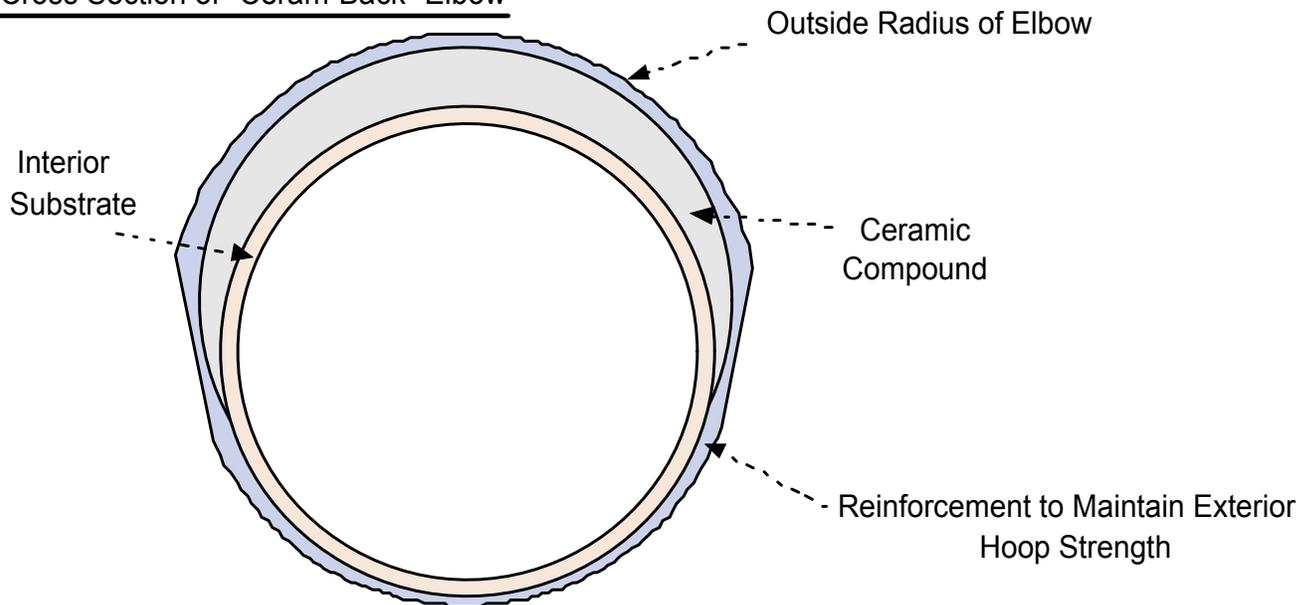


The "Ceram-Back" Elbow

Designed to eliminate unwanted costs such as maintenance, loss of material, and downtime, the "Ceram-Back" elbow replaces the conventional elbow and is manufactured to remain on a system much longer, thus reducing costs and raising production.

The "Ceram-Back" elbow has a jacket across the back of the core elbow which is approximately 1/2" of ceramic compound. This compound has a Mohs hardness of 9+, second only to diamond, which has a Mohs hardness of 10. The ceramic jacket and core elbow is then wrapped with an exterior material to maintain hoop strength. Once the core elbow has worn through, the abrasion is then transferred to the ceramic outer jacket. The metal core also acts as a static conductor.

Cross Section of "Ceram-Back" Elbow



- Abrasion resistant (Mohs 9+)
 - Easily replaces existing elbows
 - Does not change line flow
 - Available in any degree & standard CLR's
 - Available in Carbon Steel, Stainless Steel, Aluminum, and Galvanized
- Available in pipe or tubing



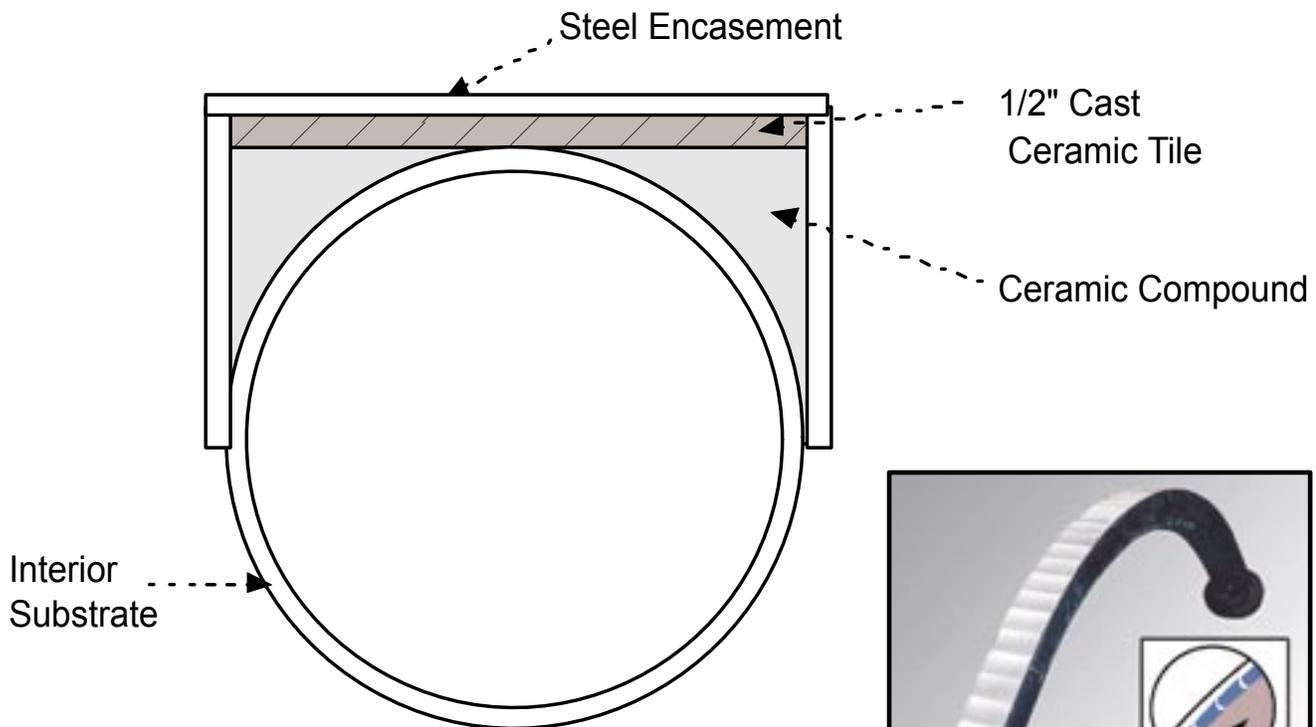
Type of Ends Available:

- Plain Ends - to be used with compression couplings
- Flanged - Plate Type (150# ASA pattern) or 150# ASA flanges
- Grooved Ends
- Quick Couplings
- Threaded Ends (M.P.T. or F.P.T.)
- Any Special Ends or Grooves (manufactured to specifications)

Ceramic "Flat-Back" Elbow

Designed and manufactured to withstand the impact of large particle pneumatic conveying. The key to our Cast Ceramic "Flat-Back" elbow is that it uses a pipe or tube for the inner core substrate. Using a pipe or tube core lessens the wear caused by the outlet transition, which is no longer needed (going from square back to round).

Cross Section of "Flat-Back" Elbow



Flat-Back without cover showing cast tiles

- Highly abrasion resistant (Mohs 9+)
- Impact resistant
- Easily replaces existing elbows
- Does not change line flow
- Available in any degree & standard CLR's
- Available in Carbon Steel & Stainless Steel
- Available in pipe or tubing



After completion showing flow direction

Type of Ends Available:

- Plain Ends - to be used with compression couplings
- Flanged - Plate Type (150# ASA pattern) or 150# ASA flanges
- Grooved Ends
- Quick Couplings
- Threaded Ends (M.P.T. or F.P.T.)
- Any Special Ends or Grooves (manufactured to specifications)