

ABSTRACT (Fig. 4)

"ANNULAR CUTTER CONNECTING APPARATUS
AND ANNULAR CUTTER"

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An annular cutter connecting apparatus includes an
arbour (101), annular cutter fixing locking members
(113) received in holding holes (112) formed in the
lower end portion (111) of the arbour (101) and a
10 sleeve (118) surrounding the lower end portion (111) of
the arbour (101), for connecting an annular cutter
(130A) to the arbour (101). The sleeve (118) has a
first control face (119) having an inner diameter equal
to the outer diameter of the lower end portion (111) of
15 the arbour (101), for projecting the locking members
(113) into the central bore (102) by a predetermined
length when the first control face (119) engages the
locking members (113), and second control faces (120)
formed circumferentially in the first control face
20 (119), for receiving the locking members (113). The
sleeve (118) is rotatable around its own axis so as to
cause the locking members (113) to selectively face the
first control face (119) and the second control faces
(120), respectively. An annular cutter (130A) has a
25 shank portion (132A) provided with locking member
passing portions (133) on that part of the outer
peripheral surface of the shank portion (132A) which
corresponds to the holding holes (112) of the annular
cutter connecting apparatus. The shank portion (132A)
30 has depressed locking member receiving portions (134A)
formed in the locking member passing portions 133 and
receive the locking members 113). The annular cutter
(130) is connected to and removed from the arbour (101)
in one-touch operation.

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