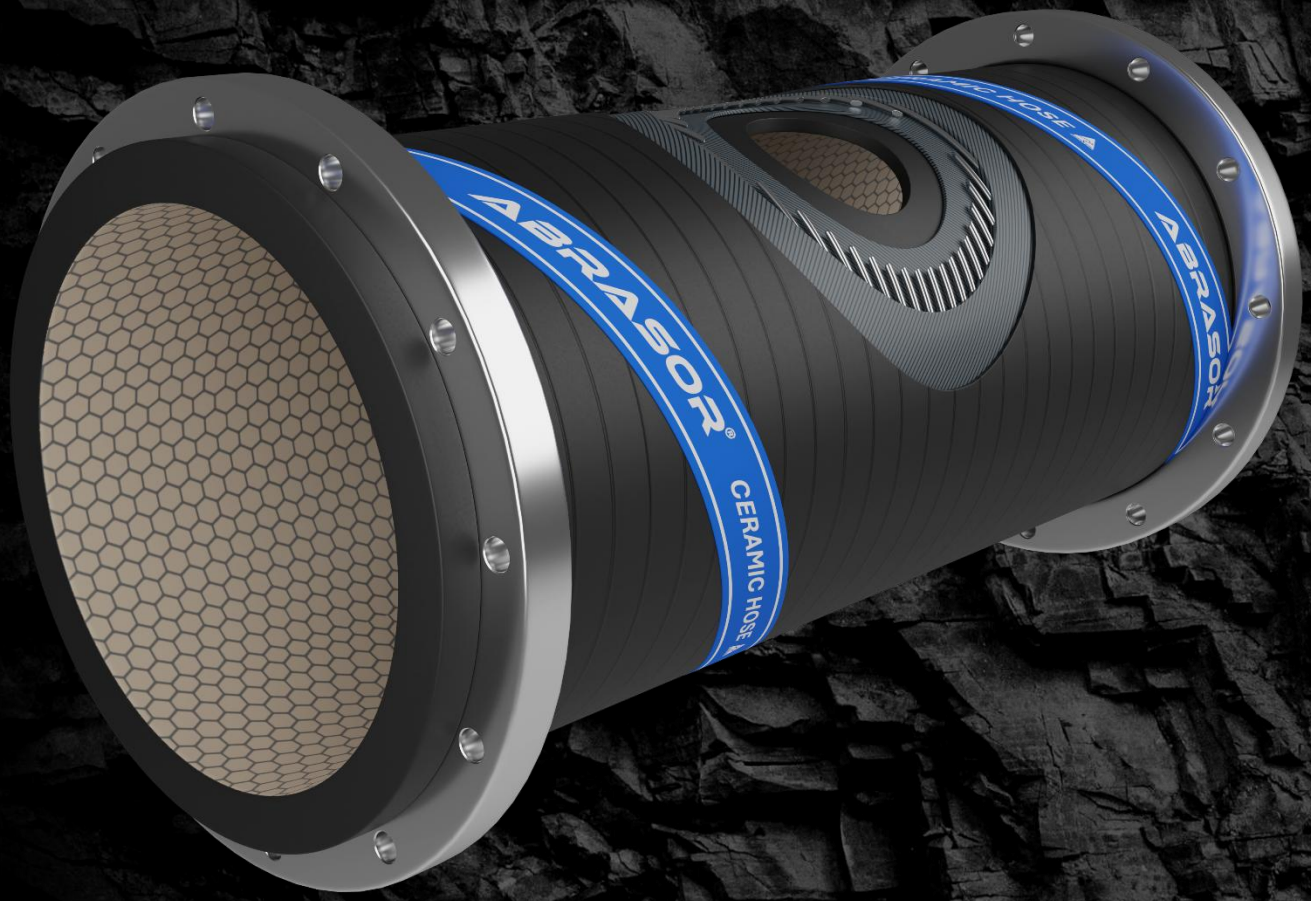
# ABRASOR®

## XC10-SERIES HARD WALL CERAMIC HOSE




# BUILT FOR EXTREME WEAR.

# The Next Level in Ceramic Hose Performance

Abrasor Ceramic Hose is designed for slurry applications where conventional rubber liners reach their practical limits. By combining high-density ceramic wear liners with a heavy duty rubber hose construction, Abrasor provides exceptional wear resistance while retaining the flexibility, impact absorption and installation benefits of rubber hose.

Our ceramic liners are selected to suit the severity and wear characteristics of each application, with options capable of achieving significantly greater wear life in highly aggressive slurry service. We only select the highest quality ceramic liners, and our bonding system guarantees a 100% adhesion level between the ceramic and rubber.

Manufactured in Australia under our ISO 9001 certified quality management system, every ceramic hose is built, inspected and tested to documented standards. With complete in-house manufacturing control, we can customise each hose around the application, including diameter, length, ceramic type, connection arrangement and overall construction.

The result is a flexible wear solution designed for the areas of a slurry system where abrasion is at its most severe.

**Extreme Wear Protection**
High density ceramic tiles provide exceptional resistance to severe sliding abrasion, significantly extending service life in high wear slurry applications.

**Australian Manufactured**
Every Abrasor Ceramic Hose is manufactured under our ISO 9001 certified quality system, giving us complete control over construction, inspection and final quality.

**100% Ceramic Adhesion**
Our controlled bonding system creates complete adhesion between the ceramic liner and surrounding rubber, helping prevent tile movement and maintain liner integrity.

# XC10-SERIES
# HARD WALL CERAMIC HOSE

ABRASOR®

**Abrasor XC10 Series Hard Wall Ceramic Hoses are designed for the most severe slurry transfer applications where maximum wear life, flexibility and reliability are essential. By combining the exceptional hardness and abrasion resistance of ceramic with the flexibility and impact absorption of rubber, Abrasor ceramic hoses delivers outstanding performance in applications where conventional ceramic lined pipe or rubber hose reaches its limits.**

Manufactured using our exclusive Abrasatech wear liner technology, each hose can be customised with premium ceramic materials to suit the specific wear characteristics of the application. Manufactured in Australia, Abrasor Ceramic Hose is ideally suited to cyclone underflow, pump discharge, mineral processing plants, tailings pipelines, dredging operations and other severe duty slurry applications where maximum service life is critical.


## TECHNICAL SPECIFICATIONS

| | |
|---|---|
| **Hose size** | DN25 – DN1200 |
| **Length** | Up to 20mt |
| **Pressure rating** | -100kPa - +8000kPa |
| **Ceramic Adhesion Level** | 100% Rubber Tear |
| **End connections** | Plain<br>Swivel flange(beaded)<br>Fixed flange<br>Flanged spigot (swivel or fixed)<br>Victaulic spigot (shouldered, roll grooved, cut grooved)<br>Threaded<br>Raised<br>Cuffed<br>Custom |
| **Flange patterns** | AS2129, ASME B16.5, ASME B16.47, AWWA C207, AS4087, BS EN 1092, BS 3293, JIS B2220, SANS 1123, DIN ISO 7005, custom |
| **Safety factor** | 4:1 |
| **Temperature rating** | -30 to +80 (ABRASATECH) |
| **Optional extras** | Anti-static wire<br>Wear monitor<br>ID tagging |

## MATERIAL SPECIFICATIONS

| | |
|---|---|
| **Ceramic Liner** | 92% Alumina (standard)<br>95% Alumina<br>99% Alumina<br>ZTA - Zirconia Toughened Alumina<br>YTZ - Zirconium Oxide<br>SiC - Silicon Carbide |
| **Secondary Liner** | ABRASATECH (for general high wear slurry)<br>QUARRYTECH (for fine sands slurry)<br>ROCKTECH (for large rock slurry) |
| **Reinforcement** | Spiralled synthetic fabric<br>Wire helix |
| **Outer cover** | ABRASATECH (for abrasion and UV resistance)<br>NEOTECH FRAS (for FRAS or oily environments)<br>FLOWTECH (for extreme UV or seawater) |
| **Connection material** | Hot dipped gal (as standard)<br>Stainless steel (SS316, SS304)<br>Carbon steel<br>Painted<br>Custom |

## HOSE TECHNICAL PROPERTIES

| HOSE SIZE | | STANDARD CERMIC THICKNESS | MAX CERAMIC THICKNESS | VACUUM RATING | STANDARD WORKING PRESSURE | | MAX WORKING PRESSURE | | SAFETY FACTOR |
|---|---|---|---|---|---|---|---|---|---|
| DN | mm | mm | mm | % | kPa | PSI | kPa | PSI | Ratio |
| 50 | 50.8 | 4 | 4 | 100 | 1000 | 145 | 8000 | 1160 | 4:1 |
| 80 | 76.2 | 4 | 6 | 100 | 1000 | 145 | 8000 | 1160 | 4:1 |
| 100 | 101.6 | 4 | 6 | 100 | 1000 | 145 | 8000 | 1160 | 4:1 |
| 125 | 127 | 4 | 6 | 100 | 1000 | 145 | 8000 | 1160 | 4:1 |
| 150 | 152.4 | 4 | 6 | 100 | 1000 | 145 | 8000 | 1160 | 4:1 |
| 200 | 203.2 | 4 | 6 | 100 | 1000 | 145 | 8000 | 1160 | 4:1 |
| 250 | 254 | 4 | 12 | 100 | 1000 | 145 | 8000 | 1160 | 4:1 |
| 300 | 304.8 | 4 | 12 | 100 | 1000 | 145 | 6000 | 870 | 4:1 |
| 350 | 355.6 | 4 | 12 | 100 | 1000 | 145 | 6000 | 870 | 4:1 |
| 400 | 406.4 | 4 | 12 | 100 | 1000 | 145 | 5000 | 725 | 4:1 |
| 450 | 457.2 | 4 | 12 | 100 | 1000 | 145 | 4000 | 580 | 4:1 |
| 500 | 508 | 4 | 12 | 100 | 1000 | 145 | 4000 | 580 | 4:1 |
| 550 | 558.8 | 4 | 12 | 100 | 1000 | 145 | 4000 | 580 | 4:1 |
| 600 | 610 | 4 | 12 | 100 | 1000 | 145 | 4000 | 580 | 4:1 |
| 650 | 660.4 | 4 | 12 | 100 | 1000 | 145 | 2500 | 363 | 4:1 |
| 700 | 711.2 | 4 | 12 | 100 | 1000 | 145 | 2500 | 363 | 4:1 |
| 750 | 762 | 4 | 12 | 100 | 1000 | 145 | 2500 | 363 | 4:1 |
| 800 | 812.8 | 4 | 12 | 100 | 1000 | 145 | 2500 | 363 | 4:1 |
| 850 | 863.6 | 4 | 12 | 100 | 1000 | 145 | 2500 | 363 | 4:1 |
| 900 | 914.4 | 4 | 12 | 100 | 1000 | 145 | 2500 | 363 | 4:1 |
| 950 | 965.2 | 4 | 12 | 100 | 1000 | 145 | 2500 | 363 | 4:1 |
| 1000 | 1016 | 4 | 12 | 100 | 700 | 102 | 2500 | 363 | 4:1 |
| 1050 | 1066.8 | 4 | 12 | 100 | 700 | 102 | 2500 | 363 | 4:1 |
| 1100 | 1117.2 | 4 | 12 | 100 | 700 | 102 | 2500 | 363 | 4:1 |
| 1150 | 1168.4 | 4 | 12 | 100 | 700 | 102 | 2500 | 363 | 4:1 |
| 1200 | 1219.2 | 4 | 12 | 100 | 700 | 102 | 2500 | 363 | 4:1 |

## CERAMIC TECHNICAL PROPERTIES

| MATERIAL | DENSITY | IMPACT RESISTANCE | VICKERS HARDNESS | ABRASION LOSS | WEAR LIFE | CRACK RESISTANCE |
|---|---|---|---|---|---|---|
| | g/cc3 | Mpa m1/2 | Hv20 | Cm3 | vs 92% | vs 92% |
| **92% Alumina** | 3.6 | 3.70 | 950 | 0.25 | 1.0x | 1.0x |
| **95% Alumina** | 3.77 | 4.10 | 1150 | 0.16 | 1.6x | 1.1x |
| **99% Alumina** | 3.83 | 4.20 | 1200 | 0.10 | 2.5x | 1.1x |
| **ZTA** | 4.10 | 4.50 | 1350 | 0.05 | 5x | 1.2x |
| **YTA** | 4.10 | 7.50 | 1350 | 0.05 | 5x | 2.0x |
| **SiC** | 3.10 | 3.0 | 2000 | 0.02 | 12.5x | 0.8x |

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