

Method for making matched surfaces of rotors with integral structure of the system of blades, bushing and at least one blade crown is implemented by means of taking off metal on the workbench after making a complete / non-split joint, with allowance for the detail in the joint area. This method includes obtaining and processing of metrological data for at least one actual surface and making a matched to it surface. Obtaining and processing of metrological data and making of surfaces is carried out at one processing mill without change of the rotor fastening. Calculated surface of each being processed part is prepared in the form of data that are saved in the memory of a computer. On the basis of at least one measured surface a matching surface is made, this overlaps the joining area, at that this surface has no breaks (bends in long direction) and in smooth way, with prescribed minimal curvature, it goes to at least one actual surface adjoining it and / or surface being repaired; at that that very surface is to correspond in optimal way to mathematically continuous, 3-dimensional surface with minimal curvature being given with changes locally and / or depending of the direction; and approximation of the calculated profile has priority with respect to the approximation of the calculated position.