

Title (en)
Straightening machine for thin-walled pipes.

Title (de)
Richtmaschine für dünnwandige Rohre.

Title (fr)
Machine à dresser pour tubes à parois minces.

Publication
EP 0016422 A1 19801001 (DE)

Application
EP 80101302 A 19800313

Priority
DE 2910705 A 19790319

Abstract (en)
1. Straightening machine which consists of several individual machines which are arranged in succession in the direction of movement of a thin-walled pipe (1) and which each have a frame (3, 10) which can be driven to rotate, and through which the thin-walled pipe (1), secured against rotation (rollers 2, 18), can be guided, with rollers (9, 13) which can be adjusted transversely to the pipe (1) and can be inclined in relation to the pipe axis, in which machine the rotational speeds of the frames (3, 10) which can be driven in opposite directions of rotation, or the inclinations of the rollers (9, 13) of the individual machines differ or can differ from one another for the purpose of building up tension in the pipe (1), the pivot axes (7, 15) of the roller-holders (6, 14) located in the two drivable frames (3, 10) are each arranged in a plane lying transversely to the axis of rotation (8) of the frames (3, 10) and at least one roller-holder (6, 14) supporting a roller (9, 13) is located in each of the frames (3, 10), characterised in that only two individual machines (3, 9 and 10, 13 respectively) with a common axis of rotation are provided, in that each of the rollers (9, 13) has a crowned shell surface, and in that the rotational speeds of the frames (3, 10) are calculated in such a way that the effective polishing width is greater than the advance, per revolution, of the material to be straightened.

Abstract (de)
Durch diese Richtmaschine mit in den Rahmen (3; 10) radial und gegenüber der Gutachse (8) schräg einstellbar einstellbaren Rollen (9; 13) werden die Rohre (1) gegen Verdrehen gesichert hindurchgeführt, wobei die Umlaufgeschwindigkeiten der mit entgegengesetzter Drehrichtung antreibbaren Rahmen (3; 10) bzw. die Schrägstellungen der Rollen (9; 13) der Einzelmaschinen von einander abweichen können. Um dünnwandige Rohre (1) einwandfrei gerade zu richten und deren Kreisquerschnitt zu erhalten, liegen die Schwenkachsen (7; 15) der in den beiden antreibbaren Rahmen (3; 10) angeordneten Rollenhalter (6; 14) je in einer quer zur Drehachse (8) der Rahmen (3; 10) liegenden Ebene, ist in jedem der Rahmen (3; 10) mindestens eine eine ballige Mantelfläche aufweisende Rolle 9; 13) lagernder Rollenhalter (6; 14) angeordnet und die Umlaufdrehzahlen der Rahmen (3; 10) derart bemessen, daß die wirksame Polierbreite größer als der Vorschub des zu richtenden Gutes (1) pro Umdrehung ist. Dabei wird die umlaufende Querschnittsverformung zum Richten benutzt.

IPC 1-7
B21D 3/06

IPC 8 full level
B21D 3/06 (2006.01)

CPC (source: EP)
B21D 3/06 (2013.01)

Citation (search report)
• DE 2020915 A1 19711125 - VNII PK I METALL MASCHINO
• DE 1032066 B 19580612 - TH CALOW & CO
• DE 1140052 B 19621122 - TH CALOW & CO

Cited by
CN113333508A; ITBO20080634A1; CN111958357A; CN104971968A; CN109773606A; CN111151595A; WO2010044050A1

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