

# Ceram-Back<sup>®</sup> Elbow

**Cut Elbow Replacement Downtime up to 90%**

## Typical applications:

abrasive dust, activated carbon, cement, chemicals, grains, minerals, plastics (resin and compound), silicates, kibble

## Benefits

- 8-10x longer lifespan than bare elbows
- Greatly reduce aggressive wear
- Save \$ on maintenance labor, product loss, and downtime
- Can fit any application
- Easily replaces existing elbows
- Doesn't change line flow
- Excellent lead times

## Additional Specs & Info

- Any diameter, degree, and Centerline Radius
- Carbon steel, stainless steel, aluminum, or galvanized steel
- Pipe or tube
- Plain, flanged, grooved, or other specified ends
- Ceram-Back<sup>®</sup> fittings also available (see other side)
- Special orders are welcome



Made in USA

1-888-235-1732

[www.progressiveproductsinc.com](http://www.progressiveproductsinc.com)

[sales@progressiveproductsinc.com](mailto:sales@progressiveproductsinc.com)

**PROGRESSIVE**  
PRODUCTS INC.  
The Elbow People™



## What Customers Say:

"We have been doing business with Progressive Products for years and have always had quick turn on quotes and great customer service from all departments." - Ryan W.

"Progressive Products have provided us with Ceram-Back® Elbows for the past 2 years! The quality of these products are exceptional and have improved our convey reliability and cost. This company is highly recommended!" - Troy Conway

## Our Products:

Since 1979, our extremely durable and highly abrasion resistant Ceram-Back® products - inspired by the space-age technology of the space shuttle - have offered exceptional performance in almost any application. Designed to remain in your system much longer than other elbows, they eliminate unwanted maintenance costs, loss of material, and system downtime.

Ceram-Back® products feature a 1/2" ceramic compound jacket with a hardness second only to diamond. The ceramic jacket and core elbow are then wrapped with an exterior material to maintain hoop strength. Once the core elbow has worn through, abrasion is transferred to the ceramic outer jacket which maintains positive or negative line pressure. The metal core also acts as a static conductor.



Ceram-Back® Fittings

## COST SAVING WORKSHEET

AVG Time to replace elbow: \_\_\_\_\_ hrs X MAINTENANCE Labor Cost per hour: \$ \_\_\_\_\_

= \$ \_\_\_\_\_ Maintenance Labor Cost to replace elbow each time

+ \$ \_\_\_\_\_ Revenue Loss during production shutdown

+ \$ \_\_\_\_\_ AVG Cost of Product Loss whenever elbow fails

\_\_\_\_\_

= \$ \_\_\_\_\_ **Non-Elbow Cost** to the company per each elbow replacement (not counting the cost of the elbow itself)

|   | Bare Elbow | Ceram-Back® |
|---|------------|-------------|
| <b>+ Elbow Cost:</b>  | \$ _____   | \$ _____    |
| = Subtotal Elbow + Non-Elbow Cost per replacement:                | \$ _____   | \$ _____    |
| X Avg # of elbows replaced over (1) Ceram-Back® Lifespan:         | 10         | 1           |
| <b>= True Lifespan Cost vs (1) Ceram-Back® Elbow replacement:</b> | \$ _____   | \$ _____    |

\*This assumes fully staffed & available maintenance personnel isn't an issue, if it is an issue then advantages of having less frequent elbow replacements are even more important and cost effective than this worksheet shows.