

# PRODUCT APPLICATIONS

## PIPES & BENDS

Bradken has had over 30 years experience in producing chromium carbide overlay products for the mining and processing sectors. Over that time, Bradken has distinguished itself as a market leader, providing quality wear resistant products.

Bradken's Duaplate® and Vidaplate® chromium carbide overlay material can be fabricated into a wide range of pipes and ducts. The tough, wear resistant Duaplate® and Vidaplate® is welded circumferentially to the material flow direction to provide superior wear performance. Long after a normal pipe has worn out, Duaplate & Vidaplate pipes show little sign of wear.

### The benefits of using Duaplate® and Vidaplate®:

- **Longer wear life:** Duaplate® and Vidaplate® pipes have been proven to last 3-5 times longer than Q & T steel pipe.
- **Reduced downtime:** Duaplate® and Vidaplate® require less maintenance. This leads to an increase in productivity.
- **Reliability:** Duaplate® and Vidaplate® pipes superior toughness provides protection from the impact of sharp objects.
- **Easy Attachment:** A flange is easily attached to the pipes backing by a weld. A rubber seal between sections ensures that an airtight seal is maintained.
- **A versatile pipe:** Duaplate® and Vidaplate® pipes come in wide variety of standard sizes, intersections, bends and fittings.
- **Flexibility:** Duaplate® and Vidaplate® pipes can be manufactured to meet individual customer requirements.
- **Adaptability:** Duaplate® and Vidaplate® is a proven wear resistant choice that is available in a wide range of grades and thickness to suit a diverse range of operating conditions.

duaplate®

Vidaplate®

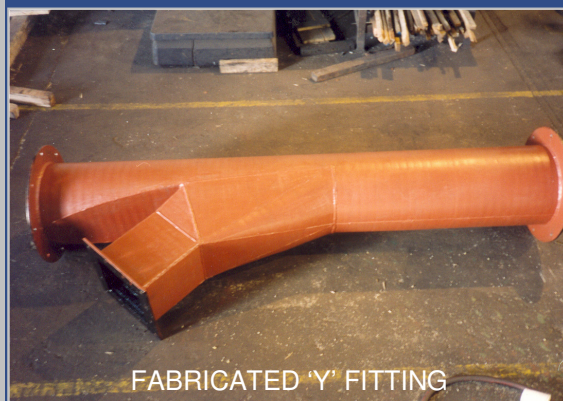


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SLURRY PIPE



FABRICATED 'Y' FITTING



DUAPLTE BANJO BOX

# PIPES & BENDS

The key advantages when considering using Bradken Duaplate® and Vidaplate® for your pipe, ducts and bends are the range of grades and our experience in tailoring a solution to suit your application. Duaplate® and Vidaplate® can be fabricated into 'T' fittings, 'Y' fittings, reducers, banjo boxes and any other custom piece that is required.

Duaplate® and Vidaplate® is typically produced with a mild steel backing, however, pipes and bends can be produced with a stainless steel backing (eg. 316 or 253MA) if required by the service environment. With a range of grades and thicknesses, Duaplate® and Vidaplate® will provide a superior wear solution, whether your wear regime is determined by particle size and form, temperature and corrosive environment.



## Standard Sizes

<u>Diameter (mm)</u>	<u>Overlay</u>
150	single
200	single
250	single
300	single or double
350	single or double
400	single or double
450	single or double
500	single or double

\* Minimum diameter depends on grade  
 \* Larger diameters are available  
 \* Seams are hardfaced internally after structural welding

## Case Study:

A cement plant demonstrates the superior performance of a Duaplate® and Vidaplate® pipes. A 2.5m diameter outlet duct & lobster back bend was fabricated using Duaplate® D60 to replace existing mild steel components. Used to transfer raw cement meal to the kiln feed box, the D60 pipe lasted over 3 times longer than the original components.



## Abrasive Properties

- Limestone, dust, caly and gases
- Moisture 18%
- Average particle size <1mm
- Velocity of 20m/s
- Temperature 100-150°C

## Wear Life

<u>Material</u>	<u>Grade</u>	<u>Life</u>
Mild Steel	10mm	10 months
<b>Duaplate D60</b>	<b>5 on 8</b>	<b>32 months*</b>

(\*still in service)

For more information contact Bradken at:

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