SEAL INNOVATIONS

KLINGER PRODUCT BROCHURE

EXCLUSIVE NZ DISTRIBUTOR OF KLINGER SEALING PRODUCTS

KLINGER trusted. worldwide.

Keeping Industry Moving

www.sealinnovations.co.nz

MOTION New Zealand

SiL CAPABILITIES

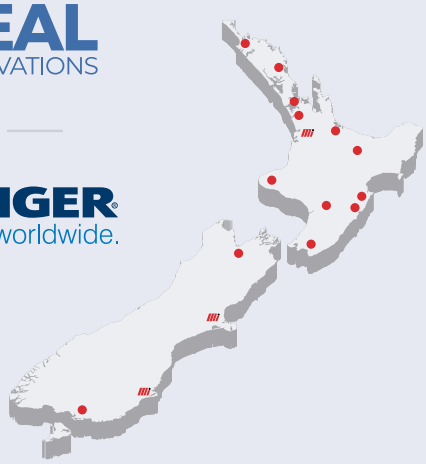
Committed to Providing the Highest Levels of Technical Support

Exclusive Sealing Products Distributor

SEAL INNOVATIONS

&

KLINGER trusted. worldwide.



In late 2020 Seal Innovations partnered with KLINGER Australia to become the KLINGER exclusive distributor in New Zealand for sealing products. This agreement also includes access to the full range of KLINGER products.

Combining the strength of international research and development with the advantage of offering manufacturing flexibility, technical expertise, support, and the sales distribution network power of Seal Innovations.

» Tailored solutions for a wide range of industries
» Multiple distribution points across New Zealand
» Large inventory available nationally
» Full inhouse technical and engineering support
» National field support to help you with all your gasket, sealing and fluid control needs

The main distribution hub is based in Hamilton at a Motion NZ Centre where you will find the Atom Cutter for gasket production and the Machine Shop for specialist seals.

All KLINGER product enquiries to:
Phone: 0800 474 569
Email: gaskets@sealinnovations.co.nz

Technical Support

KLINGER and SiL are committed to providing the highest levels of technical support. Our partnership brings practical advice along with online tools and access to handy resources.

Gasket Selection
Selecting the right gasket material is critical to the effective operation of a reliable joint. KLINGER offers a material selection and application appraisal service to ensure the correct gasket is used first time, to avoid unscheduled shutdowns and refits.

Torque Calculations
Insufficient or excessive loads are among the most common factors contributing to joint leakage. The technical services department can provide detailed calculations with explanations of why optimum gasket stress is so important in successful gasket installation.

Training
Product training sessions can help customers improve the efficiency and safety of product installation and are tailored around each facility and respective industry needs. We work with KLINGER to acccess their in-depth knowledge and experience.

SiL AND KLINGER SUPPORT

Manufacturing and Servicing for Operational Efficiency

Gaskets Group

The Gasket group at SiL has a CNC operated Atom cutter. This gives us the cutting capacity to customise to our customer requirements. We can offer gaskets for any application manufactured from KLINGER sealing products.

We strive to achieve by providing best-in-class sealing solutions that allow our customers to operate their plants, complete projects, and start up from turnarounds safely and efficiently.

We aim to help customers achieve zero leaks on machine start-up and throughout the operating cycle.

KLINGER Expert

Designed primarily with the needs of the on-site technician in mind, this versatile calculation and gasket selection software app has a clear user interface.

» Identification of the best gasket material for specific applications
» Design of gasket assemblies
» Checks of chemical and temperature suitability
» Calculation of bolt torque requirements
» Graphic illustration of the scatter of various bolting-up methods

Manufacturing Facility

Seal Innovations' manufacturing facilities make it possible to respond quickly and deliver standard and custom-made products to clients located across New Zealand.

We continuously invest in plant infrastructure and IoT technology to maintain a high manufacturing capacity to service a broad range of industries.

When manufacturing gaskets we need to know the dimensions, media temperature, material and the application.

Drawing Services

Seal Innovations has the ability to create a customised detailed drawing that can be approved prior to cutting a specialised gasket for any site.

» Accurate record keeping for critical services on any site
» Consistent supply for any planned maintenance
» Approved before manufacture and records

COMPRESSED FIBER / PTFE

Mining | Chemical | Energy | Pharmaceutical | Food & Beverage | Paper

KLINGERSIL® C4430

Consisting of synthetic fibers bonded with NBR and offering excellent stress relaxation, this gasket material is used in hot water and higher-temperature steam applications.

It is resistant to oils, gases, salt solutions, fuels, alcohols, moderate organic and inorganic acids, hydrocarbons, lubricants and refrigerants.

BASIS COMPOSITION
Optimum combination of synthetic fibers bonded with NBR.

THICKNESS
0.4, 0.8 ,1.0 ,1.5 ,2.0 ,3.0mm

KLINGERSIL® C4400

Consisting of aramid fibers bonded with NBR, this universal gasket material is a synonym for safe and reliable sealing.

Its unique matrix makes it resistant to oils, water, steam, gases, salt solutions, fuels, alcohols, moderate organic and inorganic acids, hydrocarbons and lubricants as well as refrigerants.

BASIS COMPOSITION
Aramid fibers bonded with NBR.

THICKNESS
0.4, 0.8, 1.0, 1.5, 2.0, 3.0mm

KLINGERSIL® C4500

Combining carbon fibers and special heat-resistant additives with an NBR bonding, this superior-performance gasket material has been designed specifically for the chemical industry.

Higher temperatures, alkaline media and superheated steam are typical application scenarios where operators also profit from its resistance against oils, gases, salt solutions, fuels, alcohols, moderate organic and inorganic acids, hydrocarbons, lubricants and refrigerants.

BASIS COMPOSITION
Carbon fibres and special heat resistant additives bonded with NBR.

THICKNESS
0.4, 0.8,1.5, 2.0, 3.0mm

KLINGERSIL® C6327

Offers an excellent conformity with flanges at low surface loads.

Body gaskets for liquids and steam at lower pressures and temperatures and low bolt loads, for example transformer gaskets.

» Controlled swelling in oils and fuels
» Provides very good adaptability to any sealing surface
» Conforms easily
» Excellent sealing at low stress

BASIS COMPOSITION
Aramid fibres and inorganic fibres bonded with SBR.

THICKNESS
0.4, 0.8, 1.0, 1.5, 3.0mm

KLINGERSIL® C8200

Glass fibers bonded with special acid-resistant elastomers characterise this premium high-pressure gasket primarily used in tandem with concentrated acids.

Highly versatile, it is also resistant to a wide variety of other media.

BASIS COMPOSITION
Glass fibers bonded with special acid-resistant elastomers.

THICKNESS
1.5, 3.0mm

KLINGER® TOP-CHEM 2000

The universal heavy-duty gasket filled with silicon carbide. The only PTFE gasket worldwide to have been awarded a Fire Safe certificate. Continuously providing best performance in applications with high mechanical requirements at high temperatures, this gasket material features excellent acidic and alkaline resistance and versatility in steam versatility in steam applications.

Primarily used in the chemical, petrochemical and maritime industry.

BASIS COMPOSITION
PTFE gasket filled with Silicon carbide.

THICKNESS
1.5, 3.0mm

KLINGER® TOP-CHEM 2003

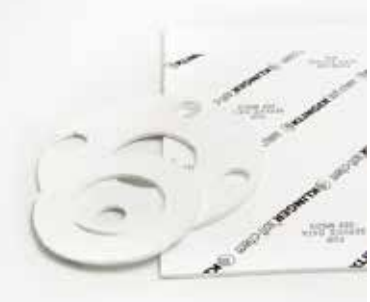
Consisting of PTFE filled with hollow glass-microspheres, this gasket material provides high adaptability and tightness even at low surface loads.

Its chemical properties make it the ideal choice for strongly acidic and alkaline applications as well as for medium temperatures and loads.

BASIS COMPOSITION
PTFE filled with hollow glass microspheres.

THICKNESS
1.5, 3.0mm

KLINGER® SOFT-CHEM



The best choice for economical plant-wide use. Manufactured from multi-directional expanded PTFE, this high-grade gasket material guarantees excellent corrosion resistance coupled with superior sealing capabilities.

Bringing sealing technology to the next level, it represents the best choice for operating conditions of up to 260 °C.

BASIS COMPOSITION
Multi-directional expanded PTFE.

THICKNESS
1.5, 3.0mm

METAL AND GRAPHITE GASKETS

Industry-leading Range of Gaskets and Sealing Materials

SPIRAL WOUND GASKETS

Spiral wound gaskets have the ability to recover under the action of fluctuating loads caused by process fluid pressure and temperature changes, flange face temperature variations, flange rotation, bolt stress relaxation and creep.

BASIS COMPOSITION

The gasket sealing element consists of a pre-formed metallic winding strip with layers of a softer, more compressible sealing material which, during compression, is densified and flows to fill imperfections in the flange surfaces when the gasket is seated.

RING TYPE JOINTS

Metallic ring joint gaskets are heavy duty, high-pressure gaskets largely used in offshore and onshore petrochemical applications. They are precision-engineered components designed to be used in conjunction with precision-machined flanges. All our Ring Joints are manufactured according to ASME B16.20 and API 6A.

BASIS COMPOSITION

The gasket material is selected on a number of grounds primarily; chemical compatibility with the media and the hardness of the flange. The gasket material ideally needs to be roughly 30 Brinell less than the flange material to ensure sufficient deformation of the gasket without damaging the flange facing.

KAMMPROFILE GASKET

Fire Safe to API 6FB, a composite gasket which utilises a serrated metal core with a soft facing material. The metal core is a machined on each contact face with concentric serrations which provide high pressure areas, ensuring that the soft coating flows into any imperfections in the flange even at relatively low bolt loads.

The soft facing material is engineered to compress in to the serrations on the core and form a thin film across the peaks creating the ideal sealing density in the grooves of the profile. The result is a gasket which combines the benefits of soft cut materials with the advantages of seal integrity associated with metallic gaskets.

KLINGER® GRAPHITE LAMINATE PSM

The pure graphite gasket with tanged sheet metal insert. Made of expanded graphite with an 0.1 mm thick insert of tanged stainless steel and featuring adhesive-free bonding, this gasket material is ideal for hot water and steam applications at temperatures of up to 450 °C, in which it displays no change to its physical properties. Furthermore, it is free of resins, impregnations or other organic substances.

BASIS COMPOSITION

Expanded graphite with a 0.1 mm thick tanged stainless steel insert.

THICKNESS

0.8, 1.0, 1.5, 3.0mm

KLINGER® GRAPHITE LAMINATE SLS

The pure graphite gasket with smooth stainless steel insert. Combining pure exfoliated graphite with stainless steel foil reinforcement, this gasket material promises improved cutting and handling. Thanks to its graphite-based conformability characteristics, it is suitable for low bolt-load and damaged flange scenarios. Resistant to virtually any type of medium, it is also temperature- resistant (up to 450°C) and highly compressible.

BASIS COMPOSITION

Expanded graphite and a plain glued stainless steel insert.

THICKNESS

0.8, 1.0, 1.5, 2.0, 3.0mm

KLINGER® TOP-GRAPH 2000

The really flexible graphite sealing material. Combining the benefits of both reinforcement and flexibility, this gasket material is made of graphite and synthetic fibers bonded with NBR. Its reliable handling, high load-bearing capacity and low embrittlement make it the best choice for steam and other demanding applications.

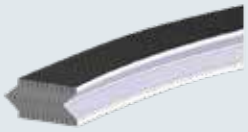
BASIS COMPOSITION

Graphite and synthetic fibers, bonded with NBR.

THICKNESS

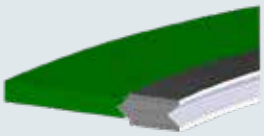
1.5, 2.0, 3.0mm

SPIRAL WOUND GASKETS



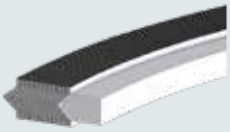
MAXIFLEX STYLE R

- Maxiflex spiral wound sealing element
- Wide choice of materials for filler and metal strip
- Suitable for high pressure and temperature applications
- Recommended flanges -tongue & groove, male to female and flat face to recess
- General and critical duties



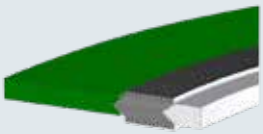
MAXIFLEX STYLE CR

- Maxiflex spiral wound sealing element
- Solid metal outer ring used as a centering device and compression stop
- Used mainly on raised face and flat face flanges
- Wide choice of materials for filler and metal strip
- General duties



MAXIFLEX STYLE RIR

- Maxiflex spiral wound sealing element
- Solid metal inner ring
- High pressure and high temperature capability
- Male to female flanges
- Wide choice of materials for filler and metal strip
- General and critical duties



MAXIFLEX STYLE CRIR

- Maxiflex spiral wound sealing element
- Solid metal inner and outer ring
- Suitable for high pressure and temperature applications
- Raised face or flat flanges
- Prevents turbulence and erosion damage to flange
- Prevents damage to the gasket bore and inner windings
- Inner ring acts as a heat shield and corrosion barrier
- Wide choice of materials for filler and metal strip
- General and critical duties

COMPRESSION PACKING

Control of Leakages from Pumps, Valves and Other Static Applications

STYLE K10

APPLICATIONS
Water, mild acids and alkalis, mild slurries.

MATERIAL
Acrylic yarn and PTFE

SERVICE CAPABILITIES
Temperature range –100°C to 260°C
pH capability 2 –12
Max rotary pressure 30 bar
Max static pressure 100 bar
Max rotary speed 10 m/sec
Max reciprocating pressure 20 bar
Max reciprocating speed 2 m/sec

STYLE K11

APPLICATIONS
Water, mild acids and alkalis, mild slurries. Suitable where the use of a non contaminating packing is not important.

MATERIAL
Acrylic yarn and graphite dispersion

SERVICE CAPABILITIES
Temperature range –100°C to 300°C
pH capability 4 –10
Max rotary pressure 40 bar
Max static pressure 100 bar
Max rotary speed 15 m/sec
Max reciprocating pressure 25 bar
Max reciprocating speed 2 m/sec

STYLE K54F

APPLICATIONS
Can be used in virtually all media including strong acids and alkalis. Also suitable for use on oxygen valve applications. Water and food compatible.

MATERIAL
Virgin PTFE yarn

SERVICE CAPABILITIES
Temperature range –240°C to 260°C
pH capability 0 – 14
Max rotary pressure 20 bar
Max static pressure 200 bar
Max rotary speed 3 m/sec
Max reciprocating pressure 100 bar
Max reciprocating speed 2 m/sec

STYLE K55

APPLICATIONS
Can be used in virtually all media including strong acids and alkalis. K55 has very good heat dissipating properties and is easy on sleeves and shafts. Very good in mild slurries and on feed pumps.

MATERIAL
Graphite encapsulated PTFE yarn

SERVICE CAPABILITIES
Temperature range –200°C to 280°C
pH capability 0 – 14
Max rotary pressure 30 bar
Max static pressure 200 bar
Max rotary speed 20 m/sec
Max reciprocating pressure 100 bar
Max reciprocating speed 3 m/sec

STYLE K13DL

APPLICATIONS
Water, mild acids and alkalis, slimes and slurries, stern tubes. Resistant to water rot especially salt water.

MATERIAL
Flax yarn and doulon lubricant.

SERVICE CAPABILITIES
Temperature range 0°C to 90°C
pH capability 4 –9
Max rotary pressure 20 bar
Max static pressure 70 bar
Max rotary speed 15 m/sec
Max reciprocating pressure 30 bar
Max reciprocating speed 4 m/sec
Max reciprocating speed 2 m/sec

STYLE K3222

APPLICATIONS
K3222 is a cost effective general purpose packing for use in non abrasive applications on pumps and valves within all industries.
It is also available in a wire reinforced version designated K3222W for high pressure valve applications.
Not suitable for pumps.

MATERIAL
Exfoliated graphite ribbon packing.

SERVICE CAPABILITIES
Temperature range –200°C to 430°C
In saturated steam 650°C
pH capability 0 – 14
Max rotary pressure K3222 20 bar
Max static pressure K3222 100 bar

STYLE K4313

APPLICATIONS
Suitable for a wide range of chemicals and heavy slurry application pumps. Reduced shaft wear to pure aramid packing.

MATERIAL
A hybrid packing that combines Aramid fibre and Expanded graphite PTFE.

SERVICE CAPABILITIES
Temperature range –100°C to 280°C
pH capability 2–12
Max rotary pressure 25 bar
Max static pressure 250 bar
Max rotary speed 20 m/sec
Max reciprocating pressure 350 bar
Max reciprocating speed 2 m/sec

STYLE 396

APPLICATIONS
Operates successfully on pumps and valves. Very conformable packing and can be run drip-free in certain applications. Excellent on feed water, caustic and condensate pumps.

MATERIAL
A dense flexible graphite with carbon/graphite yarns to resist extrusion.

SERVICE CAPABILITIES
Temperature range -196°C to 454°C
In saturated steam 650°C
pH capability 0 –14
Max rotary pressure 35 bar
Max static pressure 175 bar
Max rotary speed 22 m/sec

MISCELLANEOUS

Fluid Control and Consumable Products

KLINGER STATITE

For applications at lower temperatures, with oil, water and fuel, for example gearboxes and pumps.

MATERIAL
Asbestos-free beater addition product based on cellulose fibre bound with protein. Good adaptation properties. Available either in continuous lengths or as cut gaskets.

Material on rolls with 1000mm width.

Certified according to ISO9002 and QS9000.

THICKNESS
0.25, 0.4, .5, 0.8, 1.5, 3.2mm

RUBBERISED CORK

Cork rubber products offer many of the advantages of rubber compounds along with the added benefit of controlled compressibility and recovery. The addition of cork granules to the compound helps decrease the amount of flow or creep that occurs in compounds that are only made of rubber. This also creates a better distribution of load when compression occurs between bolt spans. Different densities and grades are available which allows for a wide variety of sealing applications from dust covers to industrial applications.

MATERIAL
Manufactured with a variety of compounds including Neoprene, Nitrile, Acrylic, SBR and Silicone, providing the necessary sealing features such as fluid or temperature resistance.

ELASTOMERS

NATURAL RUBBER (NR)
Exhibits exceptional elongation, tear strength and recovery properties.

Nitrile (NBR)
Synthetic rubber offering improved chemical resistance and temperature capabilities to neoprene.

Viton (Fluorinated Hydrocarbon)
Offers excellent resistance to acids, aliphatic hydrocarbons, oils gasoline and many industrial applications.

EPDM
Good resistance to ozone, heat, steam, strong acids and alkalis.

Neoprene (CR)
Good resistance to aging, ozone and weathering. It also has good physical properties and resilience.

Silicone (VMQ)
Excellent high and low temperature properties, superior to any other grades.

SEALEX® JOINT SEALANT

Specially processed, 100% pure PTFE on a roll, provides soft, highly compressible gasketing for longer life and trouble-free sealing.

The high compressibility of Sealex® enables it to effectively fill flange imperfections for a tight, leak-free seal. Under pressure, it provides a wide, thin, ribbon-like seal. Unlike conventional PTFE, Sealex® has good creep resistance and bolt torque retention properties.

It does not support bacterial growth or cause product contamination and virtually has no shelf-life concerns. Sealex® has excellent resistance properties to chemical attack.

WRAP SEAL QUICK REPAIR KIT

Wrap Seal Quick Repair Kit for pipe leaks is suitable for offline pipe leak repair for low pressure general pipe medium.

Works on any metal or plastic pipe. Withstands operating pressure up to 400psi. Withstands temperature up to 200°C.

Safe for drinking water and resistant to most chemicals. Ideal for pipe reinforcement and corrosion protection.

THREAD TAPES

Clean, quick and highly effective means of sealing threaded pipe fittings. These tapes provide a tight seal while providing natural lubrication to prevent damaging the threads.

Resistant to most common chemicals, and is rated for temperatures from -260°C to +260°C. Non-corrosive, low coefficient of friction, unlimited shelf life and odourless.

MATERIAL
100% PTFE and hence are inert and resistant to most media.

- Commercial Grade (white) for general services:12mm x 0.075mm x 10m
- British Standard (white), BS 7786: 12/19/25mm 0.076mm 10m
- Plumbers (pink):12mm x 0.1mm x 10m
- Gas (yellow): 12mm x 0.1mm x 10m

SAFETY SPRAY SHIELDS

Designed to prevent a catastrophe by temporarily containing hazardous leaks and sprays. Leaks can occur on piping systems conveying chemicals, high temperature fluids, and steam, which can harm workers, nearby equipment, and the environment.

MATERIAL
Constructed of durable fabrics that are chemical, UV, and weather resistant, our shields are available in teflon, polypropylene, PVC, and polyethylene.

Solid styles contain a pH indicating patch which signals a leak by immediately changing colour towards red if acidic or towards green if an alkali. The patch is replaceable which allows reuse of the shield.

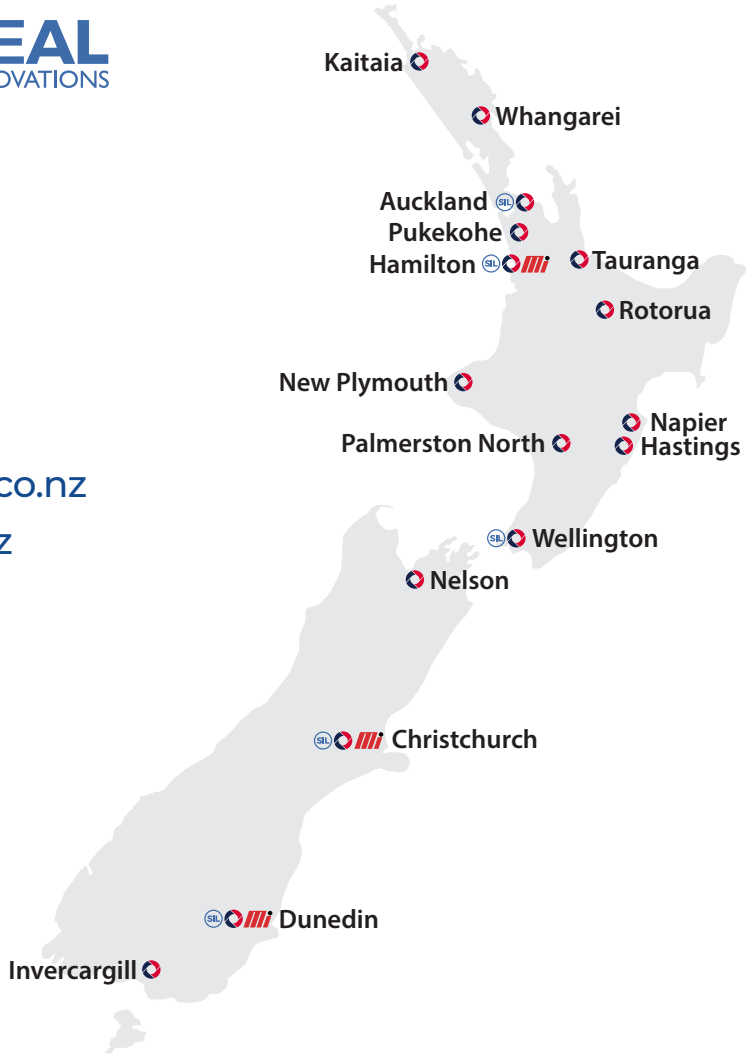
LEVEL GAUGES

Supported by KLINGER Australia Fluid Control, we can offer the full instrumentation range.

- Transparent level gauges for steam and process applications
- Reflex level gauges for steam and process applications
- Bi-colour level gauges
- Magnetic level gauges
- Shut-off fittings
- Borosilicate gauge glasses
- Glass level gauge accessories
- AB Cocks
- KLINGER level gauge spares

Contact your Seal Innovations' rep now to find out more 0800 474 569.

MOTION New Zealand | SEAL INNOVATIONS



0800 474 569
gaskets@sealinnovations.co.nz
www.sealinnovations.co.nz

- (CS) Counter Sales
- (GP) Gasket Production
- (MA) Machine Shop
- (ME) Mechanical Seal Servicing
- SAECOWilson Branches
- (SiL) Seal Innovations Branches
- Motion Centres

Spanhake Engineering Supplies Kaitaia (CS)
36 Matthews Ave
Ph: (09) 408 0960

Whangarei (CS)
28 Port Rd
Ph: (09) 430 0105

North Shore (CS)
Unit C, 21 Porana Rd, Wairau Valley
Ph: (09) 444 6129

Auckland (CS)
297 Neilson St, Onehunga
Ph: (09) 636 5239

Avondale (CS)
607 Rosebank Rd, Auckland
Ph: (09) 825 1037

Penrose (CS)
131 Station Rd, Auckland
Ph: (09) 579 3199

East Tamaki (CS)
49B Springs Rd, Auckland
Ph: (09) 274 4596

Wiri (CS)
71A Wiri Station Rd, Manukau Auckland
Ph: (09) 263 4864

Pukekohe (CS)
89 Manukau Rd
Ph: (09) 237 1511

Tauranga (CS)
17 Newton St, Mt Maunganui
Ph: (07) 575 6179

Hamilton Motion Centre
(CS) (MA) (ME) (GP)
40 Killarney Rd, Frankton
Ph: (07) 847 8773

Rotorua (CS)
Cnr Old Taupo Rd & Pururu St
Ph: (07) 348 5169

Napier (CS)
38 Austin St
Ph: (06) 843 0027

Hastings (CS)
Unit 1, 822 Omahu Rd
Ph: (06) 876 0345

New Plymouth (CS)
161 Gill St
Ph: (06) 758 5326

Palmerston North (CS)
639 Tremaine Ave
Ph: (06) 356 9561

Wellington (CS)
2B Udy St, Petone, Lower Hutt
Ph: (04) 566 6754

Wellington (CS)
122 Hutt Road, Petone, Lower Hutt
Ph: (04) 568 3189

Nelson (CS)
79 Quarantine Rd, Annesbrook
Ph: (03) 547 4888

Hornby (CS)
172 Waterloo Rd, Christchurch
Ph: (03) 348 7171

Christchurch Motion Centre (CS) (ME)
19 Lodestar Ave, Wigram
Ph: (03) 338 8533

Dunedin Motion Centre (CS)
8 Strathallan St, South Dunedin
Ph: (03) 477 8565

Invercargill (CS)
55 Leet St
Ph: (03) 211 8111

CreBive 9288 05/22

MOTION New Zealand | SAECOWilson | SEAL INNOVATIONS