

# CURVED and MITERED SEGMENTS of PIPE MITER BENDS per ASME B31.3

## 1. PIPE DATA and DESIGN CONDITIONS

### Pipe DATA:

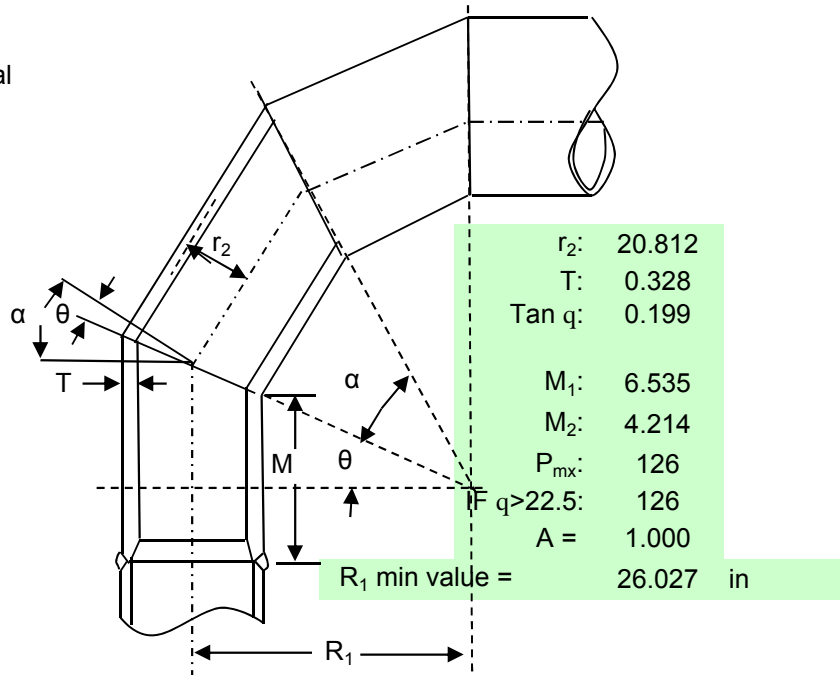
OD: 42 in  
 Nom Wall: 0.37519685 in  
 Mill Tol: 0.125 decimal  
 E: 0.95  
 Material: API 5L-B  
 S: 20000 psi  
 c: 0.05905512 in

### DESIGN CONDITIONS:

T: 150 F  
 P: 124 psig

## 2. MITER DATA

$\theta$ : 11.25 deg  
 $R_1$ : 42 in  
 M: 6.535 in



eq. 4a:  $P_m$  = 126 psig  
 eq. 4b:  $P_m$  = 165 psig  
 eq. 4c:  $P_m$  = 77 psig

The maximum permissible pressure for this miter bend is: 126 psig  
 So 126 psig > 124 psig, MITER BENDS is OK.