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Abstract

Self-Tapping Screw

10 The invention relates to a self-tapping screw (10, 30) comprising a drive (12) and a shank (14) bearing a thread comprising a main thread (16, 32), wherein the main thread (16, 32) has a maximum main thread external diameter (D_{AF}) and a cutting area (F) and a supporting area (T) following in the direction of the drive (12), wherein the shank (14) has a threaded end (18) at an end opposite the drive (12), with the screw end (18) having a diameter (DE) of at least 20% of the maximum main thread external diameter (D_{AF}). The invention is characterized in that the shank further has, in the region of the screw end (18), a
15 tap flute (20), wherein the tap flute (20) comprises at least two tapping thread turns (20a, 20b, 20c) which attain, in their external diameter (D_{AA}), no more than 90% of the maximum main thread external diameter (D_{AF}) and form a tap region in which the tapping thread turns (20a, 20b, 20c) have the same diameter development, and in addition in that the diameter of the main thread (16, 32) in the tap flute region (AB) is less than or equal to the diameter (D_{AA}) of the tapping thread turns (20a, 20b, 20c).