What does heat treatment change?

Heat Treatment of Steel Pipe & Tube: Normalizing, Annealing and Tempering

Stage	Controlled parameter	Why it matters
Heating	Heating rate and target temperature	Brings the product uniformly into the required thermal range
Holding	Time at target temperature	Allows the specified transformation or temperature equalisation
Cooling	Cooling medium and rate	Controls the resulting microstructure and avoids unwanted properties
Subsequent cycle	Tempering or other treatment when required	Adjusts hardness, strength, toughness or structural stability

Source / basis: https://niktrd.com/heat-treatment