

Oasis



PRODUCT CATALOGUE 2010

Oasis Engineering Ltd
129 Birch Avenue, Tauranga, New Zealand.
T: +64 7 928 3808 F: +64 7 928 3809
E: info@oasisengineering.co.nz
W: www.OasisNGV.com

Cutting Edge



Mankind's first precision engineers sought perfection in their production. They chose the finest materials and developed innovative tools and practices to carve out exceptional results. Their workmanship can still inspire us today.

Carving the most powerful tool of his time from a single flint, a prehistoric engineer knew that the true worth of an arrow is its CUTTING EDGE.

At Oasis, this timeless focus on exceptional results through first class engineering is represented in the Arrowhead of our logo.

Providing CUTTING EDGE solutions for over a quarter of a century, Oasis Products are specified worldwide. We have the skill and capability to develop any part you require to the exact dimensions. Designed and manufactured in New Zealand, to your specifications, for the world.

We invite you to discover the best in precision engineering and manufacturing, provided by our good looking and friendly staff.

Oasis Engineering Ltd.

Oasis Engineering is a precision engineering production facility. [ISO 9001:2008 certified](#), the systems and processes are in place to ensure our CNC machine centres are crafting the most accurate, highest quality components that will meet your specifications.

Oasis Engineering specialises in the manufacture of high pressure fluid control devices for the Natural Gas Vehicle industry (NGV). Oasis [ball valves](#) were the first to deliver gas at 3600 PSI. This innovation and focus on quality remains today with the continued development of lowest life cost products.



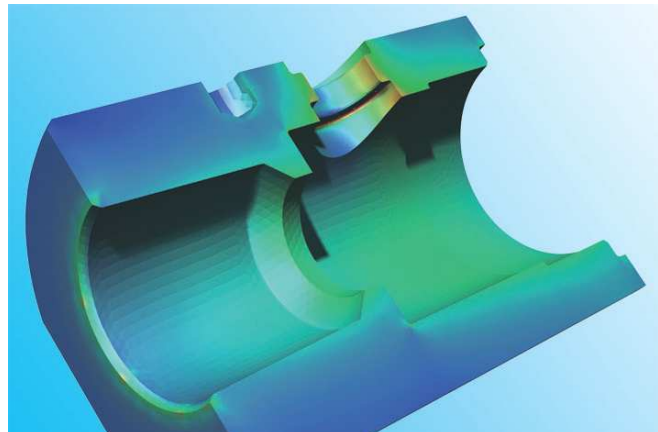
ACCREDITED QUALITY



Oasis valves, couplings and swivels are internationally recognized as market leaders in high-pressure or sterile environments. The best machining tools, certified craftsmen, accredited quality manufacturing and people who value their trade, are what makes Oasis the quality component manufacturer of choice.

We only source the highest quality materials and can provide you with a certificate of product compliance and mill certificate. Our quality assurance systems and the equipment we use, also ensure you will receive the best design and LOWEST LIFE COST parts possible.

All our products are designed and crafted to provide durable, reliable service. We specialize in using high-end CNC machinery to make contaminant-free and polished surfaces. Certified origin materials ensure all components are free of flaws, cracks or voids that could become bacterial traps. All Oasis products can be customized to the dimensions you require, or check our website for a list of the standard sizes currently in production.



FULL FLOW BALL VALVES — 34 TO 410 BAR — 500 TO 6000 PSI



Features & Specifications

- Full Flow
- Anti-Blowout Stem Design
- Two Piece Valve
- NPT Female/Female Thread Connections. Other Threads Available
- Manufactured from Certified 304 Stainless Steel Bar Stock (SS 316 also Available)
- Precision CNC Machined
- Easily Serviced
- Service Kits Readily Available
- Extended Cycle Testing to Ensure Longevity
- Delrin Seats (Peek Available)
- Nitrile O-rings (Viton Available)
- ISO 15500, API STD 607 & PED 97/23/EC Approved

BALL VALVE SEAL KITS — DELRIN AF/NITRILE — 34 TO 410 BAR — 500 TO 6000 PSI



Features & Specifications

- Complete Service Kit Available
- Easy to Install
- Pre-assembled Stem with O-rings
- Ball & Stem Manufactured from Certified 316 Stainless Steel Bar Stock
- Precision CNC Machined
- Delrin Seats
- Nitrile O-rings
- Service Instructions Supplied and Available Online

BALL VALVE SEAL KITS — PEEK/VITON — 34 TO 410 BAR — 500 TO 6000 PSI



Features & Specifications

- Complete Service Kit Available
- Easy to Install
- Pre-assembled Stem with O-rings
- Ball & Stem Manufactured from Certified 316 Stainless Steel Bar Stock
- Precision CNC Machined
- Peek Seats
- Viton O-rings
- Service Instructions Supplied and Available Online

FULL FLOW BALL VALVES — 0.48 TO 410 BAR — 7 TO 6000 PSI



Features & Specifications

- Full Flow
- Anti-Blowout Stem Design
- Two Piece Valve
- NPT Female/Female Thread Connections. Other Threads Available.
- Manufactured from Certified 304 Stainless Steel Bar Stock (Stainless Steel 316 also Available)
- Precision CNC Machined
- Easily Serviced
- Service Kits Readily Available
- Extended Cycle Testing to Ensure Longevity
- Delrin Seats (Peek also Available)
- Nitrile O-rings (Viton Available)
- ISO 15500, API STD 607 and PED 97/23/EC Approved

BALL VALVE SEAL KITS — DELRIN/NITRILE — 0.48 TO 410 BAR — 7 TO 6000 PSI



Features & Specifications

- Complete Service Kit Available
- Easy to Install
- Pre-assembled Stem with O-rings
- Ball & Stem Manufactured from Certified 316 Stainless Steel Bar Stock
- Precision CNC Machined
- Delrin Seats
- Nitrile O-rings
- Service Instructions Supplied and Available Online

FULL FLOW BALL VALVES — TUBE LOCK END — 34 TO 410 BAR — 500 TO 6000 PSI



Features & Specifications

- Full Flow
- Anti-Blowout Stem Design
- Two Piece Valve
- Supplied with Ferrule Fittings
- Easily Serviced
- Service Kits Readily Available
- Manufactured from Certified 304 Stainless Steel Bar Stock (Stainless Steel 316 also Available)
- Precision CNC Machined
- Extended Cycle Testing to Ensure Longevity
- Delrin Seats (Peek also Available)
- Nitrile O-rings (Viton also Available)
- ISO 15500, API STD 607 and PED 97/23/EC Approved

BALL VALVE WITH ACTUATOR MOUNTING KIT



Features & Specifications

- Supplied Assembled Including Ball Valve, Drive Dog and Bolts to Fit Actuator
- High Precision Stainless Steel Laser Cut Bracket
- Designed for Air Torque & Rotex Actuators
- Bolts Pattern to ISO 5211

BALL VALVE WITH PANEL MOUNTING KIT



Features & Specifications

- Ideal for Isolation Functions
- Supplied Assembled with Bracket and Forged Handle
- High Precision Stainless Steel Cut Bracket

BALL VALVE WITH ROTEX ACTUATOR



Features & Specifications

- Supplied Assembled Including Ball Valve, Drive Dog and Actuator
- High Precision Stainless Steel Laser Cut Bracket
- Rotex Spring Return Pneumatic Actuator
- Actuated Ball Valves from 1/4" to 1"

BALL VALVE WITH AIR TORQUE ACTUATOR



Features & Specifications

- Supplied Assembled Including Ball Valve, Drive Dog & Actuator
- High Precision Stainless Steel Laser Cut Bracket
- Air Torque Spring Return Pneumatic Actuator
- Actuated Ball Valves from 1/4" to 1"

700 SERIES BALL VALVES

Group	Model	Series	Product Description	Pressure Operating Range	Seat/Seal Material Configuration		Body Material		Size Range	
					Delrin/Nitrile (-40 to 120°C)	PEEK/Viton (-28 to 200°C)	SS304	SS316	Min	Max
Ball Valves	BV	700	High Pressure	500 - 6000Psi	x	x	x	x	1/4"	1"
				500 - 5000Psi	x	x	x	x	1 1/4"	1 1/2"
			Full Pressure	7 - 6000Psi	x		x	x	1/2"	1"
			Tube Lock Ends	500 - 6000Psi	x	x	x	x	1/4"	1"
			Actuator Ready Assembly	500 - 6000Psi	x	x	x	x	1/4"	1"
			Panel Mounted	500 - 6000Psi	x	x	x	x	3/8"	1/2"
			Actuator Mounted	500 - 6000Psi	x	x	x	x	1/4"	1"
			Lock out Handle	500 - 6000Psi	x	x	x	x	1/4"	1"

DOUBLE ACTING BALL VALVE WITH ROTEX MOUNTING KIT — 0.48 TO 410 BAR — 7 TO 6000 PSI

Features & Specifications



- Two Valves Integrated into One Body Design
- Three Port (2 End & 1 Centre) Valve
- NPT Female/Female/Female Thread Connections. Other Threads Available
- Full Flow
- Manufactured from Certified 304 Stainless Steel Bar Stock (SS316 also Available)
- Precision CNC Machined
- Easily Serviced
- Service Kits Readily Available
- Delrin Seats/Nitrile O-rings
- Ready to Mount Rotex or Air Torque Actuator
- Bolt Pattern to ISO 5211
- Supplied with Actuators if Required
- Handle-Handle & Handle-Actuator Operated also Available

DOUBLE ACTING ISOLATION BALL VALVE — 0.48 TO 410 BAR — 7 TO 6000 PSI

Features & Specifications



- Two Valves Integrated into One Body Design
- Two Port Valve
- NPT Female/Female Thread Connections. Other Threads Available
- Full Flow
- Manufactured from Certified 304 Stainless Steel Bar Stock (SS316 also Available)
- Precision CNC Machined
- Easily Serviced
- Service Kits Readily Available
- Delrin Seats/Nitrile O-rings
- Handle-Handle & Actuator-Actuator Operated also Available

MANIFOLD BALL VALVE — 34 TO 410 BAR — 500 TO 6000 PSI

Features & Specifications



- Supplied Assembled Including Ball Valve, Drive Dog and Bolts to Fit Actuator
- High Precision Stainless Steel Laser Cut Bracket
- Manufactured from Certified 304 Stainless Steel Bar Stock (SS316 also Available)
- Precision CNC Machined
- Complete Service Kit Available
- Designed for Air Torque & Rotex Actuators
- Bolts Pattern to ISO 5211

MANIFOLD BALL VALVE SEAL KIT — 34 TO 410 BAR — 500 TO 6000 PSI

Features & Specifications



- Easy to Install
- Pre-assembled Stem with O-rings
- Ball & Stem Manufactured from Certified 316 Stainless Steel Bar Stock
- Precision CNC Machined
- Delrin Seats
- Nitrile O-rings
- Service Instructions Supplied and Available Online

100 SERIES BALL VALVES

Group	Model	Series	Product Description	Pressure Operating Range	Seat/Seal Material Configuration		Body Material		Size Range	
					Delrin/Nitrile (-40 to 120°C)	PEEK/Viton (-28 to 200°C)	SS304	SS316	Min	Max
Ball Valves	DV	100	Double Acting	7 - 6000Psi	x		x	x	1/2"	1"
	IV		Isolation Control	7 - 6000Psi	x		x	x	1/2"	1"
	MV		Manifold	500 - 6000Psi	x	x	x	x	3/8"	1/2"

ONE PIECE CHECK VALVES — MAX PRESSURE: 410 BAR / 6000 PSI



Features & Specifications

- Ideal for High Pressure Gas Applications
- High Duty Applications
- Simple Robust Design
- Precision CNC Machined
- Manufactured from Certified 303 Stainless Steel Bar Stock
- NPT Female/Female Thread Connections. Other Threads Available

CHECK VALVES — MAX PRESSURE: 410 BAR / 6000 PSI



Features & Specifications

- High Flow
- Easily Serviced
- Manufactured from Certified 304 Stainless Steel Bar Stock (SS316 also Available)
- Precision CNC Machined
- NPT Female/Female Thread Connections. Other Threads Available
- Service Kits Readily Available

CHECK VALVE SEAL KITS — MAX PRESSURE: 410 BAR / 6000 PSI



Features & Specifications

- Poppet Pre-Assembled with PTFE & O-ring
- Easy to Install
- Poppet Manufactured from Certified 316 Stainless Steel Bar Stock
- Precision CNC Machined
- Service Instructions Supplied & Available Online

HIGH PRESSURE CHECK VALVES

Group	Model	Series	Product Description	Sizes	Maximum Operating Pressure	Typical Min Crack Pressure	Seat/Seal Material Configuration	Body Material
Check Valves	CV	100	One Piece Body	1/4"	410 Bar 6000Psi	0.07 - 0.48 Bar 1 - 7 Psi	Nitrile O-ring Acetal	Stainless Steel 303
				3/8"				
		200	Two Piece Body	3/8" to 1"	410 Bar 6000Psi	0.34 - 0.68 Bar 5 - 10 Psi	Nitrile O-ring PTFE	Stainless Steel 304/316

HIGH PRESSURE QUICK RELEASE COUPLER — MAX PRESSURE: 410 BAR / 6000 PSI



Features & Specifications

- High Flow
- NPT Female/Female Thread Connections. Other Threads Available
- Hardened Segment Connection Design Increases Gripping Surface Area
- Easily Serviced
- Service Kits Readily Available
- Precision CNC Machined
- Manufactured from Certified 304 Stainless Steel Bar Stock (SS316 also Available)

HIGH PRESSURE QUICK RELEASE SEAL KIT — MAX PRESSURE: 410 BAR / 6000 PSI



Features & Specifications

- Poppet Pre-Assembled with PTFE & O-ring
- Easy to Install
- Poppet Manufactured from Certified 316 Stainless Steel Bar Stock
- Precision CNC Machined
- Service Instructions Supplied & Available Online

ELECTRICAL ISOLATING COUPLER — MAX PRESSURE: 410 BAR / 6000 PSI



Features & Specifications

- Full Flow
- Isolates a Section of Pipe to Allow the Safe Dissipation of Static Electricity Created by High Pressure Flow
- Reduces Pipe Corrosion
- Easily Serviced
- Service Kit Readily Available
- Precision CNC Machined
- Manufactured from Certified 304 Stainless Steel (SS316 Available)

HIGH PRESSURE COUPLERS

Group	Model	Series	Product Description	Sizes	Maximum Operating Pressure	Seat/Seal Material Configuration	Body Material
Couplings	HC	100	High Pressure Quick Release	1/2"	410 Bar 6000Psi	Nitrile O-ring PTFE	Stainless Steel 304/316
	EC		Electrical Isolating	1/2" to 1"		Nitrile O-ring Acetal	Stainless Steel 304/316

3 WAY PLUG VALVE



Features & Specifications

- Fully Machined from Certified 316 Stainless Steel Bar Stock
- Supplied with Tube Weld Ends or RJTs
- Adjustable Shutter Tensioning System for Complete Sealing
- Sizes Available: 1 1/2", 2" and 3"
- Dairy Spec Clean-In-Place Non Return Valve Available
- Minimal Flow Disturbance for Foam Prevention
- Service Kits Readily Available

3 WAY PLUG VALVE SEAL KIT



Features & Specifications

- Readily Available
- Easy to Install
- Precision CNC Machined
- Service Instructions Supplied and Available Online

SANITARY SWIVEL



Features & Specifications

- Designed for Sanitary Food Handling Applications
- Fully Machined from Certified 316 Stainless Steel Bar Stock
- Precision CNC Machined
- Sizes Available from 1 1/2" to 4"
- Weld Ends Connections

SCREW TOGETHER COUPLER



Features & Specifications

- Designed for Hydraulic oil, High Pressure Water, Chemicals, Sanitary and Food Applications
- Manufactured from 316 Stainless Steel Bar Stock
- Stocked Items are BSP Female/ Female Thread
- Sizes available from 3/8" to 2"

HYDRAULIC CHECK VALVES — MAX PRESSURE: 410 BAR / 6000 PSI



Features & Specifications

- High Flow
- Easily Serviced
- Service Kits Readily Available
- NPT Female/Female Thread Connections. Other Threads also Available
- Precision CNC Machined
- Manufactured from Certified Stainless Steel Bar Stock
- Sizes Available from 3/8" to 1"

HYDRAULIC QUICK RELEASE COUPLER — MAX PRESSURE: 410 BAR / 6000 PSI



Features & Specifications

- High Flow
- NPT Female/Female Thread Connections. Other Threads also Available
- Easily Serviced
- Service Kits Readily Available
- Heavy Duty
- Precision CNC Machined
- Machined from Certified 316 Stainless Steel Bar Stock
- Sizes Available from 3/8" to 2"

NON RETURN VALVES



Features & Specifications

- Designed for Sanitary Food Handling Applications
- High Duty Applications
- Tube Weld End Connection
- Precision CNC Machined
- Machined from Certified 316 Stainless Steel Bar Stock
- Sizes Available from 3/4" to 4"

NON RETURN VALVES SEAL KITS



Features & Specifications

- Economical & Simple
- All Sealing Parts Included
- Supplied with EPDM O-rings
- Viton Kits also Available
- Readily Available
- Easy to Install

STAINLESS STEEL TROUGH VALVES

Features & Specifications

- Heavy Duty
- Excellent Corrosion Resistance
- Precision CNC Machined
- Manufactured from Certified 316 Stainless Steel Bar Stock



SWAGED HOSETAILS

Features & Specifications

- Ideal for Safe Hygienic Weld-in Situations
- Swaged Ridges for Fitting a Hose
- RJT & Triclover Adapters Hose Tails Available
- Manufactured from Certified 316 Stainless Steel Tubes



BRASS SWIVELS — HYDRAULIC PRODUCT

Features & Specifications

- Suitable in Hose Reels, Fuel Nozzles, Pump to Hose Connections, Hot Bitumen Lines etc.
- Standard Swivels Come with Viton Seals
- Working Pressure: 14BAR / 200PSI
- Precision CNC Machined
- Designed for Low Pressure Applications



CUSTOMIZED HANDLE OPTIONS



Features & Specifications

- Customized Handle Solutions to Suit Your Requirements
- Laser cut from Stainless Steel
- Powder Coated
- Printed Logo Design
- Customised Design Options & Colours Available
- Curved, Long, Short & Tall Handles Available

REVERSING SEGMENT



Features & Specifications

- Simple & Cost Effective Solution
- Changes Handle Operation Direction
- Laser Cut from Certified 304 Stainless Steel
- Robust & Simple Design
- Easy to Install

LOCK OUT HANDLE OPTION



Features & Specifications

- Fully Secure On/Off Locked Handle Position
- Stainless Steel Laser Cut Segment
- Easily Retrofitted onto Standard Valves
- Ideal for Isolation Functions

e2e – Engineer to Engineer

e2e



At Oasis Engineering we are passionate about SETTING THE STANDARD when it comes to our products & processes. As well as our standard range of products we can also customise or manufacture to your requirements. All our sales team are engineers so please talk to us e2e (Engineer 2 Engineer) to discuss your very own requirements.

Here are examples of some of the things that we have been commissioned to undertake.

CUSTOM VALVE EXTENSION

Specification Details

Testament to the “freakishly good” design of the Oasis Ball valve, the Oasis valve is being retrofitted to many installations. Maintaining the proven long cycle life of the Oasis Ball valve, the custom valve extension is used when a non-Oasis valve being replaced is longer in length than the Oasis standard design.

We can custom manufacture a cap that will meet the length dimensions for your needs. Talk to us e2e (Engineer to Engineer) so that we can craft a solution that meets your needs.



TANK HEAD VALVE

Specification Details

Custom designed to meet your tank connection, porting & valve requirements. The Oasis Tank Head Valve is designed for use in trailers and storage cascades. Utilising the proven HIGH FLOW and LOWEST LIFE COST design features we can customise a solution that meets your needs exactly.

Materials, coupling systems, port configurations and flow rates are all considered in the design brief. Oasis will work with you to define these criteria. Once defined, Oasis design potential solutions, working with you to select the best path. Oasis then prototypes & tests the selected concept. Once proven in your application, full production begins. All of this happens under ISO9001:2008 approved systems.



VENT VALVE

Specification Details

Oasis vent valves are perfect for multi port gas distribution and venting situations. Using Oasis sandwich valve technology the valve is compact and very easy to service. There are many port options available so contact an Oasis salesman today to discuss your requirements.



BALL VALVE PRIORITY PANEL MANIFOLD

Specification Details

Oasis has been creating custom solutions for some of the biggest names in the game. Providing the complete plug and play unit, Oasis can customize a manifold system that will integrate:

1. Sandwich Ball Valves
2. Check Valves
3. Coupling Systems

We have the capacity to design, prototype, test and manufacture a custom solution using either the manifold valve or the sandwich valve technology, delivering to you the complete package with total ease of service.



BALL VALVE DISPENSER MANIFOLD

Specification Details

Oasis dispenser manifolds are designed with high flow rates in mind. Using Oasis sandwich valve and integrated check valve technology, we have created a compact high flow dispenser manifold that performs at the top of its game. When the time comes maintenance is easy with the extraction of the sandwich valve only requiring the removal of 4 bolts.



Glossary of Terms

NPT (National Pipe Taper)

The most common U.S. standard for pipe fittings. NPT fittings are measured on the internal diameter of the fitting. NPT ports and fittings are both tapered. When threaded together, the NPT design creates a wedging effect, binding the thread in order to seal. The use of a thread sealant is common and required with NPT, as it does not consistently create a positive seal on its own, like an O-ring configuration.

BSP (British Standard Pipe)

The U.K. standard for pipe fittings. Also called BSPT - British Standard Pipe Taper threads or BSPP - British Standard Pipe Parallel (Straight) threads. BSPP requires a sealing ring and the BSPT achieves pressure tight joints by the threads alone.

SAE (Society of Automotive Engineers)

A version of the Unified Thread Standard developed by the US and originally adopted by the US automotive industry. SAE are parallel threads with O-ring seals.

Delrin AF (Valve Seat Material)

Unique thermoplastic material which is ideally suited as a valve seat where low friction and long wear life are important. Suitable for sustained temperatures up to 120 degree's centigrade.

PEEK (Valve Seat Material)

High performance thermoplastic material offering chemical and water resistance. Suitable for sustained temperatures up to 250 degree's centigrade. FDA approved for food contact applications.

Viton (O-ring Material)

A brand of synthetic rubber and fluoropolymer elastomer commonly used in O-rings. Viton offers excellent resistance to aggressive fuels and chemicals and has worldwide ISO 9000 and ISO/TS 16949 registration. Suitable for temperatures up to 200 degrees centigrade.

Nitrile N90 (O-ring Material)

This is an organic compound suitable for use as an O-ring. N90 stipulates the hardness of the compound. Suitable for temperatures up to 120 degrees centigrade.

EPDM (O-ring Material)

This is an elastomer (ethylene propylene diene Monomer rubber) that exhibits satisfactory compatibility with fireproof hydraulic fluids, ketones, hot and cold water, and alkalis, and unsatisfactory compatibility with most oils, gasoline, kerosene, aromatic and aliphatic hydrocarbons, halogenated solvents, and concentrated acids.

Ferrule Fittings

Work on the proven principle of two ferrules swaging to the tube when tightened. As the nut is tightened the front ferrule swages on to the tube making a prominent leak-proof seal and the back ferrule makes a positive impression on the tube with the help of back cone of front ferrule hence making a strong hold on the tube.

ISO 15500-4

This standard is for Road Vehicles — Compressed Natural Gas (CNG) fuel system components — Part 4: Manual Valve.

API STD 607

This Standard specifies fire type-testing requirements and a fire type-test method for confirming the pressure-containing capability of a valve under pressure during and after the fire test.

PED 97/23/EC Approved

The Pressure Equipment Directive (PED) (97/23/EC) places responsibility for safety on the manufacturer and is applicable to all pressure equipment put into service within the European Union.

Talking your language, e2e

e2e (Engineer to Engineer) is a concept born from the frustration Andy Cameron experienced sourcing suitable specialist products in New Zealand and Africa. Important design requirements and beneficial features were not available on the bulk, standard versions offered to the market.

Persistent to a fault, Andy went to a small local supplier and talked to the engineers directly. The result was a product that out lasted the alternatives by a factor of 4. "Simple ideas implemented - not ignored, are worth a lot of money"

At Oasis we know your requirements are unique. Our collaborative design/manufacture process is the effective way to get your products developed or made, in full, on time and in specification. This results in components and products that suit your needs exactly.

Leading edge design and drafting software now enable manufacturers and designers to overcome the challenges of distance. Our design team and complimentary prototyping and production facility gives Oasis the unique capacity to solve your problems.

If the solution you require is not in our product range, talk to us, engineer to engineer, to understand how we can craft a solution for your needs exactly, or visit www.OasisNGV.com to find out more.

Oasis Engineering Ltd
129 Birch Avenue, Tauranga, New Zealand.
T: +64 7 928 3808 F: +64 7 928 3809
e: info@oasisengineering.co.nz
www.OasisNGV.com