

Ejemplo de uso de `foreach` y `pic`

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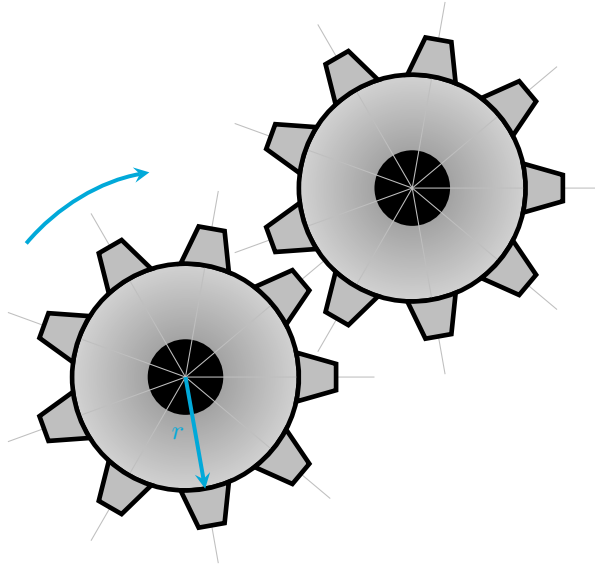


Figura 1: Engranajes

```
1 \begin{tikzpicture}[
2   pieza/.pic = {\draw[fill = gray!50, line width = 1.75] (-12.5:1.5) arc[start angle = -12.5, %
3     end angle = 12.5, radius = 1.5] -- (5:2) -- (-5:2) -- cycle;},
4   engranaje/.pic = {
5     \draw[inner color = gray!90, outer color = gray!35, line width = 1.75] (0, 0) circle[radius = 1.5];
6     \fill[line width = 2] (0, 0) circle[radius = .5];
7     \foreach \t in {0, 40, ..., 320}{
8       \draw[gray!50] (0, 0) -- (\t:2.5); % auxiliar guides
9       \pic[rotate = \t]{pieza};
10    }
11  }
12 ]
13 \pic{engranaje};
14 \pic[xshift = 3cm, yshift = 2.5cm]{engranaje};
15 \draw[-stealth, line width = 1.5, cyan!75!gray] (0, 0) -- node[auto, left] {$r$} (-80:1.5);
16 \draw[-stealth, line width = 1.5, cyan!75!gray] (140:2.75) arc[start angle = 140, end angle = 100, %
17   radius = 2.75];
18 \end{tikzpicture}
```