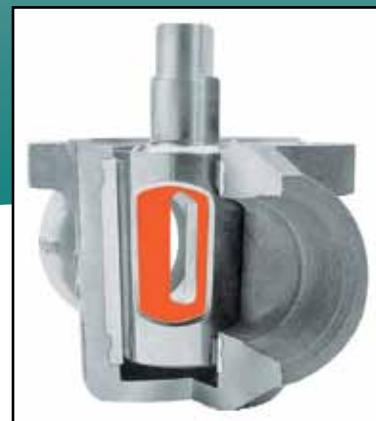
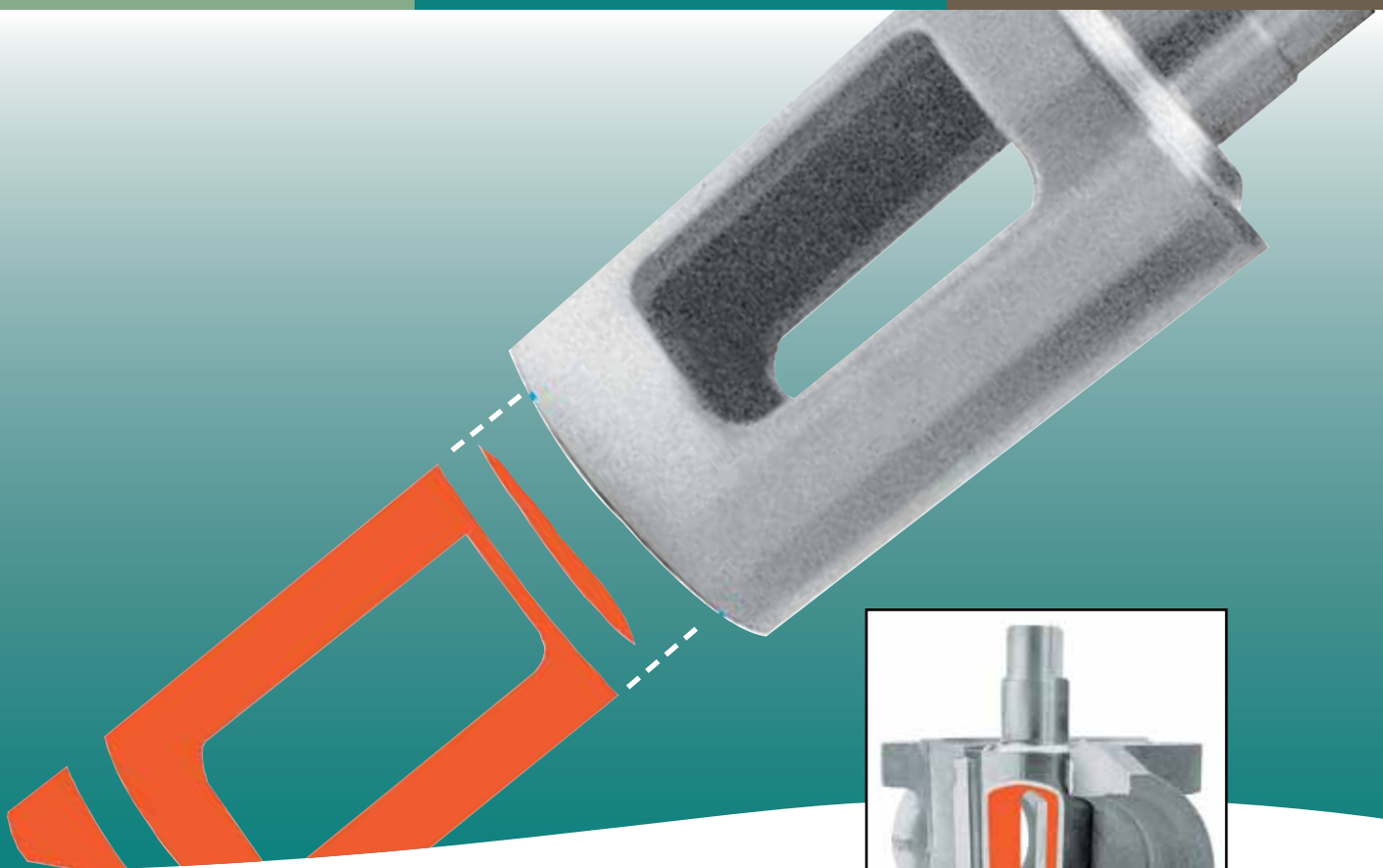


# XOMOX®

brands you trust.



Tufline® Cage Control Valves

**CRANE**

ChemPharma Flow Solutions

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

## Features and Benefits.

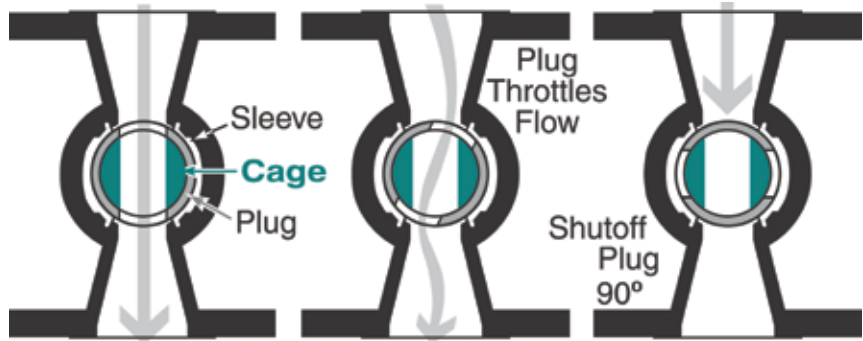
Tufline® Sleeved Plug Valves can be furnished with caged plugs to provide soft seat protection in throttling applications and in services with high pressure drops through the valve. The caged plug design allows metal-to-metal throttling while providing metal-to-soft seat shutoff for both automatic and manually controlled applications.

The design is simple and efficient. The cage is located within the plug and is fixed in the valve body. Bearings on the flow cage provide clearance between the plug and cage, allowing the plug to rotate freely.

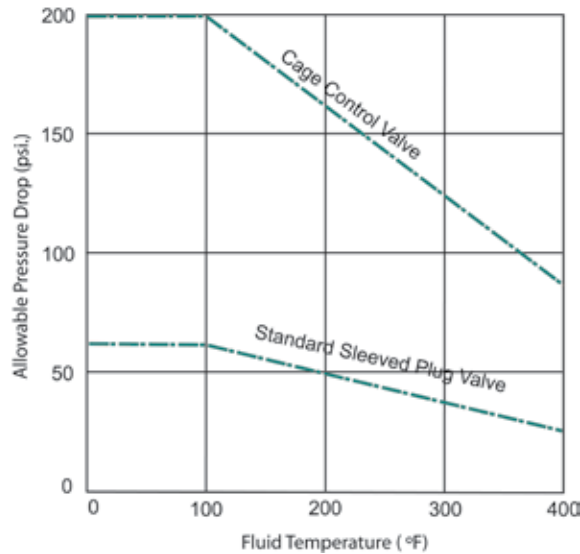
The cage plug assembly protects the seat from erosion in throttling applications by shielding the soft seat from direct flow impingement at the valve ports. The cage mechanism also serves to reduce turbulence and the cutting action of high velocity liquids, slurries and gaseous vapors by providing a more direct, contoured flow path through the valve.

## Available Materials & Sizes.

Cage Control Valves are available in sizes 1" through 12". Standard body material are WCB or CF8M while the standard plug and cage material are CD4MCuN. Other sizes and materials are available upon request.



Tufline Cage Control Flow Characteristics Cv factors for sizing 2-way valves.



## Throttling Pressure Drop Limitations for Plug Control Valves.

1. The chart above may be used for evaluating throttling pressure drop at any position for valves 4" and smaller. Consult the factory for 6" to 12" pressure drop information. (Note: In the closed position, valve can withstand full pressure drop).

2. Cage Control Valves have the same pressure-temperature rating as standard valves. Refer to the standard sleeved plug valve pressure-temperature chart for specific material rating.



## Plug Valve Trim Options.

- Reduced ports: 50%, 25%, 12-1/2%, 6-1/4%, and 3-1/8% of standard Tufline Valve Cv
- V-ports
- Special port shapes for unusual processes are available upon request

## Typical Applications.

Waste Sludge	Dilution Liquor
Raw River Water	Green Liquor
Alum	Heavy Black Liquor
Brine	Lime Mud
Sulfuric Acid with Zinc Powder	Digester Relief
45%-50% KOH in Water	Caustic Soda
Phosphoric Acid Slurry	Clay Slurry
Borax One Supply	Starch Slurry
Trona Slurry	Calcium Carbonate
Soda Ash	Fly Ash Slurry
Titanium Dioxide	Tank Bottom Residues
Scrubber Effluent	Sodium Chlorate Solution

## Dimensional Data.

The Tufline Cage Control modification does not effect or change the dimensions from the standard valve design. Please refer to the appropriate valve type for dimensional information.

## Operating Torques.

The Tufline Cage Control modification does not effect or change the operating torque from the standard valve design. Please refer to the appropriate valve type for operating torque informaton.

### How to specify

Size
Figure No.
Option
Body
Plug & Cage
Sleeve
Operator
Service

**1" - 066 - CCV - FT - 6 - 27 - P1 - W - C**

**Size & Figure No.**  
See Quick Reference Selection Table on the previous page

**Options**  
Fire Tested . . . . . **FT**  
Tertiary Top Seal . . . **TS**

Valve specifications may include multiple options.

**Body**

Carbon Steel . . . . . **2**  
316SS . . . . . **6**  
CD4MCuN . . . . . **27**  
Other (Specify) . **X**

\* Specify actuator type and available air supply.  
\*\* Consult your Xomox Sales Engineer for a wide variety of other available service options.

**Service**  
General Service . . . **Blank**  
Other\*\* . . . **X**

**Operator**  
Less Operator . . . **N**  
Wrench . . . . . **W**  
Wrench with locking device . **WY**  
Gear . . . . . **G**  
Gear with locking device . **GZ**  
Actuator\* . . . . . **A**

**Sleeve**  
PTFE . . . . . **P1**  
15% RPTFE . **P2**  
PFA . . . . . **P6**  
Tufline-475 . **P16**  
Tufline-600 . **P20**

**Plug & Cage**  
CD4MCuN . . . . . **27**  
Other (Specify) . **X**

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# XOMOX®

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