

VENDOR CATALOG / JCS TOOL & MFG

# JCS Tool & Mfg Catalog

PTFE, PP, and PVDF lined pipe fittings up through 12 inches, 150# and 300# — molded liners, full vacuum service -20°F to +450°F.

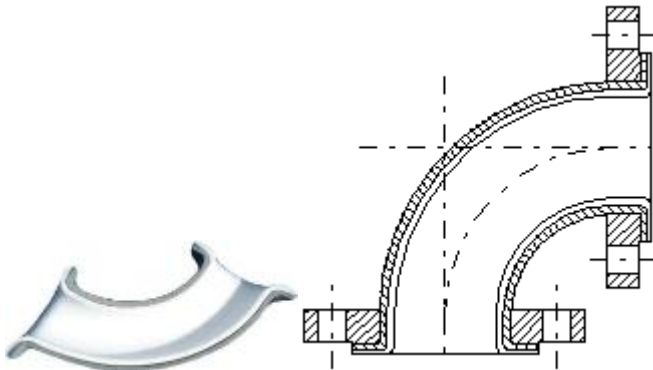
## LINER ENGINEERING

## Molded Liners • Full Vacuum Rating

JCS's 90° elbow liners are molded to fit the fitting body — avoiding both bend-induced stress and the housing-to-liner gap that a separately-molded-and-inserted liner creates. That gap-creating construction specifically undermines vacuum rating.

| Fitting Size | JCS Liner Thickness | ASTM F1545 Minimum |
|--------------|---------------------|--------------------|
| 1"           | 0.125"              | 0.120"             |
| 2"           | 0.165"              | 0.120"             |
| 4"           | 0.220"              | 0.120"             |
| 8"           | 0.280"              | 0.125"             |

Operating range: -20°F to +450°F, with full vacuum service rated across the entire range — JCS's own liners exceed the ASTM F1545 minimum at every size 1" and above.

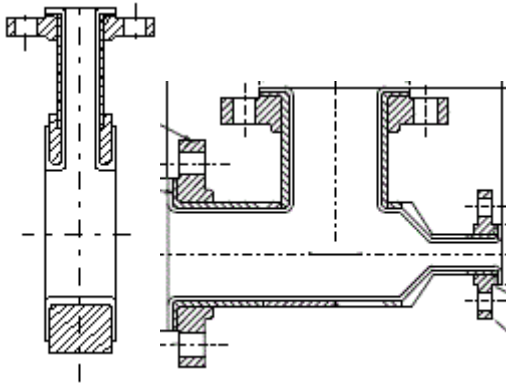


## FITTING SHAPES &amp; SIZES

## Tees · Elbows · Reducers · Crosses

All fittings available in PTFE; PP and PVDF availability is size- and shape-dependent — confirm against the specific fitting before quoting PP or PVDF.

| Shape                                 | Size Range                        | Notable                                                  |
|---------------------------------------|-----------------------------------|----------------------------------------------------------|
| Instrument Tee                        | 1x1x1/2" through 12x2/3/4/6/8/10" | Available in wafer or lug style                          |
| Reducing Filler Flange                | 1/2" through 14x12/10/8/6"        | Standard, scalloped, and straight bore sub-styles        |
| Reducing Run Tee                      | —                                 | Reduction on the run (through-pipe), not just the branch |
| Ring Spacers<br>(Lined/Armored/Solid) | 1/8"–3-1/2" by type               | Real, distinct length ranges by spacer type              |



NEXT STEP

## Send LibertyCES the process data, not a part number.

PTFE, PP, and PVDF lined pipe fittings — real JCS Tool specs, but your actual application still has a specific chemical, temperature, and pressure class that determines the correct liner material and pressure rating.

Fluid, chemistry, concentration, temperature, vacuum requirement, and pipe size — that's what a real spec review needs to start.

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### Request a spec review

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