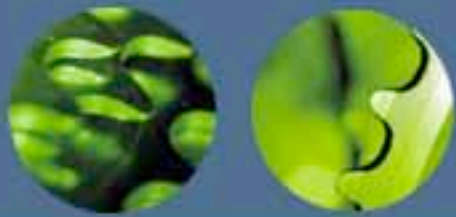
- Courses Provide:
  - Certificate III (Apprenticeship)
    - Diesel mechanic apprenticeship
  - Electronic Technician
  - Air Conditioning
  - Systems Operation
  - Testing and Adjusting

**BPW Transpec**

**Product  
Training**



**Presentation by Karl Marek**



# BPW Transpec's Product Range

Different products require different training:

- BPW axles and suspensions
- Ringfeder couplings
- HMF cranes
- Edbro hoists
- Cargo floor
- Knorr EB



RINGFEDER



**KNORR-BREMSE**  
Systems for Commercial Vehicles



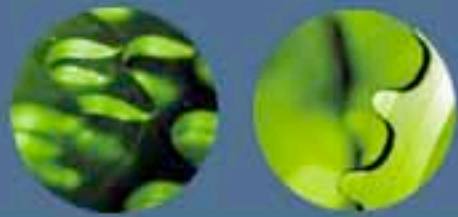
**CARGO FLOOR®**  
COEVORDEN - HOLLAND



# Why is Product Training important?

- Safety is paramount especially with brakes which are primary safety items.
- Understanding the product means longevity and less down time.
- Feedback is wanted and necessary.
- Service partners need to be trained on the product.
- New products





# BPW Transpec Training Structure

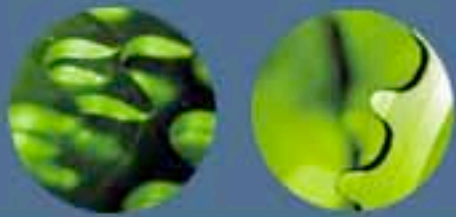
Company Representatives provide a level of product awareness and technical literature when requested.

From time to time overseas suppliers are involved in structured centralised training sessions.

Organised training events at central and regional locations are held regularly.



State	Date	External Course/Internal	Location of Training	Name of Course	Customer Training Y/N	# of Customer's Attending	Employee Training Y/N	Description of Training	Time/Duration of the Course	Supporting Records kept Y/N?
VIC	9/05/2007	External	Tauranga	BPW Product Maintenance	Yes	Logistics	8	Maintenance	3 hrs	Yes
VIC	14/11/2000	External	Keon Park	BPW Product Maintenance	Yes	Tieman Industries	20	Product Maintenance	3 hrs	No
VIC	8/11/2006	External	Tullamarine	BPW Product Maintenance	Yes	Star Track	6	Product Maintenance	3 hrs	No
NSW	15/10/2000	External	Finley	BPW Product Maintenance	Yes	McNaughtons	6	Product Maintenance	3 hrs	Yes
VIC	16/07/2000	External	Lysterfield	BPW Product Maintenance	Yes	Hanson	4	Product Maintenance	3 hrs	No
VIC	22/07/2000	External	Laverton	BPW Product Maintenance	Yes	Scania	12	Product Maintenance	3 hrs	No
VIC	28/07/2000	External	Mulgrave	BPW Product Maintenance	Yes	Woolworth	6	Product Maintenance	3 hrs	No
VIC	1/08/2006	External	Keon Park	BPW Product Maintenance	Yes	Tieman Industries	20	Product Maintenance	3 hrs	No
QLD	27/03/2007	External	Warrick	BPW Product Maintenance	Yes	Transport & Fraser Livestock companies	25	Product Maintenance	6 hrs	Yes
QLD	28/03/2007	External	Brisbane	BPW Product Maintenance	Yes	attending. Various companies	55	Product Maintenance	6 hrs	
TAS	8/08/2006	External	Hobart	BPW Product Maintenance	Yes	Seaquip	5	Product Maintenance	3 hrs	Yes
QLD	29/03/2007	External	Brisbane	BPW Product Maintenance	Yes	various companies	55	Product Maintenance	6 hrs	
VIC	6/07/2007	External	Hallam	BPW Product Maintenance	Yes	attending. DHH	4	Product Maintenance	3 hrs	No
VIC	15/06/2000	External	Wangaratta	BPW Product Maintenance	Yes	Stribley	4	Product Maintenance	3 hrs	No
VIC	15/06/2007	External	Shepparton	BPW Product Maintenance	Yes	Graham Thompson Motors	7	Product Maintenance	3 hrs	No

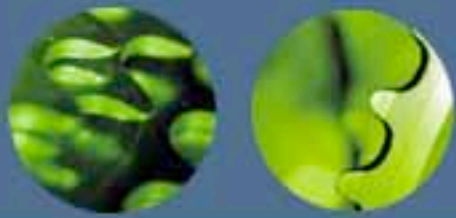


# Literature provided during training

- Operator manuals
- Maintenance manuals
- Spare part catalogues
- Torque stickers

Did you know that approximately only 35% info is memorised from any tutorial seminar or training course!

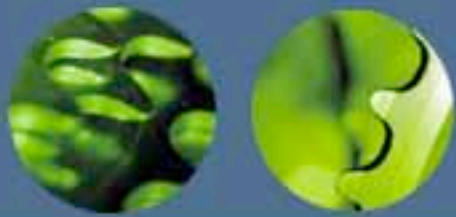




## Locations are Flexible

- In house training
- At customer's venue
- Conference centres
- Training centres





## Charges

- It is said that what is for free cannot be no good.
  - One exception:
- 
- BPW training sessions are free to our customers



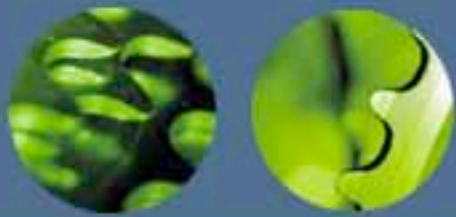
# 2007 ATA / ARTSA Technical & Maintenance Conference

**Doug Devlin**  
Eaton Pty Ltd



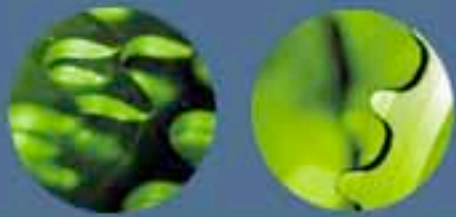
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## **Training Offered**

- **Medium Duty Transmission**
- **Heavy Duty Transmission**
- **AutoShift Gen 2 & Gen 3**
- **Axle**
- **Aftermarket Parts**



## **Training Offered**

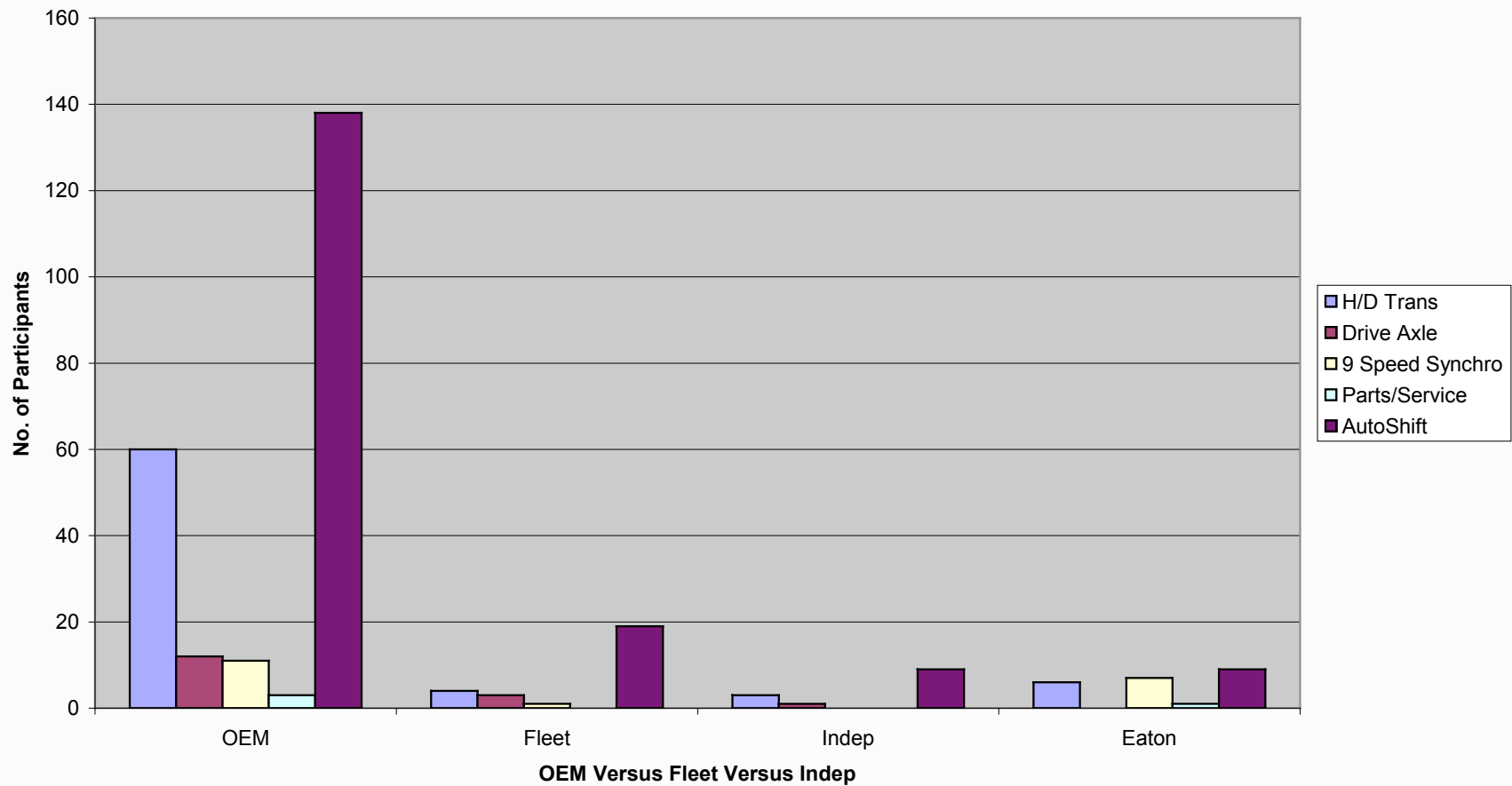
### **Additional Training Offered – On Site**

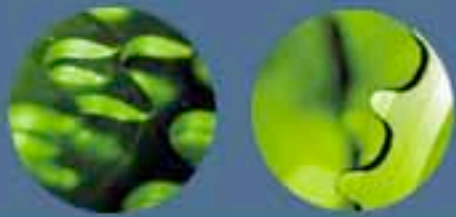
- **ServiceRanger**
- **Driver Familiarisation (AutoShift)**
- **Clutch**
- **Mobile Diagnostic Tool (MD Tool)**
- **Driveline Angle Analysis**
- **Warranty**



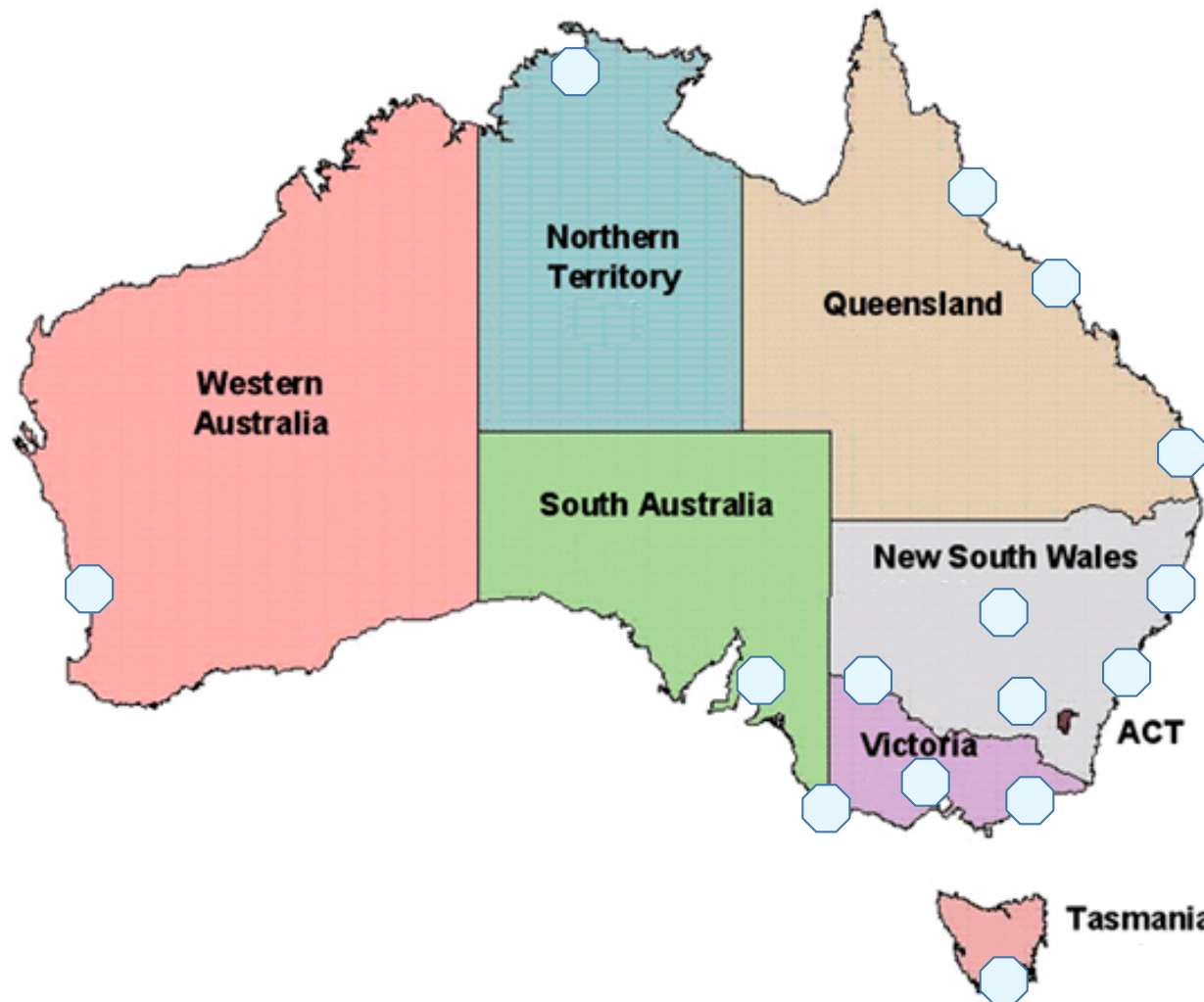
# Participants

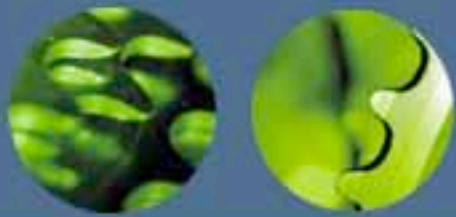
Training All States YTD 2007





# Locations





# Locations

## Victoria

- Kilsyth
- Sale
- Shepparton
- Wodonga
- Bendigo

## Tasmania

- Hobart

## N.T.

- Darwin

## NSW

- Sydney
- Wagga Wagga
- Dubbo
- Coffs Harbour
- Albury

## ACT

- Canberra

## PNG

## Queensland

- Brisbane
- Townsville
- Rockhampton
- Toowoomba

## Western Aust

- Perth

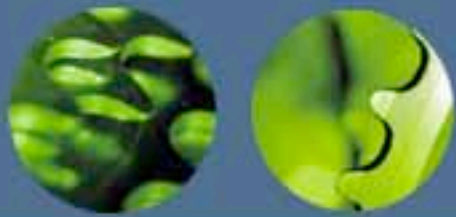
## Indonesia

## South Australia

- Mt. Gambier
- Mildura
- Adelaide

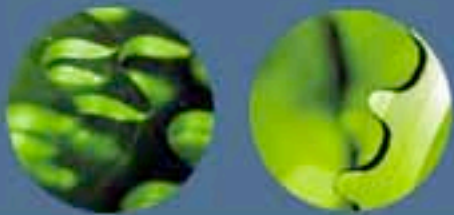
## New Zealand

- Auckland
- Christchurch



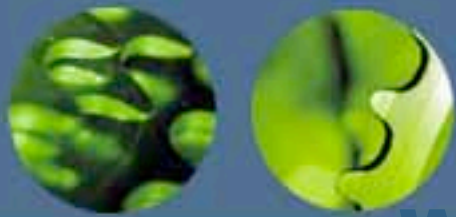
## **Notification**

- Schedule sent annually to all OEMs & Fleet customers via Email
- Customers notified personally in line with planned visits to relevant States to reinforce training options available



**A wise man once  
said....**





## **Welcome to the watering hole of knowledge**

