

```

;
; Generation of tunnel intersection at 45 degree angle
;
def parm
    sq2=sqrt(2.)
end
parm

gen zon cylint p0 0 0 0 p1 5 5 0 p2 0 10 0 p3 0 0 5 p4 5 10 0 &
                p5 0 10 5 p6 5 5 5 p7 5 10 5 dim sq2 sq2 1 1 1 sq2 1 &
                fill group Tunnel

gen zon cylint p0 0 0 0 p1 0 -4 0 p2 5 5 0 p3 0 0 5 p4 5 -4 0 &
                p5 5 5 5 p6 0 -4 5 p7 5 -4 5 dim sq2 sq2 1 sq2 1 1 1 &
                fill group Tunnel
gen zon radcyl p0 0 0 0 p1 0 0 5 p2 0 10 0 p3 -5 0 0 dim 1 1 1 1 &
                fill group Tunnel
gen zon radcyl p0 0 -4 0 p1 0 -4 5 p2 0 0 0 p3 -5 -4 0 dim 1 1 1 1 &
                fill group Tunnel
; for cylindrical tunnels
; gen zon ref dip 0 dd 0 ori 0 0 0
;
gen zon tunint p0 0 0 0 p1 0 10 0 p2 5 5 0 p3 0 0 -5 p4 5 10 0 &
                p5 5 5 -5 p6 0 10 -5 p7 5 10 -5 dim sq2 sq2 1 sq2 1 1 1 &
                size 10 10 10 10 10 fill group Tunnel

gen zon tunint p0 0 0 0 p1 5 5 0 p2 0 -4 0 p3 0 0 -5 p4 5 -4 0 &
                p5 0 -4 -5 p6 5 5 -5 p7 5 -4 -5 dim sq2 sq2 1 1 1 sq2 1 &
                size 10 10 10 10 10 fill group Tunnel

gen zon radtun p0 0 0 0 p1 -5 0 0 p2 0 10 0 p3 0 0 -5 dim 1 1 1 1 &
                size 10 10 10 10 fill group Tunnel

gen zon radtun p0 0 -4 0 p1 -5 -4 0 p2 0 0 0 p3 0 -4 -5 dim 1 1 1 1 &
                size 10 10 10 10 fill group Tunnel

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