

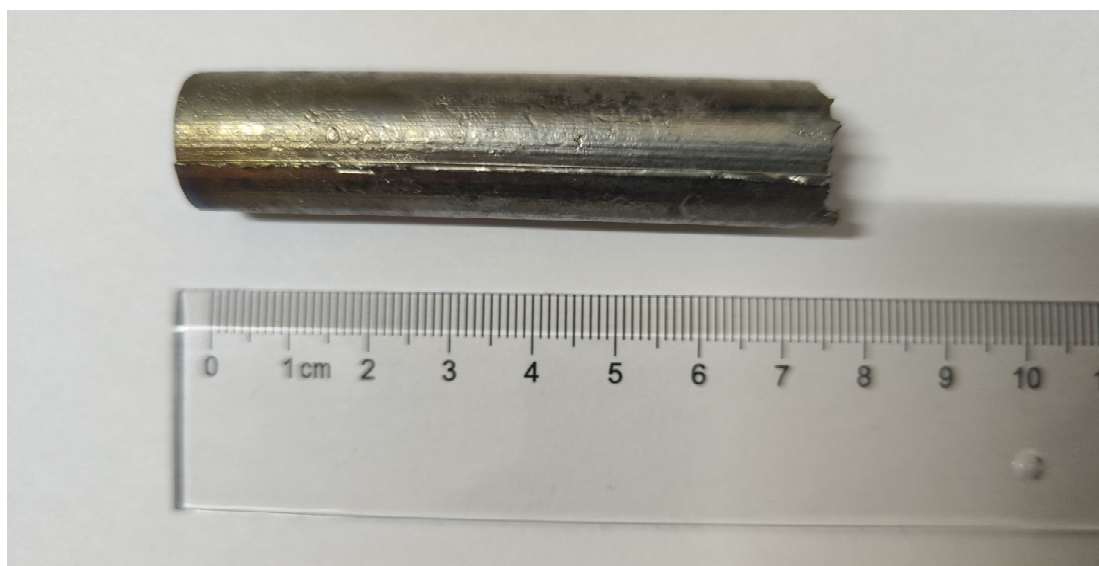
## Supplementary Files

**Table S1.** Parallel test data of room temperature compression tests (group 1).

<b>Samples</b> <b>Properties</b>	<b>TiAlNb</b>	<b>T0.5</b>	<b>T1</b>	<b>T2</b>	<b>T3</b>
Compression Strain (%)	18.4	23.2	24.1	22.7	19.9
Compression Stress (MPa)	1538	2020	2301	2206	2038
Fracture toughness (MPa/m <sup>2</sup> )	19.0	23.9	25.9	25.1	21.7

**Table S2.** Parallel test data of room temperature compression tests (group 2).

<b>Samples</b> <b>Properties</b>	<b>TiAlNb</b>	<b>T0.5</b>	<b>T1</b>	<b>T2</b>	<b>T3</b>
Compression Strain (%)	17.0	22.1	24.9	21.5	18.0
Compression Stress (MPa)	1570	2069	2240	2224	2105
Fracture toughness (MPa/m <sup>2</sup> )	15.9	23.2	27.2	25.9	20.7



**Figure S1.** Macro photo of the sample T1.