

The line consists of:

#### A. LAMINATOR:

### Section I: Working width 600 mm:

1. Dough stripformer type "low stress" [LSS] for forming a continuous strip of dough with minimal dough structure damage. Working width 500 mm. The device consists of one teflonized funnel, with almost vertical sides, with a capacity of approx. 50 l, arranged above two pairs of rollers. The upper rollers are six-sided, are 500 mm long and have a fixed spacing of 63 mm. By removable Scrapers will clean the surface of the rollers. The complete top of the machine is hinged, the upper rollers are removable and thus the machine is good accessible for cleaning purposes. The lower rollers have a diameter of 150 mm and are 500 mm long. The opening between the two rollers is adjustable in the Range from 16 to 48 mm. One of the two lower rollers is with lateral Plastic discs, with a diameter of 265 mm, fitted to the sides of the Dough band should be as smooth as possible. The surface of the lower rollers is with cleaned removable wipers. Each pair of rollers comes with its own frequency controlled motor driven. The machine is with relubricated bearings fitted. Equipped with two frequency controllers in the main electrical cabinet. All Frequency controllers are integrated in a cascade system. Equipped with a photocell for Level control in the funnel. Mounted on a mobile "C" subframe.
2. Import conveyor track with a length of about 3500 mm around the dough sheet in the Quick-Reduktor-Schlichtwerk lead. Working width 600 mm.
3. Flour spreader to provide a conveyor belt with a thin layer of flour. working width 600 mm. The device consists of a funnel, above a profiled plastic roller arranged. The spreading width is adjustable in the hopper via two plastic discs on the side.
4. Flour shaker to provide a dough sheet with a thin layer of flour. working width 600 mm. The device consists of a funnel, above a profiled plastic roller arranged. The spreading width is adjustable in the hopper via two plastic discs on the side.
5. A set of two (2) driven side rollers for loading the straight Side edges of the dough layer with flour to the next two-roll finishing mill. This section is adjustable in width for obtaining the desired dough width.
6. Multiroller Unit to reduce the dough thickness of 10: 1 depending on max Dough type and quality. Working width 600 mm. The device consists of 12 rolls, arranged in a set of rollers mounted above a top roller. The dough thickness is adjustable by changing the opening in the range of 2 - 42.5 mm between the roller set and the Sub roller.
7. Intermediate track with a length of approx. 2500 mm to guide the dough band into the two-roller screed. Working width 600 mm. The railway starts with a rising Section where a flour spreader can be mounted, and then goes on to the transport section after the finishing work.
8. Flour spreader to provide a conveyor belt with a thin layer of flour. working width 600 mm. The device consists of a funnel, above a profiled plastic roller arranged. The spreading width is adjustable via two lateral stainless steel discs in the funnel.
9. Grease pump to form a continuous layer of fat. The device consists of one Hopper, with a capacity of about 85 l, above two feed screws arranged. The feed screws are powered by an AC servo drive Pressure sensor at the end of these screws driven. This will be a constant amount of fat transported into the monopump without overworking the fat. At the funnel end are vertical

Feeding screws mounted to push the grease into the screws and thus a better To achieve filling of the snails. At the end of the screws is below 90 °, a monopump arranged with a short feed screw. The monopump is powered by a frequency controlled motor. The grease is carried by the monopump through a pipeline a diameter of 80 mm led to the discharge mouthpiece, which through the Transport path is supported. This mouthpiece produces a layer of fat with a firm Width of 270 mm. The working width and the metering opening are adjustable from 3-20 mm. Performed with a level control in the hopper of the grease pump, which sends a signal to the Increasing fat block feed path gives off for leading the funnel.

10. Rising supply track with a length of approx. 5200 mm, for grease blocks. working width 320 mm. The conveyor belt runs intermittently, controlled by a photocell in the hopper the grease pump to avoid overfilling. The band is equipped with carriers, so that the fat blocks do not slip. At the beginning of the track, a slide rail is mounted around to facilitate the placement of the blocks by hand. Equipped with quick release device to relax the tape for cleaning purposes. Drive through a drum motor with fixed speed. The drive roller has a vulcanized rubber pad. The train is mounted on a mobile base.
11. Two folding bands, each with a length of approx. 480 mm, around the dough sides over the fat layer to fold. Both straps have adjustable folding shoes around the dough over the grease layer accompany.
12. Meal spreader to make a dough band with a thin layer of flour. working width 600 mm. The device consists of a funnel, above a profiled plastic roller arranged. The spreading width is adjustable via two lateral stainless steel discs in the funnel.
13. Non-driven pressure roller to slightly compress the dough layers for Promote development through the Quick Reductor Sizing Unit. Working width 600 mm. The Device consists of a single articulated roller. The height of the roll is through the underneath ongoing dough layer determined.
14. Quick Reducer Sizing Unit to reduce dough thickness from 10: 1 maximum, depending on Dough type and quality. Working width 600 mm. The device consists of 12 rolls, arranged in a set of rollers mounted above a top roller. The dough thickness is adjustable by changing the opening in the range of 2 - 42.5 mm between the roller set and the Sub roller.
15. Laminating funnel to continuously laminate the dough sheet. Provided with a rising feed path for transporting the dough to the laminating funnel. working width 600 mm. The laminating width is adjustable from 250 to 550 mm. The funnel moves in a continuous forward and backward movement at 90 ° to the following Transport path. The produced number of layers is adjustable between 4 and 10 (depending on from the reduction capacity of the remaining line).

## **Section II: Working width 600 mm:**

16. Feed table with a length of approx. 3400 mm to guide the dough sheet into the Quick Reductor screed. Working width 600 mm.
17. Flour spreader to provide a conveyor belt with a thin layer of flour. working width 600 mm. The device consists of a funnel, above a profiled plastic roller arranged. The spreading width is adjustable via two lateral stainless steel discs in the funnel.
18. Meal spreader to make a dough band with a thin layer of flour. working width 600 mm. The device consists of a funnel, above a profiled plastic roller arranged. The spreading width is adjustable via two lateral stainless steel discs in the funnel.

19. Non-driven pressure roller to slightly compress the dough layers for Promote development through the Quick Reductor Sizing Unit. Working width 600 mm. The Device consists of a single articulated roller. The height of the roll is through the underneath ongoing dough layer determined.
20. Quick Reducer Sizing Unit to reduce dough thickness from 10: 1 maximum, depending on Dough type and quality. Working width 600 mm. The device consists of 12 rolls, arranged in a set of rollers mounted above a top roller. The dough thickness is adjustable by changing the opening in the range of 2 - 42.5 mm between the roller set and the Lower roll.
21. Laminating tape with a length of about 5750 mm for depositing the continuous Dough zig-zag on the infeed path of the next section; executed with own AC frequency-controlled drive; Lamination length max. 1430 mm; Working width 600 mm; number adjustable by layers 4, 6, 8 or 10. The lamination length is electrically adjustable.

### **Section III: Working width 1400 mm:**

22. Feed table with a length of approx. 3400 mm to guide the dough sheet into the Quick Reductor screed. Working width 1400 mm.
23. Flour spreader to provide a conveyor belt with a thin layer of flour. working width 1400 mm. The device consists of a funnel, above a profiled plastic roller arranged. The spreading width is adjustable via two lateral stainless steel discs in the funnel. Including attachment funnel.
24. Flour-shaker to provide a dough with a thin layer of flour. working width 1400 mm. The device consists of a funnel, above a profiled plastic roller arranged. The spreading width is adjustable via two lateral stainless steel discs in the funnel. Including attachment funnel.
25. Driven pressure roller to compress the dough layers slightly to promote the Development through the Quick Reductor Smoothing Unit. Working width 1400 mm. The high of Roller is adjustable in the range of 20 to 100 mm.
26. Quick Reducer Sizing Unit to reduce dough thickness from 10: 1 maximum, depending on Dough type and quality. Working width 1400 mm. The device consists of 12 rolls arranged in a set of rollers mounted above a top roller. The dough thickness is adjustable by changing the opening in the range of 2 - 42,5 mm between the roller set and the lower roller.
27. Intermediate track with a length of approx. 3000 mm around the dough sheet in the cross rolling mill to lead. Working width 1400 mm. The railway starts with a rising section, where a Flour spreader can be mounted, and then goes on in the angled transport section after the finishing work.
28. Flour spreader to provide a conveyor belt with a thin layer of flour. Working width 1400 mm. The device consists of a funnel, above a profiled plastic roller arranged. The spreading width is adjustable via two lateral stainless steel discs in the funnel. Equipped with quick filling system to fill the spreader from the side of the line.
29. Cross rolling mill, in reinforced version, to roll the dough sheet in width. Working width 1400 mm. The device consists of a roll with a diameter of 182 mm and a length of 250 mm, which in width by a motor with fixed Speed is moved back and forth. The roll itself rotates over a rack. The Roller surface is cleaned by scrapers. The height of the roll is with a handwheel adjustable from 1 to 30 mm above the conveyor belt.

30. Two-roll finishing mill to reduce dough thickness from 2: 1 maximum, depending on Dough type and quality. Working width 1400 mm. The device consists of two rollers, which are mounted one above the other. The dough thickness is adjustable by changing the roller opening in the Range of 1 - 42.5 mm.
31. Intermediate track with a length of approx. 2500 mm in order to guide the dough sheet into the two-roller screed. Working width 1400 mm. The railway starts with a rising Section where a flour spreader can be mounted, and then goes on to the transport section after the finishing work.
32. Flour spreader to provide a conveyor belt with a thin layer of flour. Working width 1400 mm. The device consists of a funnel, above a profiled plastic roller arranged. The spreading width is adjustable via two lateral stainless steel discs in the funnel.
33. Equipped with quick filling system to fill the spreader from the side of the line. 33. Flour spreader to provide a dough band with a thin layer of flour. working width 1400 mm. The device consists of a funnel, above a profiled plastic roller arranged. The spreading width is adjustable via two lateral stainless steel discs in the funnel. Including attachment funnel.
34. Two-roll finishing mill to reduce dough thickness from 2: 1 maximum, depending on Dough type and quality. Working width 1400 mm. The device consists of two rollers, which are mounted one above the other. The dough thickness is adjustable by changing the roller opening in the Range of 1 - 42.5 mm.

#### **B. UNIVERSAL SYSTEM with a working width of 1400 mm:**

35. Main transport track with a length of approx. 12 m. Working width 1400 mm. The train starts with a rising section where a flour spreader can be mounted and then goes over into a horizontal track where further processing can take place. Equipped with a sharp Takeover role at the end of the web for a perfect transfer of Products. Belt tensioner equipped with encoder for synchronization with other devices. The drive roller has a vulcanized rubber pad. Drive through one frequency controlled motor.
36. Flour spreader to provide a conveyor belt with a thin layer of flour. working width 1400 mm. The device consists of a funnel, above a profiled plastic roller arranged. The spreading width is adjustable via two lateral stainless steel discs in the funnel. Equipped with quick filling system to fill the spreader from the side of the line.
37. Flour brushing device to remove too much scattered flour from the dough band. working width 1400 mm. The angle and the height of the brushes are adjustable. The brushes are light removable and are made by a motor with two directions of rotation and firmer Speed driven. Equipped with two containers below the track to the Catching surplus flour. The brushes are equipped with a protective hood with vacuum device equipped for suction of flour dust.
38. Set of 11 detachable universal width knives, for cutting dough strips; Working width 1400 mm. Universal width diameter 100 mm. The universal width knives are made of stainless steel, hinged and with extra adjustment axes.
39. 2x2 residual dough brushes with a diameter of 250 mm around leftover strips at the side dissipate. Each brush has its own fixed speed and drive On / off switch.
40. Transverse track with a length of about 2 m; Working width 200 mm; at fixed speed; for discharging the residual dough to the side of the web; including collection container. Fitted with a quick release device to relax the belt for cleaning purposes.

41. Air operated water spray device provided with six nozzles for spraying Products or a strip of dough with water. Working width 1200 mm. Every nozzle is in the Width adjustable and can be switched on or off. Equipped with a solenoid valve Stop water and air supply as soon as the transport path stops. The nozzles are executed with needles with which you can manually pierce the sprayer regularly Avoid blockages.
42. Universal monopump dosing machine; This machine is equipped with 12 monopumps with Feed screws are provided in the funnel, equipped. In the funnel is a set of feed Paddles arranged to facilitate the supply of filling in the feed screws. The individual pumps can be switched on and off separately; every pump is with equipped with an AC frequency controlled motor (Lenze). The 12 nozzles are on one Bridge mounted. The nozzles are easily interchangeable, and are adjustable in width. Pumps and nozzles are easily cleaned via hoses and milk couplings connected. Suitable for discontinuous or continuous dosing. At discontinuous dosing, the weight per nozzle can be adjusted. Equipped with a photocell for level control in the hopper. Equipped with photocells for Detecting the products to avoid being dosed when no product is present is. Engineered in Nirosta and other stainless materials. Mounted on one mobile C-frame. Funnel capacity approx. 150 liters. The total speed of All outputs are adjustable via the frequency controller. The dosing machine is against "Dry run" protected.
43. Universal monopump dosing machine; This machine is equipped with 12 monopumps with Feed screws are provided in the funnel, equipped. In the funnel is a set of feed Paddles arranged to facilitate the supply of filling in the feed screws. The individual pumps can be switched on and off separately; every pump is with equipped with an AC frequency controlled motor (Lenze). The 12 nozzles are on one Bridge mounted. The nozzles are easily interchangeable, and are adjustable in width. Pumps and nozzles are easily cleaned via hoses and milk couplings connected. Suitable for discontinuous or continuous dosing. At discontinuous dosing, the weight per nozzle can be adjusted. Equipped with a photocell for level control in the hopper. Equipped with photocells for Detecting the products to avoid being dosed when no product is present is. Engineered in Nirosta and other stainless materials. Mounted on one mobile C-frame. Funnel capacity approx. 150 liters. The total speed of All outputs are adjustable via the frequency controller. The dosing machine is against "Dry run" protected.

### **Sandwich**

44. Transport track with a length of approx. 11.5 m. Working width 700 mm. Including angled section. Drive through a frequency controlled motor. Equipped with a frequency regulator in the main electrical cabinet. The frequency controller is in one Integrated cascade system. Equipped with a quick release device around the band for cleaning purposes.
45. Transport track with a length of about 3500 mm. Working width 700 mm. Drive through one frequency controlled motor. Equipped with a frequency regulator in the main electrical cabinet. Integrated skating system. Equipped with one Quick release device to relax the belt for cleaning purposes.

### **Continued universal system with a working width of 1200 mm:**

46. Main transport track with a length of approx. 11.5 m. Working width 1200 mm. The train starts with a rising section where a flour spreader can be mounted and then goes over into a

horizontal track where further processing can take place. Equipped with a sharp Takeover role at the end of the web for a perfect transfer of Products. Belt tensioner equipped with encoder for synchronization with other devices. The drive roller has a vulcanized rubber pad. Drive through a frequency controlled motor. Equipped with a frequency regulator in the Main electrical cabinet. The frequency controller is integrated in a cascade system. Note: The main transport lane is synchronized with the previous main transport lane - Position 35.

47. Flour-spreader to provide a conveyor belt with a thin layer of flour. working width 1200 mm. The device consists of a funnel, above a profiled plastic roller arranged. The spreading width is adjustable via two lateral stainless steel discs in the funnel. Equipped with quick filling system to fill the spreader from the side of the line.
48. Mechanical tracking guillotine for cutting and punching; Maximum number Cycles, when run with a knife, adjustable to 120 per minute; if with one Cutter designed, adjustable up to 80 per minute. Lifting height 120 mm. working width 1200 mm. Passage height under the safety guard 70 mm. The lower beam under the conveyor belt moves synchronized with the knife or cookie cutter; the Cookie Cutter are easy to assemble and remove with two levers; executed with a AC frequency controlled servo drive. Engineered in stainless steel and others corrosion resistant materials. Including a straight knife with in height adjustable scrapers. (Passage height under the scraper approx. 40 mm). Included Synchronization.
49. Multifunctional line spreader track with a length of approx. 1500 mm around products in the Width to separate. Working width 1200 mm. Drive through a frequency controlled motor. Equipped with a frequency regulator in the main electrical cabinet. The frequency controller is integrated into a cascade system. Equipped with a quick release device around the Configuration of the straps easy to change. Equipped with screw spindles for Leveling and positioning of the transport path. The transport track is mounted on one mobile undercarriage. Including templates for easy adjustment of the String configuration.
50. Transport track with a length of about 2500 mm. Working width 1000 mm. Drive through one frequency controlled motor. Equipped with a frequency regulator in the main electrical cabinet. The frequency controller is integrated in a cascade system. Equipped with a sharp Takeover role at the beginning and at the end of the course. Equipped with a quick release device to relax the belt for cleaning purposes. Equipped with Screw spindles for leveling and positioning the transport path. The transport railway is mounted on a mobile undercarriage.
51. Absetzband for the automatic supply of the products to the baking sheet. Length approx. 4000 mm; Settling length approx. 830 mm; including automatic tape control device. Working width 1000 mm. Settling movement at fixed speed; Band with adjustable Speed; Execution in stainless steel and other stainless materials. Equipped with a frequency regulator in the main electrical cabinet. The frequency controller is in integrated into a cascade system. The belt and rollers are cleaned by scrapers. Equipped with a photocell at the end of the track to detect the products. After Product detection, the starting moment of Absetzbewegung be set by counter. Executed with a pneumatic lift to lower the nose. Apples for apple / cherry bag - 10 rows in width:
52. Basic set decorating roller, including underrun roller and protective cover. working width 1400 mm. Including set of decorating rolls to cut designs into the dough sheet. The Rollers are mounted on a shaft. Diameter of the rollers 120 mm.

53. Set of ten folding shoes. Working width 1400 mm. The shoes are suitable for folding Dough strips with a width between 90 and 160 mm. The shoes are mounted on one removable bridge and are adjustable in width.
54. Set of hinged pressure rollers with brackets to close the 2 Teiglagen. Working width 1400 mm. Each roll has a diameter of 110 mm. Execution of the Rolls in Nirosta. Mounted on a shaft with adjustable collar. The wave is interchangeable for other product formats.
55. Straight Guillotine knife with pressure edge. Working width 1200 mm.
56. Two rod weave tracks, each with a length of approx. 530 mm, mounted in one common rack to place products under a water spray device and a Universal shaker to transport. Working width 1200 mm. Equipped with "L" rails for Installation of a spreader and free space for mounting the water spray device. Two Drawers are mounted below the track to collect excess material and by vacuum recirculation system return to the respective reservoir. The Rod braids are removable for cleaning purposes. Drive the two belts through a common frequency controlled motor. Equipped with a frequency regulator in the main electrical cabinet. The frequency controller is integrated in a cascade system. Equipped with screw spindles for leveling and positioning the transport path. The Transport track is mounted on a mobile undercarriage. \* Second plug position for water sprayer from position 41.
57. Universal spreader for spreading various dry stray goods. working width 1200 mm. The device consists of a funnel, with a capacity of approx. 60 l, arranged above a spreading roller. At the bottom of the funnel is a controllable Strip mounted, creating a passage column is in the range of 1 - 15 mm. The Funnel is equipped with sliding plates for different spreading widths. The scatter role is easy removable and replaceable for roles with other scattering profiles. Drive the Spreading roller by a frequency-controlled motor. Including exchange role for Granulated sugar. The role is executed in Nirosta and has a diamond-shaped profile.

**Devices for Quark Bag - 6 rows in width:**

58. Mechanical guillotine, working width 1400 mm. Equipped with own drive. Also suitable for cutters. Number of Hackhübe adjustable to 100 per minute with Knife; until 60 with cutter. Chopping knives or cutters are mounted by two clamps for accurate mounting and quick replacement. Executed in Stainless steel and other corrosion resistant materials. Equipped with synchronization. Passage height under the protective cover: 20 mm.
59. Cutter plate for the mechanical guillotine. Working width 1400 mm. Including Decorating knife for quark bag.
60. Set of folding shoes. Working width 1400 mm. The shoes are suitable for folding Dough strips with a width between 90 and 160 mm. The shoes are mounted on one removable bridge and are adjustable in width. Second set of folding shoes. Working width 1400 mm. The shoes are suitable for folding Dough strips with a width between 90 and 160 mm. The shoes are mounted on one removable bridge and are adjustable in width.
61. Turning device for turning the large folded dough strand.
62. Pressure roller with a working width of 1400 mm.
63. Straight guillotine knife with pressure stamp around the pocket below the dosing point to be pressed. Working width 1200 mm.
64. Plug position for the metering machine.

65. Moving dosing bridge suitable for 2 x 6 nozzles. Working width 1200 mm. The bridge is mounted on a rack for the tracking motion. Drive through one frequency controlled motor. Additional dosing bridge for mounting a second row Nozzles. Working width 1200 mm.
66. Extra set of long tubes for the mono pump dosing machine.
67. Transport track with a length of approx. 3500 mm for the transport of the products. working width 1000 mm. Drive through a frequency controlled motor. Equipped with one Frequency controller in the main electrical cabinet. The frequency controller is in a cascade system integrated. The drive roller has a vulcanized rubber pad. Equipped with one sharp takeover role at the beginning and end of the track. Executed with relubricated bearings. Equipped with screw spindles for leveling and Positioning of the transport path. The transport track is on a mobile undercarriage assembled. Including quick release device to the total track length of about 140 mm shorten the integration of Smartbelts for redcurrant crumble taler.

**Appliances for pudding pretzel - 5 rows in width:**

68. Cutter plate for the mechanical Guillotine. Including Teflon-coated Decorating glasses and outdoor glasses for pretzels. The cookie cutters are equipped with a Ejector so that products are easy to solve.
69. Dough return system to remove residual dough laterally. Working width 1200 mm. The system consists of a lift to the leftover strips of the running below Main conveyor belt and a cross track which runs at 90 ° to the riser, to dissipate the dough strips laterally. Both tracks are by a common frequency controlled motor driven. Ausgestattet with a frequency regulator in the Main electrical cabinet. The frequency controller is integrated in a cascade system. The Transport track is mounted on a mobile C-frame. Including Plug position.
70. Nozzles to dose 5 rows of pudding.

**Raisin / nut sweets - 4 rows in width:**

71. Set of hinged pressure rollers with holders. Working width 1400 mm. Every role has a diameter of 110 mm and a width of 30 mm. Execution of the roles in Nirosta. Mounted on a shaft with adjustable collar. The shaft is interchangeable for other product formats.
72. Water drip device with taps for dripping the dough band with water. working width 1400 mm. Each cock is adjustable in width and can be switched on or off. Behind Each tap has a strip arranged to distribute the drops of water. Equipped with Storage tank with a capacity of approx. 15 l. Including solenoid valve Stop water and air supply as soon as the transport lane stops. The device is removable for cleaning purposes.
73. Spreading device for 2/4 rows.
74. Waterfall spreader around the products running underneath continuously Sprinkles (raisins) to sprinkle. Working width 1400 mm. The device consists of:
  - Import transport track with a length of approx. 1675 mm for transporting the litter under the leveling rake. Drive through a frequency controlled motor. Equipped with a sharp takeover role at the end of the track. The drive roller is equipped with a vulcanized rubber pad. Equipped with a quick release device to relax the tape for cleaning purposes. The transport track is with removable Equipped with import rails. The tape is removable at the side for cleaning and Maintenance.

- Leveling rake to evenly distribute the litter mass. Drive by a motor at a fixed speed. The height of the rake is about a handwheel in the range of 5 - 35 mm adjustable.
  - Distributor shaft with pins around the litter mass evenly, at the end of the lane behind the Rake, to distribute. Drive through a frequency controlled motor.
  - Export track with a length of about 1040 mm to transport the litter to the including running products. Powered by a fixed speed motor. Equipped with a sharp Takeover role at the end of the track. The drive roller has a vulcanized rubber pad. Equipped with a quick release device around the Relax band for cleaning purposes. The band is removable at the side for Cleaning and care.
  - Equipped with relubricated bearings.
  - The spreader is mounted on a mobile base, equipped with Screw spindles for installation. The spreader can be placed at an angle to influence the working width.
75. Two conical mandrels around a dough sheet with a maximum width of 450 mm (per mandrel) roll up for 2 rows in width. The mandrels are mounted on a bridge over the track and are adjustable in terms of width and angle. If out of service, the Winding mandrels are folded up, free from the conveyor belt. Winding mandrel length 1100 mm. Drive through a frequency controlled motor.
76. transport track with a length of about 3000 mm, mounted on a mobile "C" -Untergestell. Working width 1200 mm. Including angled section. Drive through a frequency controlled motor. Equipped with a frequency regulator in the Main electrical cabinet. The frequency controller is integrated in a cascade system. Fitted with a quick release device to relax the belt for cleaning purposes.
77. Eight vertically mounted, bell-shaped casters to accompany the continuous Slug. Working width 1200 mm. The rollers are mounted on a bridge over the track and are adjustable.
78. One set of two universal brackets. Mounted above a counter-roll, arranged below the conveyor belt. Including 1 set of two bearing blocks mounted on the shaft end. Including axis with four cutting knives for cutting rolled up Slugs driven by the belt. Mounted below the guard of the mechanical tracking guillotine.
79. transport track with a length of about 5000 mm. Working width 1000 mm. Drive through one frequency controlled motor. Equipped with a frequency regulator in the main electrical cabinet. The frequency controller is integrated in a cascade system. Equipped with a sharp Takeover role at the beginning and end of the course. Equipped with a quick release device to relax the belt for cleaning purposes. Equipped with Screw spindles for leveling and positioning the transport path. The transport railway is mounted on a mobile base.

**Nut, poppy seed and raisin snail equipment - 3 rows in width:**

80. Wave with adjustable collar for the width position of the pressure roller. working width 1200 mm.
81. Spreading device.
82. Vertically mounted, bell-shaped casters to accompany the continuous auger. Working width 1200 mm. The rollers are mounted on a bridge over the track and are adjustable.
83. Horizontal snail guillotine with a working width of 450 mm, consisting of a Feed path to a horizontal cutting knife. Maximum number of bars up to 120 per Minute. Maximum diameter of the screws approx. 70 mm. Equipped with two Frequency controllers in the main electrical

cabinet. One of these frequency controllers is in one Integrated cascade system. This device is mounted on a mobile base. Equipped with screw spindles for leveling and positioning the transport path. Equipped with bottom locking and synchronization.

#### **ELECTRIC:**

A. The whole line is designed with cable duct, main control cabinet and 2 x control panel with Touchpanel (1 x at the laminator and 1 x at the universal table).

B. The Sigma laminator is designed with a Siemens PLC S7-300:

- Up to 30 easy-to-program programs.
- - Password protection with different levels for plant operators, production managers, Maintenance personnel.
- Error messages for drives, emergency stops and safety switches (per module) generated. These error messages are stored in a first-in and first-out buffer (register buffer) at the Control panel saved.
- Switching on and off of individual devices via 2 control panels with touch screen.
- The flour spreaders are standard plugged and are practically linear with the Belt speed regulated.
- All controlled drives are controlled by bus system, for better linearity provides.
- For each section you can choose which recipe is produced or that this is in the Cleaning stand is. This gives shorter switching times from "recipe x" to "recipe y". you can faster with the cleaning / maintenance of the line after the last production run begin.
- Roller opening adjustments are automatic.
- Information on maintenance intervals with exceeded runtime warning is displayed per Section displayed on the screen.
- operating language selectable (standard from English, German, French, Spanish, Dutch).
- Dough import control by 2 pulse generator for dough and banding, measurement and To set the proximity switch for dough detection only on the two-roll finishing machines.
- To check the dough export by means of an analogue proximity switch on the two-roller screed units and Quick-Reduktor-Schlichtwerke.
- Turning the flour spreader on and off automatically, depending on the presence of dough.
- Capacity diagnosis: calculation number of kilograms of dough produced.