



TECHNICAL DATA

Material : single fired
 monoporosa
 porcelain

Process required : cutter crush
 grinding
 squaring-up
 chamfering

Size tile mosaic: input 30x30 output 3,5x3,5 (3x3 need to test Soga tiles)
production, 16/18 Inclsion/minute = final average 90 mosaic pieces/min
With big size Cut Crash, 120x120 cm, when is mosaic in process, is probable the production reduce for effect of long conveyor cut crash machine . The mosaic is obtained maximum by 60x60 .

Size tile bull-nose strip : 6,5 cm minimum largest (edging line)

Size tile squared : minimum 20 X 20 cm (max production 46 pieces/min)
maximum 60 X 120 cm
120 x 120 cm : only forecast for cut crash input .

The size tile input – output are suitable on the layout .

Material to be removed for rectifying tile is forecast 3 mm on each side tile .

With CUT CRASH system you can cut 95 + 97% of the ceramic product now on the market, for the others 3 + 5% it is not possible to obtain straight cuts due to the particular features of the tile (internal tensions, no-homogeneity of the product etc.), for these particular products will be necessary to use the traditional cut by means of disc.



CUTTER CRUSH AND SQUARING LINEA MADE UP OF:

POS. 1

- 30.094.00S Mt. 1,5 Nr.2 Conveyor line, 800-mm frame with pulleys and two B section belts, including iron supporting structure (It' s out of the incision unit, and the second, out the breaking device)
- 10.008A.00 Nr. 1 Driving system with 0,37 kW. variable speed motor from 190 to 1000 rpm. coupled with worm reduction unit, complete with counter-arm.
- 30.150.00 Nr. 1 Electrical system for controlling 1 0,37/0,75 kW. variable speed motor complete with control board, various installation material and installation on the machine.

Euro

POS. 3

- 30.126C.00 Nr. 1 "CUT CRUSH 120" transversal cutting system complete with wheels-holder one head device for tile surface cross cutting with the possibility of carrying out one or more cuttings, that are automatically programmable according to the size to be obtained. Complete with two inverter-controlled gear-motors for cutting wheel side and longitudinal transfer, pneumatic cylinder for wheel pressure and lifting. Conveyor belt having a length of 1400 mm and a width of 650 mm, controlled by gear-motor with inverter, locking devices for positioning and locking the tile in the cutting area. Supporting frame and protection guard. Electrical system complete with control board with programmable logic, motors controlling inverter, synoptic panel and alphanumeric keyboard, installation material and installation on the machine.

Euro

POS. 4

- 30.019.00 Nr. 1 Pre-cut tiles width of 1200 mm breaking device complete with two driven roller conveyor sections with two inverter-controlled gear-motors, reference front locking device that can be adjusted by hand-wheel. Breaking unit with crank-connecting rod mechanical system with corresponding tile locking in position. Supporting frame and protection guard. Electrical system with control board with plc, installation material and installation on the machine.

Euro

POS. 5

- 30.122.00 Nr. 1 Set of grid side guards with doors that can be opened on operator side, machine stop limit switch.

Euro

- POS. 6**
- 30.094.00S Mt. 3 Nr.2 Conveyor line, 800-mm frame with pulleys and two B section belts, including iron supporting structure (It ' s out of the Inclusion unit, and the second, out the breaking device)
- 10.008A.00 Nr. 2 Driving system with 0,37 kW. variable speed motor from 190 to 1000 rpm. coupled with worm reduction unit, complete with counter-arm.
- 30.150.00 Nr. 2 Electrical system for controlling 1 0,37/0,75 kW. variable speed motor complete with control board, various installation material and installation on the machine.
- Euro
- POS. 7**
- 41.400.00 Nr. 1 Square belt aligner for kiln unloading, complete with 1-meter connection roller-way, step 72 mm., aligning belt, Nr. 3 drive variable speed motors. Electric system complete with installation material and installation on board machine.
- Euro
- POS. 8**
- 30.025.00 Nr. 1 Continuous breaking device for pre-cut tiles complete with driven conveyor belt, nr.1 top driven roller, adjustable in height and length, nr.1 bottom striker roller, adjustable in height via hand wheel. Supporting structure and safety guard.
- Euro
- POS. 9**
- 30.026.00 Nr. 2 Set of mesh guards, opening on the operator side for mosaic breaking units, limit switch that stops the machine.
- Euro
- POS. 10**
- 30.094.00S Mt. 2 Nr.2 Transport belt line of total length 2 m, including iron supporting structure and strips crossing belt system .(one is in the entrance squaring machine, and the second is before the roller lifting bench) .
- 10.008A.00 Nr. 1 Driving system with 0,37 kW. variable speed motor from 190 to 1000 rpm. coupled with worm reduction unit, complete with counter-arm.
- 30.150.00 Nr. 1 Electrical system for controlling 1 0,37/0,75 kW. variable speed motor complete with control board, various installation material and installation on the machine.
- Euro
- POS. 11**
- 30.103A.00S Nr. 2 Roller lifting bench with lifting belts for tile 90°-conveyance, complete with roller conveyor and variable speed motor-driven belts, pneumatic belt lifting unit, supporting frame and guard. Electric system with different material for installation and installation on the machine. It ' s included transport length 2.4 m .
- Euro

POS. 12

32.202.04 Nr. 1 Squaring/chamfering unit "SQUADRA 6/1", composed by nr.2 modules with tile turner.

The group is realized with strong electro-welded steel structure and well worked in order to guarantee the max precision during working process.

First module for size 100 + 600 consisting of No.4+4 side motors mounted opposed pre-setting for Ø 350 frontal grinding wheel, with hand-wheel for micrometric adjustment, No.1+1 floating 45° chamfering motors with hand wheel for diamond grinding wheels and pneumatic return. Two lower toothed belts with a width of 48 mm and two upper toothed belts with a width of 35 mm for blocking and transporting the tiles during the operation, assembled on anti-wear guides. Working pressure on upper belts by means of pneumatic cylinders. The group can be adjusted as concerns width by means of hand-wheels with display for different sizes.

Driving group by means of gear-motor, controlled by inverter, with double output than ensure the same speed to both lower and upper belts. At module inlet is installed one centring device for automatic tiles centring over the machine axis. Water distribution plant for tools cooling, control pneumatic panel for belts pressure adjustment and chamfer motors balance..

A connecting line with a length of 4,5 m complete with section B pulleys and belts, stainless steel support frame, complete with three drive groups by means of 0,75 kW. Gear-motor controlled by inverter with difference speed system for tiles rotation, adjustable for the different sizes.

Second module for size 200 + 1200 consisting of No.4+4 side motors mounted opposed pre-setting for Ø 350 frontal grinding wheel, with hand-wheel for micrometric adjustment, No.1+1 floating 45° chamfering motors with hand wheel for diamond grinding wheels and pneumatic return. Two lower toothed belts with a width of 48 mm and two upper toothed belts with a width of 35 mm for blocking and transporting the tiles during the operation, assembled on anti-wear guides. Working pressure on upper belts by means of pneumatic cylinders. The group can be adjusted as concerns width by means of hand-wheels with display for different sizes.

Driving group by means of gear-motor, controlled by inverter, with double output than ensure the same speed to both lower and upper belts. At module inlet is installed one centring device for automatic tiles centring over the machine axis, pusher group controlled by gear-motor with inverter controlled by encoder for alignment and 90° positioning of the tiles compared to one of the already worked side. .

Water distribution plant for tools cooling, control pneumatic panel for belts pressure adjustment and chamfer motors balance.

Electric plant complete with PLC, operator touch-screen with message and machine parameters, production data, error adjusting.

Frontal calibrating motor power : 5,6 kW.

Chamfering motor power : 2,4 kW

Total installed electric power: 110 kW., real electric energy absorption during the operation about 60% of the installed power.

Water consumption every using point: 25 Lt./min., (tot 800 Lts./1' recyclable)

Total weight: 9500 Kg.

Belt speed: 6+25 Mt./min.

Euro 



POS. 13

- 30.062S.00 Nr. 1 Mod. "ASPIRA 03" drying unit for porcelain stoneware tiles comprising a stainless steel roller conveyor measuring roughly 1100 mm, 1 driving unit by variable speed motor, 3 upper suction ports, 3 lower suction ports, stainless steel container for decanting in-take water, 3 kW. suction fan, sizes: 200+1200 mms. Tile size 20x10 is allowed, but probable may be pick-up by the suction . The strips 10x40-50-60 and more are allow .

Euro

POS. 14

- 30.300.08 Nr. 1 RECTIFYING AND CHAMFERING UNIT "BS 98 F 3 + 1 "
 2nd Rectifying/chamfering Module " BS 98 F 3+1" sizes 6,5/12 cm , with 3+3 front gauging motors arranged opposite each other, suitable for front grinding wheels Ø 300, equipped with a hand wheel for very fine adjustments.
 Nr. 1 + 1 - 45° chamfering motors arranged opposite each other with hand wheel for recovering the diamond discs and pneumatic return of the vertical excursion.
 Tile blocking and shifting system during the operational process by means of two bottom gear belts and two top gear belts. The presser belts are driven by means of a double-output gear motor, controlled by an Inverter. The double output of the gear motor ensures the drive of both the bottom belts and the top belts.
 The top belt is kept in the correct pressing position by means of a set of pressers that are mechanically balanced and controlled by pneumatic cylinders with variable load.
 The rectifying module is equipped with an automatic tile centring device that keeps the tile centred compared to the machine centre-line.
 The module is complete with water distribution system to cool the tools and control panel of the pneumatic commands for regulating the pressure of the presser belts and balancing the chamfers.
 Electric system complete with PLC panel, with touch screen operator interface with messages of the machine parameters, production data and machine default settings.

Front gauging motor power	:	5,6 kW
Chamfer motor power	:	2,4 kW
Total installed electric power	:	40 kW (60 % absorbed)
Water consumption (recyclable) for each spindle 20 litres/minute:	:	160 litres/minute / 1 bar
Total weight	:	5.500 Kg
Belt speed	:	6 - 25 meters/minute

Euro

- 60.310.07 Nr. 1 **POS 15** Front edging machine for creating the half bull-nose type profile on strips (skirting boards) tiles and steps.

Machine configuration:

- 1st head: bevel at 30°
- 2nd head: bevel at 60°
- 3rd head: bull-nose rounded profile
- 4th head: removal of tile back side
- 5th head: satin finishing profile
- 6th head: polishing finishing profile
- 7th head: Incision rows antislip

Machine description:

Basic structure in heavy structural steel work complete with feet for levelling it and securing it to the ground.

Driven tile conveyor with two gear belts. The gear belts replace the traditional belt and its large driving drums with relative maintenance and periodic replacement. The gear belts have a set of built-in steel strands, making them much more resistant and longwearing compared to other systems. The gear belts are adjusted based on the size of the tile using a manual handwheel. The speed of the drive is controlled by an inverter.
Nr. 1 top blocking system of the tile being conveyed on the belts made up of a bar of vertical pressing units.

Nr. 1 Striker guide of the tiles on the side opposite to that to be edged. The guide is adjusted using a manual handwheel and has a millimetre reference of the tile size.

Nr. 7 tool carrying spindles, driven by 5,5 kW motors at 2.800 rpm. The motors are installed on supports that can be adjusted based on the thickness of the tile and on the bull-nose rounding extent.

Nr. 1 water distribution system to cool the tools, with adjustable end on each head.

Electric system contained in a dedicated cabinet housing all the electro-mechanical components: the operator interface includes the speed control of the driven belts and the start and stop push buttons of the tool-carrying heads.

TECHNICAL DATA OF THE EDGING MACHINE

- Size	: 6,5 / 33 cm
- Thickness	: 6 / 14 mm
- Infeed speed	: 3 / 15 metres/minute
- Suggested operating speed	: 3 metres/ min. ground porcelain tiles polished : 5 metres/ min ground porcelain tiles satin
- Installed electric power	: 34 kW
- Water requirement (recyclable)	: 140 litres/minute
- Dimensions	: 6.550 x 1.500 x 1.700 mm
- Weight	: 3.200 Kg

Machine manufactured in compliance with EC norms.

Euro



60.300.CS Nr. 1 **POS. 16**
Nr. 1 Cabin steel water protection, with door along front and opposite side operator . The steel panel has also window for operator inspection and light inside the cover .

Euro

30.062.00 Nr. 1 **POS. 17**
Mod. "ASPIRA 03" drying unit for porcelain stoneware tiles comprising a stainless steel roller conveyor measuring roughly 1100 mm, 1 driving unit by variable speed motor, 3 upper suction ports, 3 lower suction ports, stainless steel container for decanting in-lake water, 3 kW. suction fan, sizes: 6,5+450 mm .

Euro

30.079.00S Nr. 1 **POS. 18**
Sorting line with idle roller-way, sample-holder foll, neon lighting and box support surface

Euro

POS. 19-21 Belt conveyors motorized in order to charge and discharge the tumbled .

Euro

TOTAL MACHINERY AMOUNT Euro

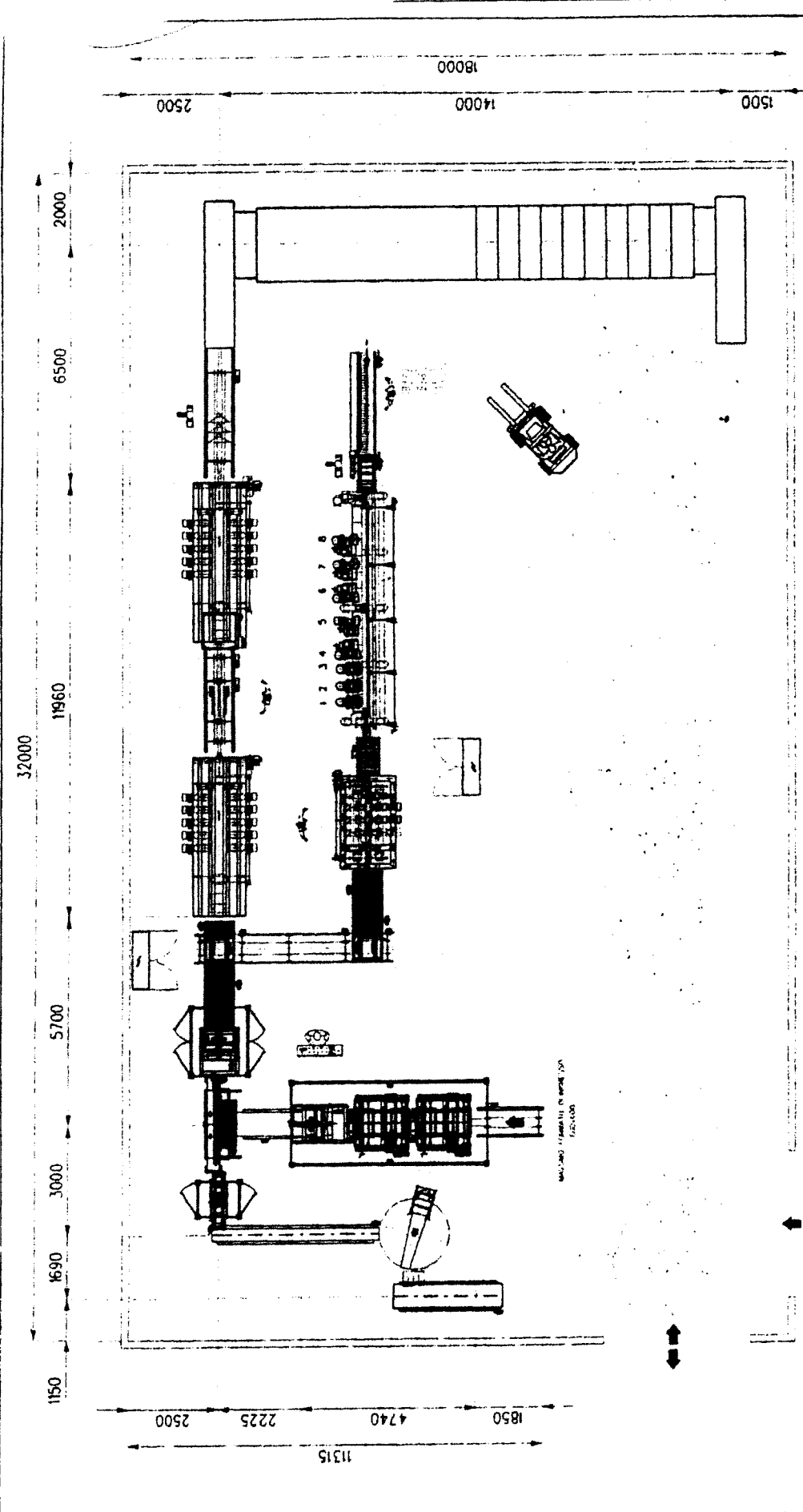
Nr. 1 Installation and start-up: one technician in 40 days/man, excluding travelling, board and lodging expenses and daily allowance of 30 €/day.

Euro

SOUND EMISSIONS

The squaring/chamfering machine, considering the different situation of work that could be adopt from you (For ex. squaring of particular hard material, utilization of a lot number of grinding wheels, etc.) can define an high level of noisy in the working area, in spite of our intervention in order to fell the sonority emissions, intervention already pre-settled by us at the surce.

Premised that the real exposure to the noise of the insiders depends also from the organizer measure, use procedurals and from the way of insertion of the machine in the work environment, of your only pertinent, it is necessary to equip the machine, according to the precise directions in this sense of the competent control organ and for the full and real respect of what indicated Art.41 Co.1 of the D.Lgs. No. 277/91, with on sound insulating and/or sound absorption booth (or other equivalent solution), in order to reduce the acustic pressure level to restrained value.



Pos. n. pezzi	Denominazione			Materiale	
SCHEMA DISPOSIZIONE MACCHINE					
Data		13-12-2006		Scala	1:100
Disegni		GV		Tratt.	
Centr.				Mater.	
Sostit.				Pezzi n	
<p>La quota pezzi materiale è da prendere:</p> <ul style="list-style-type: none"> da 01 a 02 - 10 da 03 a 04 - 10 da 05 a 06 - 10 da 07 a 08 - 10 da 09 a 10 - 10 da 11 a 12 - 10 da 13 a 14 - 10 da 15 a 16 - 10 da 17 a 18 - 10 da 19 a 20 - 10 da 21 a 22 - 10 da 23 a 24 - 10 da 25 a 26 - 10 da 27 a 28 - 10 da 29 a 30 - 10 da 31 a 32 - 10 da 33 a 34 - 10 da 35 a 36 - 10 da 37 a 38 - 10 da 39 a 40 - 10 da 41 a 42 - 10 da 43 a 44 - 10 da 45 a 46 - 10 da 47 a 48 - 10 da 49 a 50 - 10 da 51 a 52 - 10 da 53 a 54 - 10 da 55 a 56 - 10 da 57 a 58 - 10 da 59 a 60 - 10 da 61 a 62 - 10 da 63 a 64 - 10 da 65 a 66 - 10 da 67 a 68 - 10 da 69 a 70 - 10 da 71 a 72 - 10 da 73 a 74 - 10 da 75 a 76 - 10 da 77 a 78 - 10 da 79 a 80 - 10 da 81 a 82 - 10 da 83 a 84 - 10 da 85 a 86 - 10 da 87 a 88 - 10 da 89 a 90 - 10 da 91 a 92 - 10 da 93 a 94 - 10 da 95 a 96 - 10 da 97 a 98 - 10 da 99 a 100 - 10 					
				Disegno n.	06 P 1216
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