

ABSTRACT

A device for improving the method of manufacturing Archimedes screws by
5 assembling sectors. The invention relates to a device for producing an Archimedes
screw by assembling sectors on a shaft (13) without forming gaps, cutting edges or
weak regions between one another and ensuring the continuity of the turns of which
said screw consists. It consists of a sector (3) having a turn with a length equal to
one screw thread and having a geometry that enables it to be interlocked with
10 another, identical sector (3). The turn sits on a core, the geometry of which is
obtained by following in each case a helical generatrix which is offset through at
least one turn thickness. The terminal face of the turn is inclined a tone turn
thickness. The terminal face of the turn is inclined at an angle with respect to the
axis of the sector. The device according to the invention is particularly intended for
15 the production of systems for metering or pumping viscous, pulverulent or granular
products, said systems comprising at least one Archimedes screw.