# The natural frequency of the photovoltaic tracking bracket



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The comparison of the mode shapes of tracking photovoltaic support system measured by the FM and simulated by the FE (tilt angle = 30& #176;). The modal test results indicated that the natural vibration ...

The natural frequencies and corresponding modal shapes of the tracker structure at maximum elevation angle of the solar tracker (60deg) are calculated and analyzed.

Because the support structure of the tracking photovoltaic support system has a long extension length and the components are D-shaped hollow steel pipes,the overall stiffness of the structure was found ...

Since the photovoltaic panels of the tracking photovoltaic support system have different tilt angles, changes of its natural frequencies and mode shapes under different tilt angles should be ...

In terms of finite element analysis,Wittwer et al.,obtained modal parameters of the tracking photovoltaic support system with finite element analysis,and the results are similar to those ...

tracking photovoltaic support system? What can be shown by the modal test results and finite element simulations of the tracking photovoltaic power generation bracket tracking photovoltaic support ...

Key findings are as follows. Dynamic characteristics of tracking photovoltaic support systems obtained through field modal testing at various inclinations, revealing three torsional modes within the 2.9-5.0 ...

Key findings are as follows. Can a tracking photovoltaic support system reduce wind-induced vibration? Finite element analysis also showed a slight increase in natural frequencies with increasing ...

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