WHAT IS CLAIMED IS:

1. A high-speed coupler comprising:

a coupling member couplable, at the bottom thereof, to a bed or support shaft of a drilling agitator;

a housing integrally formed on the top of the coupling member and configured to receive a rotor (rod) being rotatably inserted and installed into the housing;

coverings coupled to or decoupled from both ends of the housing; and

a bushing integrated with the outer periphery of the rotor and latched between the housing and the coverings such that there is no rotational clearance from the rotor, wherein the bushing is rotatable simultaneously with the rotor.

2. The high-speed coupler according to claim 1, wherein the bushing is inserted and engaged between the housing and the coverings coupled to both ends of the housing.

3. The high-speed coupler according to claim 2, wherein the bushing has friction dispersion holes formed

along a periphery thereof at regular intervals and penetrating from an inner diameter to an outer diameter thereof, the friction dispersion holes being configured to absorb and disperse friction shock generated during the rotation of the rotor (rod).

4. The high-speed coupler according to claim 1, wherein the bushing is a dual bushing interposed between the housing and the rotor (rod).

5. The high-speed coupler according to claim 4, wherein:

the dual bushing comprises a gap from an inner bushing positioned therein, and reinforcement tips integrated at both ends of the inner bushing; and

the high-speed coupler further comprises a first friction shock reducing unit composed of a tapered roller bearing formed into the gap to reduce a load and friction shock generated during the rotation of the rotor (rod).

6. The high-speed coupler according to claim 4, wherein:

the dual bushing comprises a gap from an inner bushing positioned therein, and reinforcement tips integrated at

both ends of the inner bushing; and

the high-speed coupler further comprises a second friction shock reducing unit composed of a banded ball bearing formed into the gap to reduce a load and friction shock generated during the rotation of the rotor (rod).