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Title: Grain size effect on springback behavior in bending of Ti-2.5Al-1.5Mn foils

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Highlights

- A T/D ratio value near 14 is found, which divides the variation trend of the springback behavior into two different parts.
- The springback behavior has a close correlation with the T/D ratio and crystallographic texture.
- Stress distribution is disturbed in specimens with small T/D ratio, which leads to large scatter of springback angle after unloading.
- Pressure sizing process can change the state of stress distribution of deformation region and it is proposed to control the springback behavior in micro-bending.