轧制后的塑性影响不大。

（2）冷轧 TA34 钛合金管材的形变织构和热处理织构的总体类型相同，均显示出轴向 $<10\bar{1}0>$ 织构的特点。

（3）完全再结晶退火后的 TA34 钛合金管坯，在冷轧加工过程中提高 Q 值会使管材产生周向织构，即基面法线方向沿 TD 方向分布，其压扁性能随着周向织构的增强而愈显优异。去应力退火不改变 TA34 钛合金管材的织构类型。

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专利信息

一种适用于增材制造的钛合金

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摘要: 本发明公开了一种适用于增材制造的钛合金，其化学成分(质量分数)为：Al 3.0%~3.5%，Fe 2.0%~2.5%，Si 0.1~0.3%，V 2.5%~3.0%，O 0.07%~0.1%，C≤0.06%，Cr≤0.03%，Cu≤0.015%，Mn≤0.03%，余量为 Ti。通过精确控制得到适合于增材制造的钛合金并将其制成丝材或粉末后用于增材制造，所获得的增材体室温抗拉强度为 1081~1154 MPa，屈服强度为 998~1051 MPa，断后伸长率为 17.9%~25.4%。该合金具有较好的增材制造成形性，不仅可在流动氩气下进行丝材增材制造，而且对粉末增材制造保护气氛的要求不高。