

Title (en)
VIBRATORY SCREENING APPARATUS.

Title (de)
VIBRATIONSSIEBMASCHINE.

Title (fr)
APPAREIL A TAMISER VIBRATOIRE.

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Abstract (en)
[origin: WO9324245A1] There is disclosed a vibratory screening apparatus (10, 10a) comprising a frame having a pair of opposed screen frame sides (11, 11a), a screen deck (13, 13a) mounted on the frame sides (11), and a shaft-driven vibratory mechanism coupled with the screen deck (13) to impart vibration energy thereto to assist the screening operation, the mechanism comprising: a pair of stubshafts (14) or projecting shaft ends (14b) associated one with each of the frame sides (11); a respective pair of bearing housings (15, 16; 15a, 16a) supporting each stubshaft (14) or shaft end (14b) and mounted on the respective frame sides (11, 11a) and spaced apart from each other; a respective counterweight (17, 17a) mounted on each stubshaft (14) or shaft end (14b) in the space between the housings (15, 16; 15a, 16a) of each pair, with the counterweight being rotatable with the stubshaft (14) or shaft end (14b) in order to apply vibration energy to the stubshaft and therefrom to the screen deck (13) via the bearing housings (15, 16; 15a, 16a) and the frame sides (11); and drive means (20, 20a) arranged to drive the vibratory mechanism. In one embodiment a drive motor (20) is coupled with each stubshaft (14) and arranged to apply synchronous drive to each stubshaft. In a second embodiment, a single shaft (14a) extends between the frame side (11a) and a single drive motor (20a) is coupled with one shaft end (14b). In both embodiments, the spaced bearing housings (15, 16; 15a, 16a) supporting each shaft end (14, 14b) with the counterweight (17, 17a) in the space between the housings provide vibrational energy to operate the screen but in a way which reduces the tendency of the drive shaft to oscillate excessively.

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