

Plz see below Chart of the comparison between No.6005T5 aluminum and No.6063T5 aluminum.

Mechanical Property

Aluminum alloy	Tensile strength (/Mpa)	Yeild strength (Mpa)	Tensile rate (%)	Hardness (HW)	status
6005	≥260	≥215	≥7	≥15	T5
6063	≥160	≥110	≥8	≥10	T5

Chemical Element (≤%)

Aluminum alloy	Si	Fe	Cu	Mg
6005	0.60~0.90	0.35	0.10	0.40~0.60
6063	0.20~0.60	0.35	0.10	0.45~0.90

The most important key factor of the material is the aluminum yeild strength , when the value is high , that means the aluminum tube have more windload capacity , and won't bend and deformed.

As you can see in the charts , 6005T5 yeild strength is twice solid compare to 6063T5 aluminum.

What does T means in the aluminum No ?

Heat Treatment Code - (Name)

T1 - Artificial aging

T2 - Annealing

T4 - solution treatment + natural aging

T5 - solution treatment + incomplete artificial aging

T6 - solution treatment + complete artificial aging

T7 - solution treatment + stabilizing treatment

Our Mast Design Team's Computer **mast windforce** analysis with **finite element method**

Click → [3D CAD prototyping Windforce and top load force loaded](#)

Click → [Telescopic Mast Windforce Analysis Result](#)

Check out → [Aluminum No from Extruded Tube Manufacturer](#)