modular TRENCH cover in Kinext™
About Us

Scavenger Supplies is an Australian-owned, Australia-wide specialist in industrial products and services, committed to safety and high standards for our customers. Our focus is on maintaining control systems that provide an environmentally safe and healthy workplace for all.

Established in 2002 as Conveyor Technology Services, we have consistently expanded to meet the high requirements of industry in Australia.

Scavenger Supplies has two divisions – Scavenger Supplies and Scavenger Fire / Maritime Safety. These are supported by four leading brands – Scavenger Supplies, Conveyor Technology, Scavenger Fire and Safety and Grating FRP Australia.

All have a comprehensive product portfolio based on quality-assured manufacturers and suppliers.

Scavenger Supplies is supported by a Quality Management System that conforms to rigorous standards, including ISO 9001:2008. We work with your company so that exacting goals of quality, price and delivery are consistently met.

Every aspect of our service and delivery to you is measured, from selecting material, components and services that undergo routine inspection for specific conformity, to providing facilities, training and encouragement, backed by regular reviews and internal audits.

We partner with innovative manufacturers to bring you the latest, safest and most cost-effective technologies.

We are proud of the range of solutions we provide, constantly looking for products that have perfect mechanical properties, are light weight, high strength, impact resistant, easy to maintain, with a number of other benefits so that you can concentrate on delivering the safety and environmental standards expected by your customers and employees.

National Order Placement

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It is composed of:
- Rectangular cover made of composite material with anti-slip surface
- Two stainless steel slots for lifting
- Optional locking system
- Optional customisation (customer’s name or service)

### 125 - 250 400 KN

**SINGLE KID TRENCH 900 X 500MM**

<table>
<thead>
<tr>
<th>Description</th>
<th>B (mm)</th>
<th>C (mm)</th>
<th>D (mm)</th>
<th>E (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIO TRENCH 125 KN</td>
<td>25</td>
<td>400 x 800</td>
<td>500</td>
<td>17</td>
</tr>
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<td>400 x 800</td>
<td>500</td>
<td>30</td>
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</tbody>
</table>

Drawing and the information only for general presentation purposes.

### 125 - 250 KN

**MODULAR KID TRENCH 900 X 500MM CLEAR OPENING 800MM**

<table>
<thead>
<tr>
<th>Description</th>
<th>B (mm)</th>
<th>C (mm)</th>
<th>D (mm)</th>
<th>E (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIO TRENCH 125 KN</td>
<td>48</td>
<td>800</td>
<td>900</td>
<td>40</td>
</tr>
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<td>KIO TRENCH 250 KN</td>
<td>56</td>
<td>800</td>
<td>900</td>
<td>48</td>
</tr>
</tbody>
</table>

Drawing and the information only for general presentation purposes.

It is composed of:

- Aluminium frame with L-section profile on request
- Rectangular cover made of composite material with anti-slip surface
- Two stainless steel slots for lifting
- Optional locking system
- Optional customisation (customer’s name or service)

<table>
<thead>
<tr>
<th>Description</th>
<th>A (mm)</th>
<th>B (mm)</th>
<th>C (mm)</th>
<th>D (mm)</th>
<th>E (mm)</th>
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</thead>
<tbody>
<tr>
<td>KIO TRENCH 250 KN</td>
<td></td>
<td>512</td>
<td>36</td>
<td>400</td>
<td>500</td>
</tr>
</tbody>
</table>


It is composed of:

- Rectangular cover made of composite material with anti-slip surface
- Two stainless steel slots for lifting
- Optional locking system
- Optional customisation (customer’s name or service)

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<td>48</td>
<td>400</td>
<td>500</td>
</tr>
</tbody>
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The cover can be directly placed on the bearing walls of the conduit or on the aluminium / steel frame.

We can provide it included with aluminium frame with model KIO TRENCH 900 x 500 400mm Clear Opening 250KN. The frame is supplied in elements from 2.75 metres.

Thanks to special joining systems, the aluminium frames can be connected in-line or in the corner, directly on site.

A locking system is available for models 250KN and 400KN.

In the case of hand-hole with multiple and coupled KIO TRENCH a steel beam as support must be considered in the project.
THE KINEXT™ REVOLUTION

POLIECO Group has patented an innovative advanced industrial production process utilising a revolutionary composite material: Kinext™.

Kinext™ is used for manufacturing high performance manhole covers and frames designed and tested to replace traditional ferrous materials which are not only heavier, but also subject to corrosion, erosion and theft. KIO covers are fully certified to EN 124 - B125 C250 and D400, available in a range of sizes, square and round, to meet every requirement.

Through the continuous development of innovative solutions in the design and manufacture of composite covers and frames, Polieco Group designed and build a new modular manhole, the KIO TRENCH.

The cover is made using the material Kinext™, while the frame is made of aluminium. This product is placed on top of a concrete service channel for several applications: fairground, service areas, industrial areas, commercials areas, ports and docks.

KIO TRENCH is designed to fit trench widths of 40 or 80 cm.

Easy and safe manual removal and replacement of the covers is facilitated through the use of a simple single point manual lifting tool.

KIO TRENCH can be installed in a modular way (sitting on two sides) or single (sitting on four sides).

To provide the same structural resistance, the cover is clearly manufactured with two different thicknesses if it is used modular or single.
**FACT SHEET**

**SOLID AND RESISTANT TO DEFORMATION AND STRENGTH**
KIO is fabricated in accordance with EN-124 (1994) load testing. In load testing, when deliberately stressed, KIO lids return to their initial shape and form. The same test with extreme load show that cast-iron cover break, whereas KIO produce will move but do not fail, and continue to function effectively.

**LIGHTNESS AND HANDINESS**
KIO composite covers are 70% lighter than European made cast-iron covers. Thanks to their low weight, they are easy to handle and install, which means cost savings in both labour and plant, in addition to potential reduction in injuries during installation and maintenance. The low weight also reflects into a considerable reduction in transport costs.

**ELECTRIC INSULATING**
KIO is particularly suitable for installation on pedestrian thoroughfares. Kinext is non-conductive, so KIO products protect pedestrians against voltage dispersion, especially in moist or wet environments.

**NOISE REDUCTION**
KIO greatly reduces noise pollution. Kinext is lower density than cast-iron, deadening the noise and disturbance caused by vehicles driving over installed covers. The Kinext material and optional sealing system.

**RESISTANCE TO CORROSION**
Kinext is resistant to chemicals and is not subject to rust and corrosion caused by constant exposure to atmospheric agents. For this reason, KIO never needs to be re-painted. And, products are particularly suitable in areas with flammable liquids, such as fuel filling stations and storage plants, significantly reducing the risk.

**ENVIRONMENTAL PROTECTION QUALITIES**
This becomes clear when comparing the energy required to reach the temperature to mould cast-iron (higher than 1200 degrees Celsius) and the energy required to reach the temperature to mould composite materials (near 70 degrees Celsius). The lower amount of CO2 released into the atmosphere is strictly connected with the lower weight of each single cover, allowing to load on a truck a number of covers, three times higher than cast-iron covers, resulting in reduction of pollution to lower number of transports.

**CAN BE CUSTOMISED**
KIO covers can be personalised with a company name, service type or other required information. Our products can also be produced in a range of colours.

**THEFT PREVENTION**
The value of scrap iron is rising, with theft impacting on costs to local authorities and service companies. They are sold and recycled for scrap. Besides the economic impact caused, there is also the risk of serious injury or accidents caused by dangerous openings in public and transport areas. KIO products have zero scrap value.

**RESISTANT TO TEMPERATURE FLUCTUATIONS**
KIO was tested at -30°C and +150°C, maintaining all characteristics of loading resistance, so is particularly suitable for very hot and very cold areas.

**PERMEABLE TO ELECTROMAGNETIC WAVES**
Thanks to RFID (Radio Frequency Identification) SMART KIO is the manhole cover allowing to you:

- Receive and transmit without batter with interrogated by a reader
- Be located, if covered with asphalt
- Be geo-referenced (GPS coordinates); know all the information about what is present inside the manhole plus full record of maintenance actions
- Have a single unique identification of the product (each manhole has a serial number on the microchip)

New dimensions are available for fuel stations and industrial area applications:
- square 950 x 950 and round 1100 in class C250 and D400

The standard frame for 100 system has ‘U’ shaped internal seatings for air-tightness. Thanks to the new frame’s flat profile (available for class B125 in sizes 400 x 400, 500 x 500 and 600 x 600), Kinext manhole covers by KIO are ideal for installation with interlocking pavers and natural stone.

Thanks to patented technology, we can also produce grating in Kinext™.
KIO TRENCH COVER PROJECTS

KIO TRENCH COVER SIZES

- KIO TRENCH 250kn 400 clear opening with aluminium cover, thickness 36mm
- KIO TRENCH 250kn 400 clear opening, thickness 36mm
- KIO TRENCH 400kn 400 clear opening, thickness 48mm
- KIO TRENCH 125kn 800 clear opening, thickness 48mm
- KIO TRENCH 250kn 800 clear opening, thickness 56mm
- KIO TRENCH 125kn 400 as single cover 400 x 800, clear opening, thickness 25mm
- KIO TRENCH 250kn 400 as single cover 400 x 800, clear opening, thickness 32mm
- KIO TRENCH 400kn 400 as single cover 400 x 800, clear opening, thickness 38mm

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