WARNING
In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

1/00 Mixing or kneading machines for the preparation of dough (domestic mixing or kneading machines A47J 43/00, A47J 44/00; mixing or kneading of substances in a plastic state in general B29B 7/00))

1/03 . . . {Plant; Systems, i.e. flow charts or diagrams}
1/06 . . . {Methods}
1/02 . . . with vertically-mounted tools; Machines for whipping or beating
1/04 . . . with inclined rotating mixing arms or levers
1/06 . . . with horizontally-mounted mixing or kneading tools; Worm [or screw] mixers
1/065 . . . {Worm or screw mixers, e.g. with consecutive mixing receptacles}
1/08 . . . with rollers
1/083 . . . {by calendering, i.e. working between rollers (using rollers for shaping dough A21C 3/02)}
1/086 . . . {having a receptacle rotating about a vertical axis cooperating with rotary rollers}
1/10 . . . with additional aerating apparatus for the manufacture of aerated doughs
1/105 . . . {the gas being introduced through the shaft of a rotary tool}
1/12 . . . for the preparation of dough directly from grain
1/14 . . . Structural elements of mixing or kneading machines; {Parts; Accessories}
1/1405 . . . {Tools}
1/141 . . . . {having mixing or cutting elements essentially perpendicular to their axes}
1/1415 . . . . {Shafts; Heads therefor}
1/142 . . . . {Feeding mechanisms, e.g. skip lifting mechanisms}
1/1425 . . . . {for feeding in measured doses}
1/143 . . . . . {using pneumatic means}
1/1435 . . . . {for liquids (A21C 1/1425 takes precedence)}
1/144 . . . . {Discharge mechanisms}
1/1445 . . . . {using tiltable receptacles; Tilting mechanisms therefor}
1/145 . . . {Controlling; Testing; Measuring (A21C 1/1425 takes precedence)}
1/1455 . . . . {Measuring data of the driving system, e.g. torque, speed, power}
1/146 . . . . {Measuring properties of the dough, e.g. moisture, electrical conductivity, temperature (A21C 1/1455 takes precedence)}
1/1465 . . . {Drives}
1/147 . . . . {for planetary motion}
1/1475 . . . . {Brakes therefor}
1/148 . . . . {Safety arrangements (A21C 1/1485 takes precedence)}
1/1485 . . . {Doors; Closures; Operating, e.g. safety, mechanisms therefor}
1/149 . . . . {Receptacles, e.g. provided with means for carrying or guiding fluids, e.g. coolants}
1/1495 . . . . {Arrangements for cooling or heating (receptacles with means for guiding fluids per se A21C 1/149); Arrangements for applying superior or sub-atmospheric pressure}

3/00 Machines or apparatus for shaping batches of dough before subdivision
3/02 . . . Dough-sheeters; Rolling-machines; Rolling-pins (mixing or kneading dough by rollers A21C 1/08; non-manual rolling and working of discrete dough pieces A21C 7/00)
3/021 . . . {Rolling-pins; Hand-operated spreading or rolling devices (A21C 11/004 takes precedence)}
3/022 . . . {Laminating or undulating a continuous dough sheet, e.g. by folding transversely or longitudinally onto a moving surface (combined with filling A21C 9/045)}
3/024 . . . {using one or more rollers with an axis of rotation substantially parallel or oblique to the direction of dough transport (A21C 3/065 takes precedence); hand-operated rollers A21C 3/024}
3/025 . . . {with one or more rollers moving perpendicular to its rotation axis, e.g. reciprocally (A21C 3/024 takes precedence; hand-operated rollers A21C 3/021)}
3/027 . . . . {with multiple rollers moving in a closed loop, e.g. in an orbital path; Planetary roller systems}
3/028 . . . . {using rollers having a shape other than straight round cylinders (A21C 3/04 takes precedence)}
3/04 . . . Dough-extruding machines; {Hoppers with moving elements, e.g. rollers or belts as wall elements for drawing the dough}
3/06 . . . Machines for coiling sheets of dough, e.g. for producing rolls (. e.g. crescent-rolls (as part of a machine for further moulding or forming A21C 7/00); with filling A21C 9/06)}
A21C

3/065 . . . (the coil axis of the produced rolls being in parallel or oblique position relative to the transport direction; with coiling elements, e.g. rollers, being placed in parallel or oblique position relative to the transport direction)

3/08 . Machines for twisting strips of dough, e.g. for making pretzels

3/10 . combined with dough-dividing apparatus

5/00 Dough-dividing machines

5/003 . . . (with revolving bodies, e.g. with bodies having spaces separated by radially oriented elements or walls)

5/006 . . . (for dispensing liquid or semi-liquid dough, e.g. batter)

5/02 . with division boxes and ejection plungers

5/04 . . . with division boxes in a revolving body with radially-working pistons

5/06 . . . with division boxes in a revolving body with axially-working pistons

5/08 . . . with radial, i.e. star-like, cutter-blades slidable in the slots of, and relatively to, a pressing-plunger (A21C 7/06 takes precedence)

7/00 Machines which homogenise the subdivided dough by working other than by kneading

7/005 . . . (the dough pieces being worked in radially disposed cavities in a rotating drum)

7/01 . with endless bands (A21C 7/005 takes precedence)

7/02 . with moulding channels (A21C 7/01 takes precedence)

7/04 . with moulding cups (A21C 7/01 takes precedence)

7/06 . combined with dividing machines with radial, i.e. star-like, cutter-blades slidable in the slots of, and relatively to, a pressing-plunger

9/00 Other apparatus for handling dough or dough pieces

9/02 . Apparatus for hanging or distributing strings of dough, such as noodles, spaghetti or macaroni, on bars

9/04 . Apparatus for spreading granular material on, or sweeping or coating the surfaces of, pieces or sheets of dough (coating baked articles A21C 15/002)

9/045 . . . (Laminating dough sheets combined with applying a filling in between, e.g. lasagna-type products (ravioli-making machines A21C 9/066; making laminated baked wafer sheets A21C 15/02))

9/06 . Apparatus for filling pieces of dough such as doughnuts (A21C 11/163 takes precedence; apparatus for filling baked products A21C 15/007)

9/061 . . . (Making continuous filled tubular products, e.g. with subsequent cutting)

9/063 . . . (Applying a folding, wrapping, rolling action (A21C 9/045, A21C 9/061 take precedence)

9/065 . . . (by means of injection into a piece of dough (filling baked articles A21C 15/007))

9/066 . . . (using two separate sheets or pieces of dough with filling in between, e.g. crimped at their edges; Ravioli-making machines (A21C 11/163 takes precedence)

9/068 . . . (Tools for crimping or trimming of edges or rims, e.g. hand-operated)

9/08 . Depositing, arranging and conveying apparatus for handling pieces, e.g. sheets of dough (for handling liquid or semi-liquid dough, e.g. batter A21C 5/006)

9/081 . . . (Charging of baking tins or forms with dough)

9/083 . . . (Manipulating tins, pans etc., e.g. charging or discharging conveyors, trolleys or ovens)

9/085 . . . (Separating, spacing, orienting or aligning discrete dough pieces, e.g. after passing a cutting device)

9/086 . . . (Stacking or unstacking discrete dough sheets (with filling in between sheets A21C 9/045)

9/088 . . . (Folding or bending discrete dough pieces or dough strips (twisting strips of dough A21C 3/08; with filling action A21C 9/063; forming toroid-shaped dough pieces A21C 11/002))

11/00 Other machines for forming the dough into its final shape before cooking or baking

11/002 . . . (the shape being toroid-like, e.g. bagels, doughnuts (extruding machines for toroid shaped products A21C 11/166))

11/004 . . . (forming the dough into a substantially disc-like shape with or without an outer rim, e.g. for making pie crusts, cake shells or pizza bases)

11/006 . . . (by pressing or press-moulding (A21C 11/008 takes precedence)

11/008 . . . (by press-rolling)

11/02 . Embossing machines

11/04 . . . with cutting and embossing rollers or drums (A21C 11/106 takes precedence)

11/06 . . . handling regularly pre-shaped sheets of dough

11/08 . . . with engraved moulds, e.g. rotary machines with die rolls

11/10 . . . combined with cutting apparatus (A21C 11/004 takes precedence)

11/103 . . . (having multiple cutting elements slidable or rotably mounted in a diaphragm-like arrangement)

11/106 . . . (using hand-operated cutting tools (A21C 9/068 takes precedence)

11/12 . . . Apparatus for slotting, slitting or perforating the surface of pieces of dough

11/14 . . . for star-like stamping

11/16 . Extruding machines

11/163 . . . (Applying co-extrusion, i.e. extruding two or more plastic substances simultaneously, e.g. for making filled dough products; Making products from two or more different substances supplied to the extruder)

11/166 . . . (for making toroid-shaped products, e.g. doughnuts (A21C 11/163 takes precedence)

11/18 . . . with pistons

11/20 . . . with worms

11/22 . . . Apparatus with rollers and cutting discs or blades for shaping noodles

11/24 . . . Apparatus for cutting out noodles from a sheet or ribbon of dough by an engaging pair of grooved rollers

13/00 Provers, i.e. apparatus permitting dough to rise (testing dough properties G01N 33/10)

13/02 . . . with endless conveyors [, e.g. for moving the dough pieces progressively through the prover)
14/00 Machines or equipment for making or processing dough, not provided for in other groups of this subclass

15/00 Apparatus for handling baked articles

15/002 { Apparatus for spreading granular material on, or sweeping or coating the surface of baked articles (of pieces of dough A21C 9/04; for confectionary A23G 3/28) }

15/005 { of which at least the dispensing part is hand-held, e.g. comprising a flexible container, pouch or gun-like applicator }

15/007 { Apparatus for filling baked articles (filling pieces of dough A21C 9/06; filled bakery products A21D 13/30, A21D 13/80) }

15/02 Apparatus for shaping or moulding baked wafers; Making multi-layer wafer sheets

15/025 { Apparatus for shaping or moulding baked wafers, e.g. to obtain cones for ice cream }

15/04 Cutting or slicing machines or devices specially adapted for baked articles other than bread (for cutting or slicing bread B26B, B26D)