Title (en)

WORKING PROCEDURE FOR THE MANUFACTURE OF A ROTOR WITH LAMINATED TERMINAL FOR AN ELECTRIC MACHINE.

Title (de)

ARBEITSVERFAHREN ZUR HERSTELLUNG EINES SCHICHTPOLLÄUFERS EINER ELEKTRISCHEN MASCHINE.

Title (fr)

PROCEDE DE TRAVAIL POUR LA FABRICATION D'UN ROTOR A POLES LAMELLES D'UNE MACHINE ELECTRIQUE.

Publication

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Application

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Priority

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Abstract (en)

[origin: WO8001444A1] In large diameter electric motors, in particular engines for hydraulic power stations, the rotors are constituted by segments (1) made up of many metal sheets stacked by covering over and placed on a rotor brace (6). Following the staggering of the sheet segments during the stacking to produce rings several meters in diameter, inaccuracies occur due to the summing up of the limits set to the division of the individual sheets and which are called stacking inaccuracies. Because of this, the bolt passage holes (3) are diminished by thereabout a few hundredths of a millimeter. To reinsure the exact measure of these passage holes it is proposed to reinsure real measure to the borings (3) made in the sheet segments (1) stacked by crushing their walls by means of a calibrating tool comprising a cylindrical body (12) provided with conical rollers at its circumference (14). The forming of cuttings is thus avoided and the power of the machine tool is notably less than that of machines utilized in known procedures. Moreover, the calibration of the holes can be executed with only one pass, thus entailing a significant saving of time in working.

Abstract (fr)

Dans les machines electriques de grand diametre, notamment les machines de centrales hydrauliques, les rotors sont constitues par des segments (1) formes de plusieurs toles empilees avec recouvrement et montes sur un croisillon rotorique (6). En raison du decalage des segments de tole lors de l'empilage pour former des anneaux de plusieurs metres de diametre, il se produit des imprecisions dues a l'addition des tolerances de division des toles individuelles et que l'on appelle decalage d empilage. De ce fait, les trous (3) de passage des boulons sont retrecis de l'ordre de grandeur de centiemes de millimetre. Pour retablir la dimension de passage des trous, il est propose de redonner une mesure exacte aux percages (3) pratiques dans les segments de tole (1) empiles en ecrasant leur paroi a l'aide d'un outil de calibrage comprenant un corps cylindrique (12) muni a sa peripherie de rouleaux coniques (14). On evite ainsi la formation de copeaux et la puissance de la machine-outil est nettement inferieure a celle des machines utilisees dans les procedes connus. De plus, 1e calibrage des trous peut etre effectue en une seule passe, ce qui entraine aussi une economie de temps e travail importante.

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