

0100101000101010
0101001011000101
0100101001010101
0010101001010101
0111010110110001
0010100101101010
0101010101010010
1001010100010101
0010110010010010
1001001010101001
0100101010101001

Dynapack

CHASSIS DYNAMOMETERS

0010101001001010
1101010100101001
0100101001010010
1010010100110010
1010101010010100
1001010010010101
0010110001001100
1010101001010101
0101001010101001
0101010010101001
0101001010101001
0101001010010101
0101001001010010
1010100100101001
0101001010010101
0101011011010010
1010101010101010
0101010010101010
0101001010010101
0010100101010100
1010010101001001
0100010101001010
0101100010101000
0100101010100100
0100101010101110
1011011000100101
0010110101001010
1010101001010010
1010001010100101
1001001001010010
0101010100101001



Taking vehicle diagnosis a quantum leap forward

1010100100101001
0101001010010101
0101011011010010
1010101010101010
0101010010101010
0101001010010101
0010100101010100
1010010101001001
0100010101001010
0101100010101000
0100101010100100
0100101010101110
1011011000100101
0010110101001010
1010101001010010
1010001010100101
1001001001010010
0101010100101001



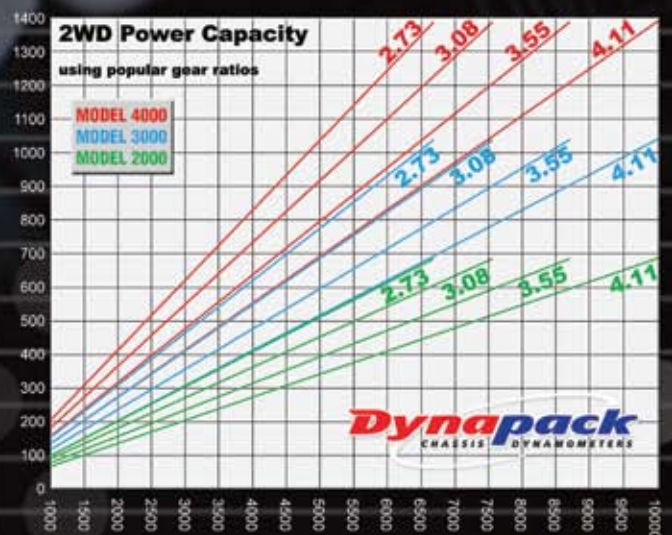
MEMBER



Become more productive with Dynapack™, the new standard in chassis dynamometers. Dynapack™ direct couples to the wheel hubs and applies a precisely controlled hydraulic load. This method of direct couple plus its built-in strength mean the Dynapack™ is always in control of the vehicle.

The new standard in

With the power of the Dynapack™ literally at your fingertips, you have complete control over the test and the demands placed on the vehicle. Flexible data presentation and analysis is available direct from the Dynapack™ in seconds.





Are you serious about performance ??

We are, with machines being used in 23 countries by top tuners, car manufacturers, exhaust manufacturers, aftermarket part developers, race teams and OEM suppliers, Dynapack™ is a proven solution for world class companies.

-  **Best in class performance**
-  **Ultimate control for engine mapping and development**
-  **Change RPM by 1, 10, 100 or any user selected RPM**
-  **High sensitivity**
-  **High repeatability**
-  **No "wheel-slip" issues to worry about**
-  **Easy to use software for instant results**
-  **Designed and built to last for many years of operation**
-  **Models with measurement ranges from 5 to 3200 kW**

All models are subject to change without notice.

Chassis Dynamometers



Vehicles not included, shown for illustration only



Email: sales@dynapack.com **Website:** www.dynapack.com

What makes **Dynapack** CHASSIS DYNAMOMETERS so special?

Repeatable - stable measurement system, no tyre / roller interface

Sensitive - no inertia to mask small changes

Simulate - track conditions on the Dynapack™ with user controlled rate of RPM change

Portable - with the wheels on Dynapacks™ power absorption units, just roll it up to the vehicle

Flexible and easy to use Windows based software

Reliable - high quality components used throughout

Easy and quick to connect to the vehicle

Safe to use - no rollers, no need to tie the vehicle down, the Dynapack™ supports the weight of the vehicle.

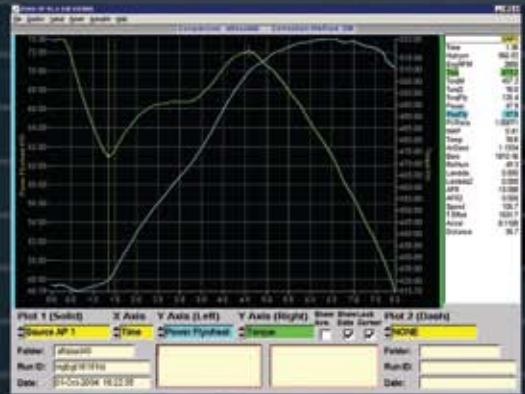
Low installation costs - No permanent installation required, only low pressure water for cooling and 100,110 or 230v single phase power

Quiet running - no tyre noise

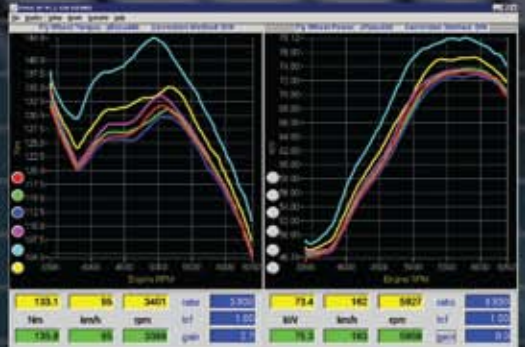
Large clear displays, graphs, colour printouts. All graphed data available in table form

Available in 2WD and 4WD models to suit a wide range of applications

Custom built machines available



User defined. Choose from temperature, power, torque, lambda, etc. Power and temperature plotted against RPM is shown. A numeric display shows 21 types of data. Any two types can be overlaid as graphs.



Torque and power graphs. Multiple back to back runs can be overlaid as shown.

'fast-sensitive-repeatable'

Standard Equipment

Power absorption units, two for 2WD, four for 4WD

Each complete with,

- wheels for ease of movement
- 4 and 5 stud hub adapters 95 to 155mm PCD (3.86" to 6.1")
- interconnecting cables
- connectors for cooling water inlet/outlet

Control cabinet, on wheels

Computer with,

- Windows operating system
- Dynapack™ software package
- A4 cut sheet colour printer
- Keyboard and mouse
- Colour monitor

Controller

- Electronic 2WD or 4WD DSP controller

Options

DAQ-Pro - 64 channel DAQ built to customer needs

1000VA True online - double conversion, thin format UPS. **(Recommended option)**

Custom made hub adapters



Vacuum & boost over RPM; both displays are placed on one screen, allowing the operator to see such things as the transition from vacuum to boost.



Taking information from an oxygen sensor AFR system, the Dynapack™ displays AFR/lambda over RPM and places this graph next to the torque graph.



Email: sales@dynapack.com

Website: www.dynapack.com

User friendly Windows based operation

Flexible with a wide variety of user selectable options

Most inputs by mouse or via the keyboard from the drivers seat

Large, clear displays of all parameters

Multiple run graphs of

- torque
- power
- flywheel torque
- temperature
- manifold vacuum/pressure (if sensor fitted)
- torque split (for 4WD)
- AFR - Dynapack™ air fuel ratio & lambda system
- acceleration/tractive effort

Quick access to live and stored data

Zoom function on all graphs

Data stored on disk for later retrieval and analysis

Data also available as numeric data which can easily be exported out to industry standard format for use in external applications.

Run to run comparison statistics

Fast, accurate feedback to speed inputs and guaranteed control for engine mapping and development.

User defined system settings

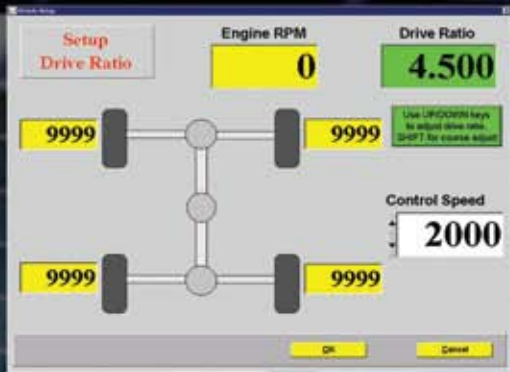
- torque measurement units
- power measurement units
- automatic/manual power correction
- temperature reading
- AFR Dynapack™ air fuel ratio & lambda system
- acceleration display type

User defined vehicle settings

User defined Autoplot settings (eg min and max RPM)



All the data to complete auto plots is set up in this one screen.

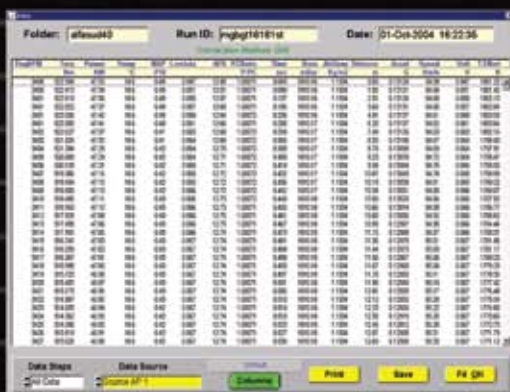


The overall gear ratio (from flywheel to rear axle) is automatically calculated using this screen.

'smarter answers faster'



A statistical analysis of autoplot information including information such as peak torque, peak power, mean torque & power, distance travelled, percentage difference.



Data can also be displayed as numeric data. This data can easily be exported out to industry standard formats for use in external applications.

The Dynapack™ offers three modes of operation. These are selectable from the keyboard function keys.

F1 Autoplot

Computer controlled "run" over a user defined time or RPM range. Used to graph power and torque. Also monitor boost, AFR or lambda, temperatures etc when appropriate sensors are used.

F2 Load Mode

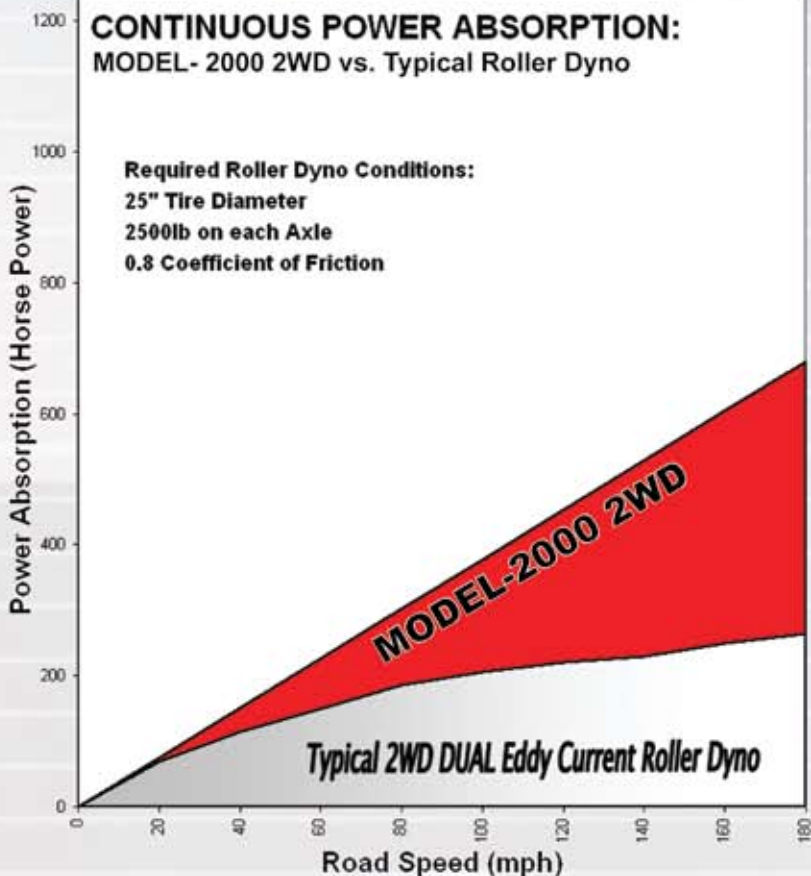
Applies a user defined load to the axle. The RPM will vary with the amount of power. Simulates a hill of infinite length and user defined grade.

F3 Speed Mode

The Dynapack™ controls the car to a constant, user defined, engine RPM. Used to measure steady state power, torque etc at any speed and throttle setting. Very effective in setting fueling and ignition with engine management systems.



The Dynapack™ status panel showing real time data. Multiple real time graphs can be selected for display.



In order to achieve the wheel slip limit of the roller dyno used in this reference, up to 1200lb of additional weight over the driven axle is required.



2WD APPLICATION

'performance means profit'

Model range

Dynapack measures from 5 to 3200 kW with standard production models. We have a proven track record that allows us to create a custom build for any application required.

Data acquisition

The DAQ_PRO is a 64 channel data acquisition system that can be configured for any application. Data is provided in an industry standard format to allow benefits to all aspects of tuning and development. Call us with your needs.

Energy efficient

Dynapack™ control system is so efficient it requires only 1 kW of single phase power to control a 3200 kW motor vehicle.

Installation

It couldn't be easier. Single phase power, low pressure cooling water and a fan is all that you need to become operational out of the box.

Environmentally friendly

We have a strong commitment to conserving the environment. This is shown in the form of our remanufacturing process, but more importantly in the ability of the Dynapack to help develop more environmentally friendly and fuel efficient vehicles.

Safe to use

Lower your insurance costs, no rollers, no tie downs, far less noise and absolutely no torque steer.

Technical support

With a full time dedicated technical support team (USA, Japan, Australia and New Zealand) using the latest remote diagnostics software means you'll always have support if you need it.

Return on Investment

Minimal installation and running costs as well as best in class performance are not the only major benefits of owning Dynapack™. Better use of the workshop space - no dedicated space required, just roll the Dynapack under the bench and your dyno bay becomes a work space again.

Dynapack Model Specifications

TYPE	2WD			
MODEL	2000	3000	4000	8000
Total capacity HP	400	800	1100	2200
Total capacity KW	300	600	800	1600
Total capacity lb/ft	1500	2200	3000	6000
Total capacity Nm	2000	3000	4000	8000
Hub rpm	2350			
Road speed kph*	350			
Road speed mph*	220			
Software features	All			
Wheel unit weight (kg)	220	280	560	
Wheel unit width (mm)	500	700		
Wheel unit length (mm)	1000			
Wheel unit height (mm)	600	630		
Max load per axle (kg)	1500			
Shipping weight (kg) **	835	1060	1060	1930
Shipping capacity (m³)	3.8	3.8	3.8	5.7

Specifications subject to change without notice

* Note: Road speed is dependent on final drive ratio and tyre size.

** Note: Approximate shipping weight for complete dynamometer including all required cables, packing etc

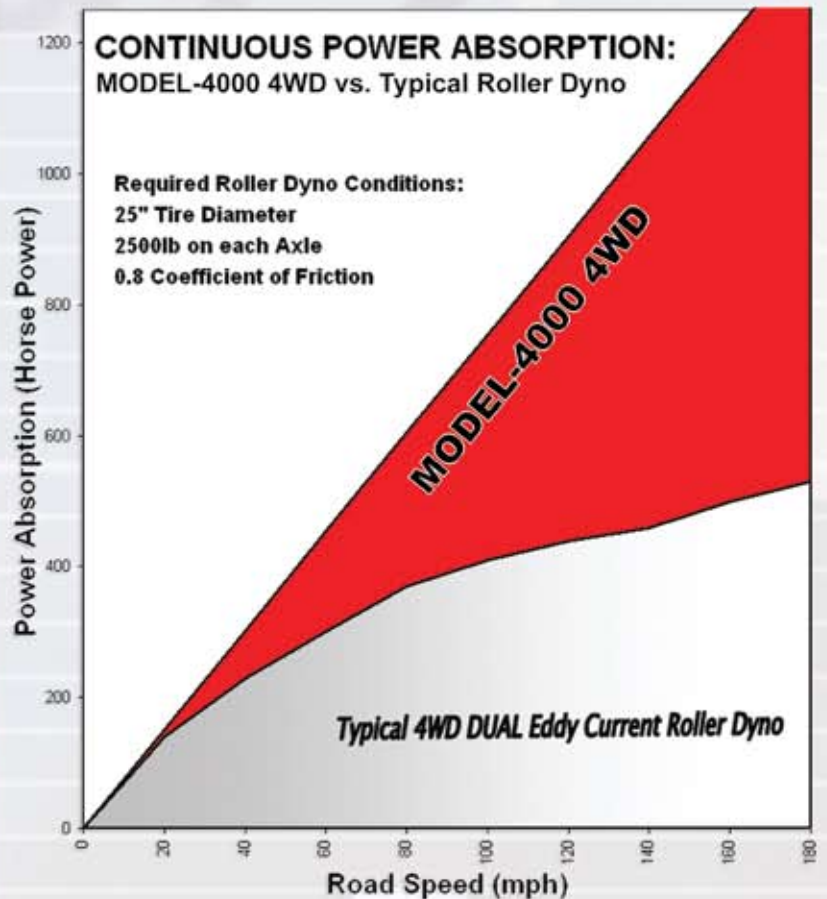
Custom built machines available. Please ask for details.

Dynapack

DYNAMOMETERS



4WD APPLICATION



In order to achieve the wheel slip limit of the roller dyno used in this reference, up to 1200lb of additional weight over the driven axle(s) is required.

'power meets control'

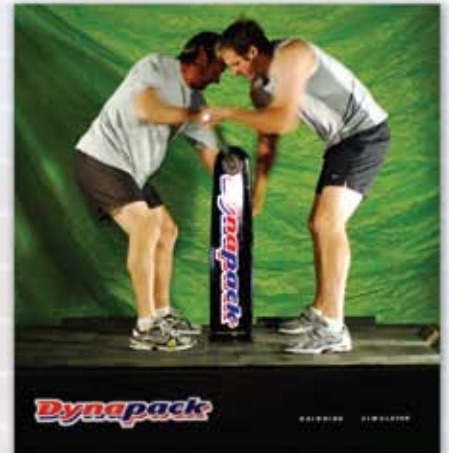
Custom Solutions

The Dynapack™ range of products is constantly being developed and we're constantly called upon to push the envelope with new and varied products.

Although most of our products are from the automotive world, the Dynapack™ range of products have gained such a reputation worldwide, that we have been asked to make custom solutions in other areas, such as sports and engineering.

Team New Zealand was one of these for whom we designed a grinding simulator for training and analysis of fitness of each team member.

Custom solutions have also been built for use within the Army, Navy and Aeronautical industries.



4WD					
4022	5032	6042	6033	7043	8044
800	1200	1500	1600	1900	2200
600	900	1100	1200	1400	1600
3000	3600	4500	4400	5200	6000
4000	5000	6000	6000	7000	8000
2350					
350					
220					
All	All, except load mode in 4WD		All		
220	280 & 220	280 & 220	280		
500	700 & 500	700 & 500	700		
1000					
600	630 & 600	630 & 600	630		
1500					
1430	1670	1670	1930	1930	1930
5.7	5.7	5.7	5.7	5.7	5.7

Installation

Power requirements:
100, 110 or 230 V AC, single phase, 1kW maximum.

Cooling water:
low pressure, 20°C (68°F)
2.6 litres per second, (40 US gpm) max.

Email: sales@dynapack.com

Website: www.dynapack.com

0100101000101010
0101001011000101
0100101001010101
0010101001010101
0111010110110001
0010100101101010
0101010101010010
1001010100010101
0010110010010010
1001001010101001
0100101010101001

Important!

As part of our ongoing development programme, we are continuously introducing improvements and modifications.

Therefore, the specifications mentioned in this publication are subject to change, without notice. The information in this publication is given in good faith and is believed to be true and correct at the time of publication. We exercised all due care to provide accurate, complete and timely information in this publication. However, we accept no liability for any errors or omissions in this publication.

We have made every effort to explain the benefits of our dynamometers as clearly and completely as possible. Nonetheless, a dynamometer is a complicated piece of diagnostic equipment. Therefore, it is not possible for this publication to address every conceivable issue that may affect your purchasing decision. The information in this publication is intended to provide general guidance only. For specific guidance or support contact us directly. Any opinions, recommendations or suggestions given do not constitute a warranty, representation or guarantee. In particular, they do not constitute a warranty, representation or guarantee of any particular benefits that you will derive from our dynamometers. They do not constitute a warranty, representation or guarantee concerning a dynamometer's suitability or fitness for your specific purpose. They are not intended to alter the terms of our standard warranty and terms of trade.

Unless otherwise noted, a reference to brand names, product names and trademarks constitutes the intellectual property of the owner thereof and no right of use is granted thereby. Any statements concerning business prospects and future performance reflect our opinions and forecasts only. They are not intended as representations and warranties of your prospects and performance. In this publication, we have compared our dynamometers with other types of dynamometers. We did so on a generic level and without any intent to disparage any specific competitor's good will, reputation and products.

In the final analysis, it is your responsibility to determine the suitability of our dynamometers for your purposes. You must make your own independent judgment and assessment of these issues. You may not rely upon any opinions, interpretations, statements, assurances or representations contained in this publication.

0010101001001010
1101010100101001
0100101001010010
1010010100110010
1010101010010100
1001010010010101
0010110001001100
1010101001010101
0101001010101001
0101010010101001
0101001010101001
0101001010010010

Taking vehicle diagnosis a quantum leap forward

International Dynamometers Ltd Head Office

70 Victoria Street
Alicetown
Lower Hutt
New Zealand
Tel 64 4 587 0484
Fax 64 4 587 0485

Dynapack USA / Europe

2617 N. Fowler Ave
Suite 102
Fresno, CA 93727
Tel 1 559 292 3800
Fax 1 559 292 4900

Dynapack Australia

PO Box 6765
GCMC 9726
Queensland
Australia
Tel 61 419 798510
Fax 61 7 5564 8706

Dynapack Greece

C/O Dimitris Ghelis
11 Chalder Street
Marrickville
Sydney NSW 2204
Australia
Tel 61 2 9557 4000
Fax 61 2 9557 4366

Dynapack Representatives Europe & East Europe

Gaelmo Motorsport
Zone Industrielle de Hatten
F-67690 Hatten
France
Tel 33 3 88 80 1507

Dynapack Japan

Inside Zero Max, PIT100
Ota Branch, 162-2 Nishi Yajima
Ota, Gunma
Japan 373-0823
Tel 81 276 56 4038
Fax 81 276 56 4078

Email: sales@dynapack.com

Website: www.dynapack.com