

SEGATRICI A PONTE A CONTROLLO NUMERICO

CNC BRIDGE SAWS



INSPIRED BY YOU

ISPIRATI DA VOI



The machines of the Prussiani Engineering company are born and developed technologically based on the different needs of the Customer. The company builds **custom-made machines, designed to meet specific needs**. Customer's requests become the incentive for an increasingly advanced technological research. Together, company and Customers, reach success, stimulating each other.

e le macchine dell'azienda Prussiani Engineering nascono e si sviluppano tecnologicamente in base alle diverse esigenze del Cliente.

L'azienda costruisce **macchine 'su misura'**, ideate per rispondere a bisogni specifici. Le richieste dei Clienti diventano lo stimolo per una ricerca tecnologica sempre più avanzata. Insieme, azienda e Clienti, raggiungono il successo, stimolandosi reciprocamente.

"IN PRUSSIANI EVERY CUSTOMER IS SPECIAL AND SPECIAL IS THE MACHINE WHAT WE CREATE FOR HIM"

"IN PRUSSIANI OGNI CLIENTE E' SPECIALE E SPECIALE E' LA MACCHINA CHE CREIAMO PER LUI"

Mario Giorgio Prussiani
CEO - Managing Director

THE COMPANY L'AZIENDA

In 1991 the dream of Mario Giorgio Prussiani and his wife Mariella Lucchini came true, giving life to **Prussiani Engineering**: a company that designs and builds high quality **numerical control machines for working marble, granite, stone and ceramics**.

Over the years the company has grown along with the needs of the market, affirming its presence worldwide. Today it offers **advanced and efficient machines**, thanks to the constant search for improvement and technological innovation. Robust and precise made-to-measure machines based on the needs of the individual customer **guaranteed up to 5 years**. Thanks to a widespread **technical commercial network**, present all over the world, the customer assistance is guaranteed before and after the purchase, with speed, professionalism and courtesy. The professionalism of all workers and the diligence of the new generations will carry on and develop the great project of an Italian company able to combine **fantasy and technology**, in the conception of their machines and in the unlimited expressive possibilities that these machines guarantee to Customers.

Nel 1991 il sogno di Mario Giorgio Prussiani e della moglie Mariella Lucchini si è trasformato in realtà dando vita alla **Prussiani Engineering**: un'azienda che progetta e costruisce **macchine a controllo numerico di qualità elevata per la lavorazione di marmi, graniti, pietre e ceramiche**. Nel corso degli anni l'azienda è cresciuta insieme alle esigenze del mercato, affermando la propria presenza a livello mondiale. Oggi offre **macchine evolute ed efficienti**, grazie alla costante ricerca per il miglioramento e l'innovazione tecnologica.

Macchine robuste e precise, **garantite fino a 5 anni**. Grazie ad una capillare **rete tecnico commerciale**, presente in tutto il mondo, è assicurata l'assistenza prima e dopo l'acquisto, con rapidità, professionalità e cortesia. La professionalità di tutti i lavoratori e l'impegno delle nuove generazioni, porteranno avanti e faranno crescere il grande progetto di un'azienda italiana capace di coniugare **fantasia e tecnologia**, nell'ideazione delle proprie macchine e nelle infinite possibilità espressive che queste macchine garantiscono ai Clienti.

PRUSSIANI CNC BRIDGE SAWS

SEGATRICI A PONTE

CHAMPION and **TANGO**, bridge saws with five interpolated axes and **STAR**, bridge saw with four or five interpolated axes, designed and built for the processing of marble, granite, artificial quartz, ceramic and natural stones.

Managed by a numerical control unit interfaced with **CAD/CAM systems**, these saws allow different types of processing: Perfect for the production of unique pieces or in series, **STAR**, **CHAMPION** and **TANGO** bridge saws are used primarily for cutting slabs.

Tipologies of masterpieces:

- STRAIGHT CUTS
- PROFILES
- INCLINED CUTS
- CURVED CUTS
- HOLES
- ENGRAVINGS
- BAS-RELIEFS

CHAMPION and **TANGO** machinery may be customized according to the Customer's needs about production and space available into his factory.

THE ADVANTAGES

I VANTAGGI

AUTOMATIC CUTTING AND DISPLACEMENT OF THE PIECES "CUT & MOVE" suction cups manipulator
(Prussiani Engineering European Patent EP 1651409)

MACHINE STABILITY AND PERFECT CUTTING QUALITY
Bridge moved by two servomotors, one on the right and one on the left (GANTRY system)

MACHINE EASY TO USE
Intuitive CAD/CAM software

GREATER GRIP AND NON-DEFORMABILITY OF WORK TABLES - Top of the working table made of a special Prussiani rubber

EASY AND LOW MAINTENANCE
Planning controlled and guided by CNC

NO RISK OF OIL STAINS ON THE MARBLE SLABS
Lubrication with EP1 density grease

ATTENTION TO PEOPLE SAFETY Machines compliant with the most recent safety standards

MACHINES MADE IN ITALY
The Marmo Machine Mark guarantees the Italian excellence of Prussiani machines

UP TO SIXTY MONTHS WORRY-FREE
Three or five years warranty for the mechanical, electrical and electronic components

CHAMPION e **TANGO**, segatrici a ponte a cinque assi interpolati e **STAR**, segatrice a ponte a quattro o cinque assi interpolati, sono progettate e costruite per la lavorazione del marmo, del granito, del quarzo artificiale, del materiale ceramico e della pietra in genere.

Gestite da un controllo numerico interfacciato con sistemi CAD/CAM, consentono diverse lavorazioni:

Ideal sia per la produzione di pezzi unici che in serie, le segatrici a ponte **STAR**, **CHAMPION** e **TANGO** sono impiegate soprattutto per il taglio di lastre.

Tipologia di lavorazioni:

- TAGLI RETTILINEI
- PROFILATURE
- TAGLI INCLINATI
- TAGLI CURVI
- FORATURE
- INCISIONI
- BASSORILIEVI

Le macchine **CHAMPION** e **TANGO** possono essere personalizzate in base alle esigenze di produzione e di spazio disponibile nella fabbrica del Cliente.



EP-PATENTED

CUT & MOVE®

**STAR
CHAMPION
TANGO**



prussiani

VIDEO TRAILER

Bridge Saws



PERFECT
CUTTING



EASY
TO USE



PRECISION
OF JET



MAINTENANCE



NO RISK
OIL STAINS



ATTENTION
SAFETY



WORRY
FREE



CUSTOMER
CARE



MADE
IN ITALY

SUCTION CUPS MANIPULATOR

MANIPOLATORE A VENTOSE

WHAT IT IS

The first suction cups manipulator in the world designed and patented by Mario Giorgio Prussiani in 2003 (European Patent Prussiani Engineering EP 1651409).

WHAT IT DOES

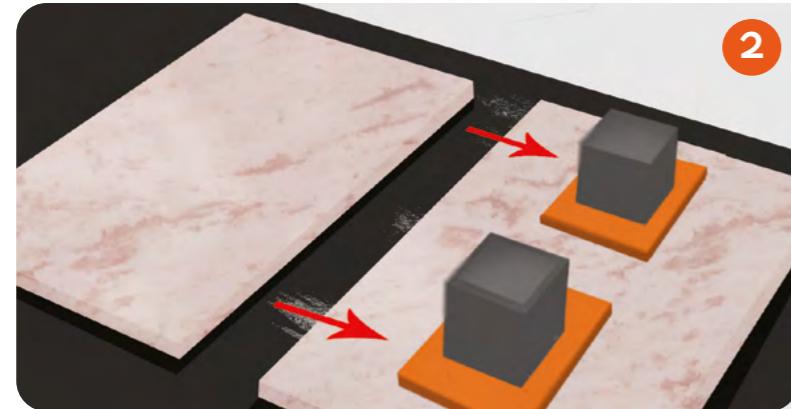
It automatically displaces the strips on a working table allowing the disk to perform remaining cuts without hitting closed pieces.



1

Beginning of preliminary cuts of the slab into strips.

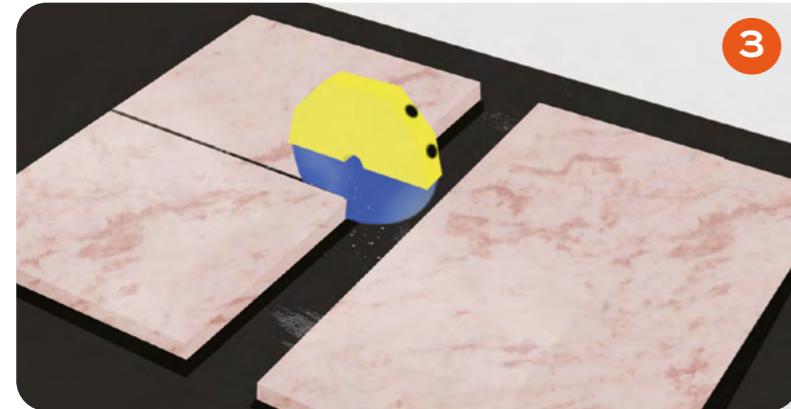
Inizio dei tagli preliminari della lastra in modo da ricavare filagne.



2

Displacement of strips with the suction cups manipulator Cut & Move.

Spostamento delle filagne tramite il manipolatore a ventose Cut & Move.



3

Performing of remaining cut.

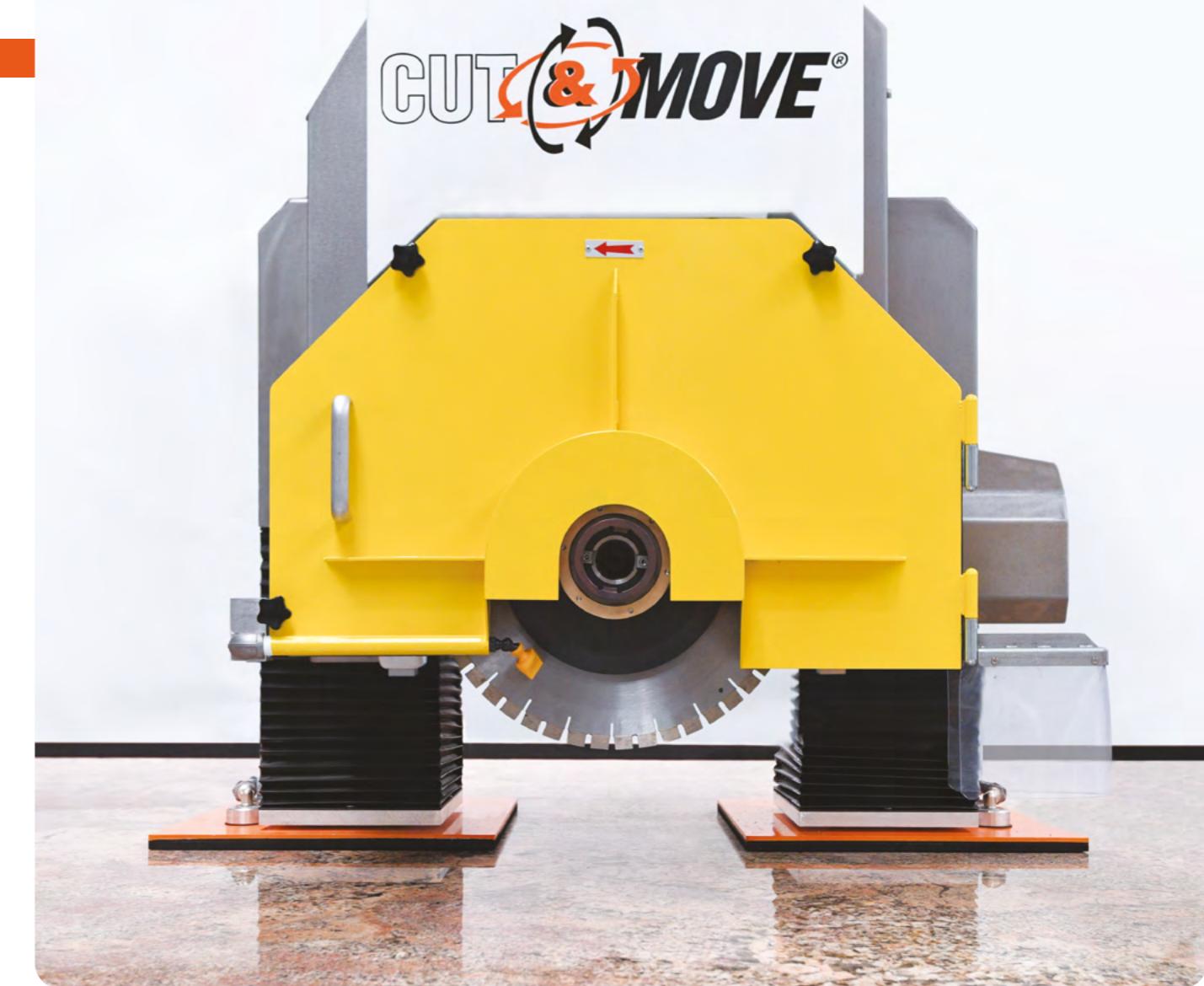
Esecuzione del taglio rimanente.

COSA E'

Il primo manipolatore a ventose al mondo progettato e brevettato da Mario Giorgio Prussiani nel 2003 (Brevetto Europeo Prussiani Engineering EP 1651409).

COSA FA

Sposta automaticamente le filagne sul banco di lavoro permettendo al disco di eseguire i tagli rimanenti senza incidere i pezzi vicini.



THE ADVANTAGES

The Cut & Move system **REDUCES:**



TIME

- time to organize the work;
- production time.



COSTS

- less wasted material (up to 30%);
- less bridge saws needed;
- less space needed.



RISKS

- reduced physical effort for the operator;
- fewer injuries.

I VANTAGGI

Il sistema Cut & Move **RIDUCE:**

TEMPI

- tempi di organizzazione del lavoro;
- tempi di produzione.

COSTI

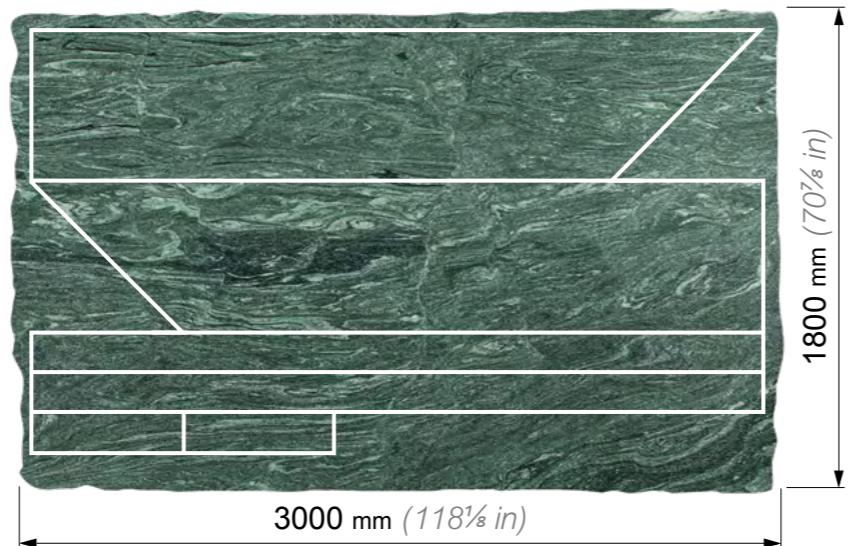
- scarto di materiale (fino al 30%);
- numero di segatrici a ponte necessarie;
- spazio occupato.

RISCHI

- minore sforzo fisico dell'operatore;
- meno infortuni.

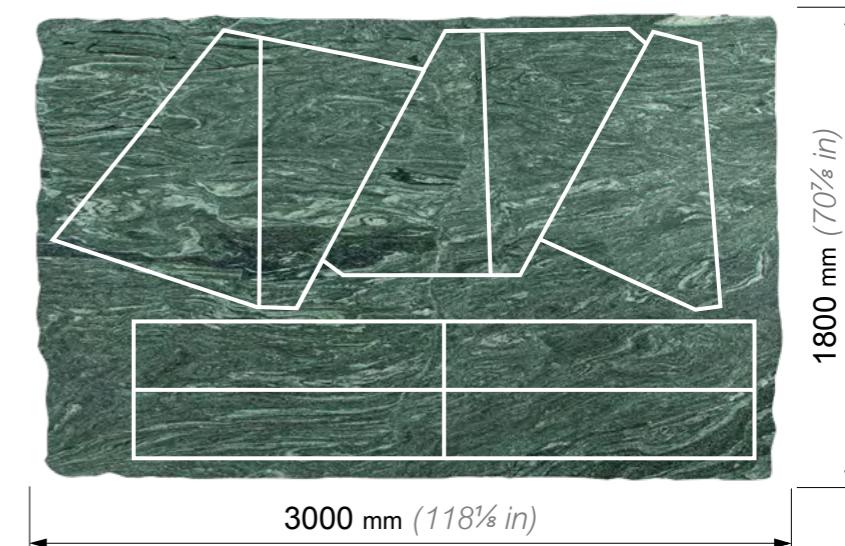
EXAMPLE A

Produced with manipulator
Prussiani Engineering Patent



EXAMPLE B

Produced with manipulator
Prussiani Engineering Patent



	THICKNESS 20 mm (3/4 in)		THICKNESS 30 mm (1 1/4 in)	
	GRANITE	ARTIFICIAL QUARTZ	GRANITE	ARTIFICIAL QUARTZ
STAR XL WITH TABLE **	19	24	18	22
CHAMPION 55 WITH TABLE **	19	24	18	22
CHAMPION 55 / CL WITH SIDE LOADING *	24	29	23	27
CHAMPION 55 / SHUTTLE WITH ROTATING TABLES *	33	38	32	36
CHAMPION 65 WITH TABLE **	21	26	20	24
CHAMPION 65 / CL WITH SIDE LOADING *	28	33	27	31
CHAMPION 65 / NT WITH CONVEYOR BELT *	41	46	40	44
NEW CHAMPION 5 WITH TABLE **	21	26	20	24
NEW CHAMPION 5 / CL WITH SIDE LOADING *	28	33	27	31
NEW CHAMPION 5 / 2T WITH TWO TABLES *	42	47	41	45
NEW CHAMPION 5 / NT WITH CONVEYOR BELT *	42	47	41	45
TANGO / NT WITH CONVEYOR BELT *	66	76	64	72

Number of slabs cut as Example A, including time for: slab loading + picture + programming + unloading of the pieces, within 8 working hours up to:

* with these configurations the programming is done while the machine is working.

** On the table versions the programming time can be avoided introducing the slabs check-in photo station. See the optional n. 7 page 37.



	THICKNESS 20 mm (3/4 in)		THICKNESS 30 mm (1 1/4 in)	
	GRANITE	ARTIFICIAL QUARTZ	GRANITE	ARTIFICIAL QUARTZ
STAR XL WITH TABLE **	18	23	17	21
CHAMPION 55 WITH TABLE **	18	23	17	21
CHAMPION 55 / CL WITH SIDE LOADING *	23	28	22	26
CHAMPION 55 / SHUTTLE WITH ROTATING TABLES *	32	37	31	35
CHAMPION 65 WITH TABLE **	20	25	19	23
CHAMPION 65 / CL WITH SIDE LOADING *	27	32	26	30
CHAMPION 65 / NT WITH CONVEYOR BELT *	40	45	39	43
NEW CHAMPION 5 WITH TABLE **	20	26	19	23
NEW CHAMPION 5 / CL WITH SIDE LOADING *	27	33	26	30
NEW CHAMPION 5 / 2T WITH TWO TABLES *	41	47	40	44
NEW CHAMPION 5 / NT WITH CONVEYOR BELT *	41	47	40	44
TANGO / NT WITH CONVEYOR BELT *	64	74	62	70

Number of slabs cut as Example B, including time for: slab loading + picture + programming + unloading of the pieces, within 8 working hours up to:

* with these configurations the programming is done while the machine is working.

** On the table versions the programming time can be avoided introducing the slabs check-in photo station. See the optional n. 7 page 37.

TECHNICAL COMPARISON

COMPARAZIONE TECNICA

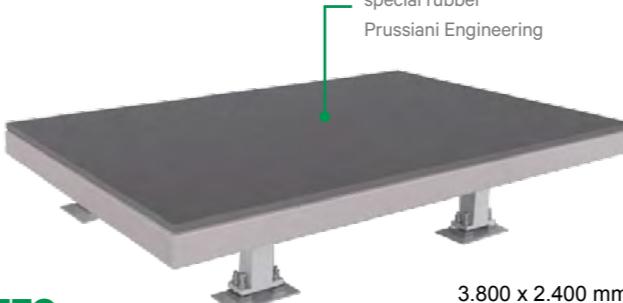
 prussiani® state machines culture	STAR XL	CHAMPION 55	CHAMPION 65	NEW CHAMPION 5	TANGO
X axis stroke Corsa carro asse X	3.600 mm (141 1/4 in)	3.800 mm (149 5/8 in)	3.800 mm (149 5/8 in)	3.800 mm (149 5/8 in)	4.550 mm (179 1/8 in)
Y axis stroke Corsa carro asse Y	2.600 mm (102 1/8 in)	2.500 mm (98 3/8 in) 3.500 mm (137 25/32 in) 6.500 mm (255 7/8 in)	2.500 mm (98 3/8 in) 3.500 mm (137 25/32 in) 6.500 mm (255 7/8 in)	2.500 mm (98 3/8 in) 3.500 mm (137 25/32 in) 6.500 mm (255 7/8 in)	2.500 mm (98 3/8 in)
Z axis stroke Corsa carro asse Z	350 mm (13 3/4 in)	350 mm (13 3/4 in)	450 mm (17 1/4 in)	400 mm (15 1/4 in)	400 mm (15 1/4 in)
A axis rotation Rotazione asse A	-185° + 185° (370°)	-185° + 185° (370°)	-185° + 185° (370°)	-185° + 185° (370°)	-185° + 185° (370°)
C axis tilting Ribaltamento asse C	0° ÷ 90°	0° ÷ 90°	0° ÷ 90°	0° ÷ 90°	0° ÷ 90°
X axis rapid speed Velocità in rapido del carro asse X	45 m/min (147,6 fpm)	45 m/min (147,6 fpm)	75 m/min (246 fpm)	65 m/min (213,3 fpm)	65 m/min (213,3 fpm)
Y axis rapid speed Velocità in rapido del carro asse Y	45 m/min (147,6 fpm)	45 m/min (147,6 fpm)	75 m/min (246 fpm)	65 m/min (213,3 fpm)	65 m/min (213,3 fpm)
Z axis rapid speed Velocità in rapido del carro asse Z	10 m/min (32,8 fpm)	10 m/min (32,8 fpm)	8 m/min (26,2 fpm)	11,4 m/min (37,4 fpm)	11,4 m/min (37,4 fpm)
Power electrosindle Potenza elettromandrina portadisco	19,4 HP S9 (14,3 kW) 94 Nm	19,4 HP S9 (14,3 kW) 94 Nm	26,5 HP S9 (19,5 kW) 130 Nm	36 HP S6 (26,4 kW) 207 Nm	36 HP S6 (26,4 kW) 207 Nm
Rpm electrosindle Velocità elettromandrina portadisco	0 ÷ 6.000 0 ÷ 8.000 (optional)	0 ÷ 6.000 0 ÷ 8.000 (optional)	0 ÷ 10.000	0 ÷ 8.000	0 ÷ 8.000
Electrospindle tool holder Attacco utensile elettromandrina	½" GAS ISO 40 (optional)	½" GAS ISO 40 (optional)	ISO 40	ISO 40	ISO 40
Max disk diameter Diametro massimo disco	625 mm (24 5/8 in)	625 mm (24 5/8 in)	750 mm (29 1/2 in)	725 mm (28 1/2 in)	725 mm (28 1/2 in)
Min disk diameter Diametro minimo disco	350 mm (13 3/4 in)	350 mm (13 3/4 in)	350 mm (13 3/4 in)	350 mm (13 3/4 in)	350 mm (13 3/4 in)
Max cutting thickness with disk Taglio spessore massimo disco	215 mm (8 1/2 in)	215 mm (8 1/2 in)	260 mm (10 1/4 in)	225 mm (8 3/8 in)	225 mm (8 3/8 in)
Max distance table spindle nose Distanza naso mandrino dal tavolo	350 mm (13 3/4 in)	220 mm (8 5/8 in)	355 mm (14 in)	305 mm (12 in)	305 mm (12 in)
Total absorbed power Potenza massima assorbita	18 kW	18 kW	24 kW	31 kW	65 kW
Displacement of pieces Spostamento dei pezzi	with manipulator CUT&MOVE lifting capacity 420 kg	with manipulator CUT&MOVE lifting capacity 420 kg	with manipulator CUT&MOVE lifting capacity 800 kg	with manipulator CUT&MOVE lifting capacity 800 kg	with manipulator CUT&MOVE lifting capacity 800 kg

TABLES & CONVEYOR BELT

TAVOLE & NASTRO TRASPORTATORE

FIXED TABLE

Tavola fissa



TGF

special rubber
Prussiani Engineering

PARTIAL TILTING TABLE

Tavola parzialmente ribaltabile



TPG

TABLE WITH TILTING LEVERS

Tavola con leve ribaltabili



TLG

COMPLETELY TILTING TABLE

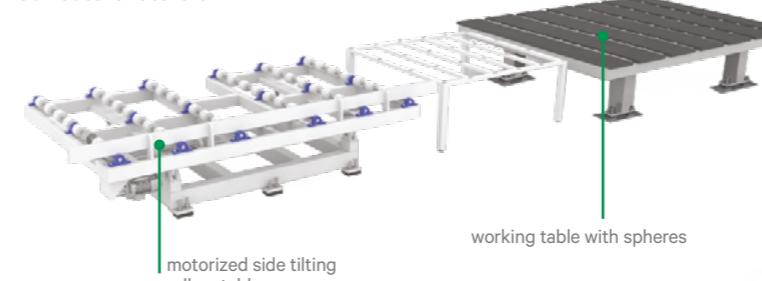
Tavola completamente ribaltabile



TCG

SIDE LOADING

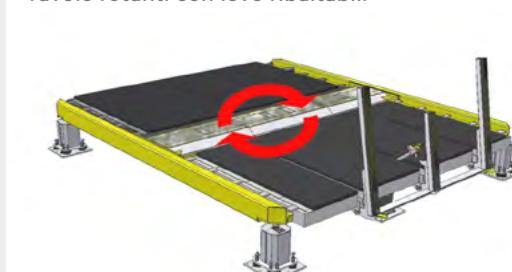
Caricatore laterale



CL

ROTATING TABLES WITH TILTING LEVERS

Tavole rotanti con leve ribaltabili



SHUTTLE

TWO TABLES

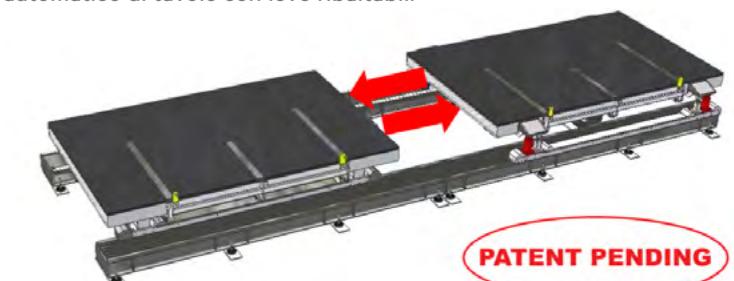
Due tavole



2T

AUTOMATIC TABLES EXCHANGER WITH TILTING LEVERS

Scambiatore automatico di tavole con leve ribaltabili



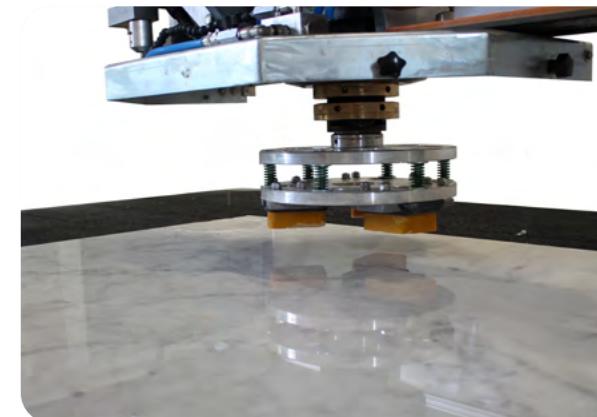
IN & OUT TABLES

STAR⁺ XL



TELESCOPIC ADAPTER FOR POLISHING

Mandrino Telescopico per Lucidatura



3 or 5 year warranty
for mechanical electric
and electronic
components



Marmo Macchine
Mark guarantees the
italian excellency of
Prussiani machine

3 o 5 anni di garanzia per i componenti
meccanici ed elettronici



Consolidated experience
the first to patent the
suction cups manipulator
system "CUT&MOVE"

Consolidata esperienza, i primi a brevettare il sistema con
manipolatore a ventose "CUT&MOVE"



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dinamic company able to
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TECHNICAL DATA - STAR XL

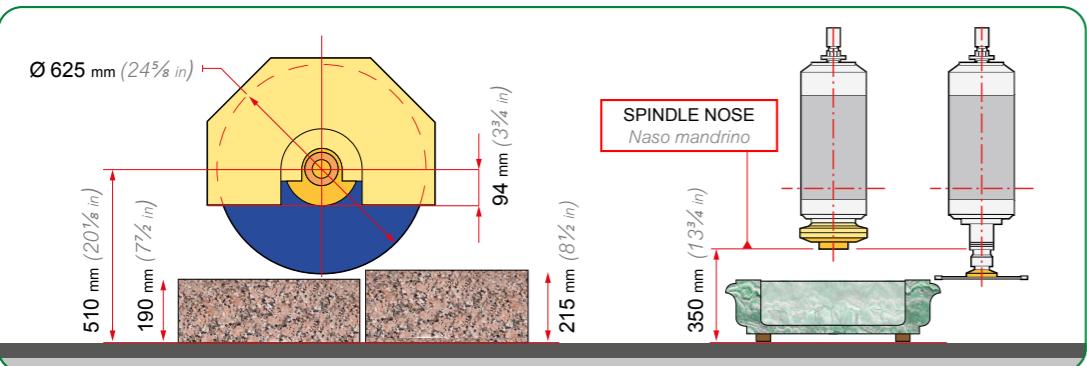
DATI TECNICI - STAR XL



STAR XL
WITH TABLE

X axis stroke Corsa carro asse X	mm (in)	3.600 (141 $\frac{1}{4}$)
Y axis stroke - GANTRY Corsa carro asse Y - GANTRY	mm (in)	2.600 (102 $\frac{3}{8}$)
Z axis stroke Corsa carro asse Z	mm (in)	350 (13 $\frac{3}{4}$)
A axis rotation Rotazione asse A	degrees gradi	- 185° + 185° (370°)
C axis tilting Ribaltamento asse C	degrees gradi	0° ÷ 90°
X axis rapid speed Velocità in rapido del carro asse X	m/min (fpm)	45 (147,6)
Y axis rapid speed Velocità in rapido del carro asse Y	m/min (fpm)	45 (147,6)
Z axis rapid speed Velocità in rapido del carro asse Z	m/min (fpm)	10 (32,8)
Main disk-holder electrosindle power - Standard Potenza elettromandrino portadisco - Standard	HP S9 (kW)	19,4 (14,3)
Main disk-holder electrosindle torque - Standard Coppia elettromandrino portadisco - Standard	Nm	94
Main disk-holder electrosindle rotation speed - Standard Velocità di rotazione elettromandrino portadisco - Standard	rpm	0 ÷ 6.000
Electrospindle tool holder - Standard Attacco utensile elettromandino - Standard	-	½ " gas
Main disk-holder electrosindle power - Optional Potenza elettromandrino portadisco - Optional	HP S9 (kW)	31 (22,8)
Main disk-holder electrosindle rotation speed - Optional Velocità di rotazione elettromandrino portadisco - Optional	rpm	0 ÷ 8.000
Electrospindle tool holder - Optional Attacco utensile elettromandino - Optional	-	ISO 40 (optional)
Max disk diameter Diametro massimo del disco	mm (in)	625 (24 $\frac{5}{8}$)
Axes servomotors for axis X-Y-Z-A-(C) with absolutes encoder Servomotori per assi X-Y-Z-A-(C) con encoder assoluti	-	BRUSHLESS

- Automatic centralized greased lubrication. In case of anomalies the machine stops;
Lubrificazione centralizzata automatica a grasso. In caso di anomalie la macchina si arresta.
- Watertight IP 55 electric cabinet with safety thermostat;
Armadio elettrico a tenuta stagna IP 55 e termostato di sicurezza.
- Sound power level: 80 ÷ 90 dB(A);
Livello di potenza sonora: 80 ÷ 90 dB(A).



Max total adsorbed power	18 kW
Approximate total weight	5.000 kg (11.023 lb)
Length	5.750 mm (226 $\frac{5}{8}$ in)
Width	4.250 mm (167 $\frac{3}{8}$ in)
Height	2.700 mm (106 $\frac{1}{4}$ in)
Height with camera	2.800 mm (110 $\frac{1}{4}$ in)
Capacity suction cups	420 kg (926 lb)
Minimum width for lifting	120 mm (4 $\frac{3}{4}$ in)
Optional*	50 mm (2 in)

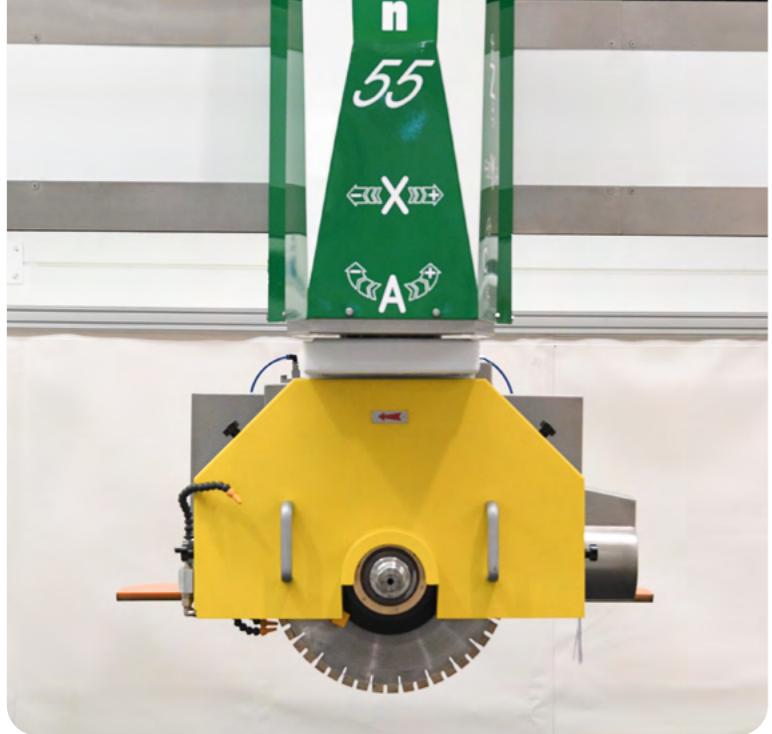
MONOBLOC STRUCTURE
Struttura monoblocco



Nº1
20' O.T.



CHAMPION 55



SIDEMILL SPINDLE
Mandrino laterale



3 or 5 year warranty
for mechanical electric
and electronic components



Marmo Macchine
Mark guarantees the
italian excellence of
Prussiani machine

3 o 5 anni di garanzia per i componenti
meccanici ed elettronici



Consolidated experience
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rapido alle esigenze dei suoi Clienti

CHAMPION 55

TECHNICAL DATA - CHAMPION 55

DATI TECNICI - CHAMPION 55

CE

X axis stroke Corsa carro asse X	mm (in)	3.800 (149 5/8)
Y axis stroke - GANTRY Corsa carro asse Y - GANTRY	mm (in)	2.500 / 3.500 / 6.500 (98 %) (137 25/32) (255 %)
Z axis stroke Corsa carro asse Z	mm (in)	350 (13 3/4)
A axis rotation Rotazione asse A	degrees gradi	-185° + 185° (370°)
C axis tilting Ribaltamento asse C	degrees gradi	0° ÷ 90°
X axis rapid speed Velocità in rapido del carro asse X	m/min (fpm)	45 (147,6)
Y axis rapid speed Velocità in rapido del carro asse Y	m/min (fpm)	45 (147,6)
Z axis rapid speed Velocità in rapido del carro asse Z	m/min (fpm)	10 (32,8)
Main disk-holder electrospindle power - Standard Potenza elettromandrino portadisco - Standard	HP S9 (kW)	19,4 (14,3)
Main disk-holder electrospindle torque - Standard Coppia elettromandrino portadisco - Standard	Nm	94
Main disk-holder electrospindle rotation speed - Standard Velocità di rotazione elettromandrino portadisco - Standard	rpm	0 ÷ 6.000
Electrospindle tool holder - Standard Attacco utensile elettromandino - Standard	-	1/2 " gas
Main disk-holder electrospindle power - Optional Potenza elettromandrino portadisco - Optional	HP S9 (kW)	31 (22,8)
Main disk-holder electrospindle rotation speed - Optional Velocità di rotazione elettromandrino portadisco - Optional	rpm	0 ÷ 8.000
Electrospindle tool holder - Optional Attacco utensile elettromandino - Optional	-	ISO 40 (optional)
Max disk diameter Diametro massimo del disco	mm (in)	625 (24 5/8)
Axes servomotors for axis X-Y-Z-A-(C) with absolutes encoder Servomotori per assi X-Y-Z-A-(C) con encoder assoluti	-	BRUSHLESS



NEW CHAMPION 55 WITH TABLE

Max total adsorbed power	18 kW
Approximate total weight	4.900 kg (10.802 lb)
Length	6.600 mm (259 1/4 in)
Width	4.300 mm (169 1/4 in)
Height	2.900 mm (114 1/4 in)
Capacity suction cups	420 kg (926 lb)
Minimum width for lifting	120 mm (4 3/4 in)
Optional *	* 50 mm (2 in)

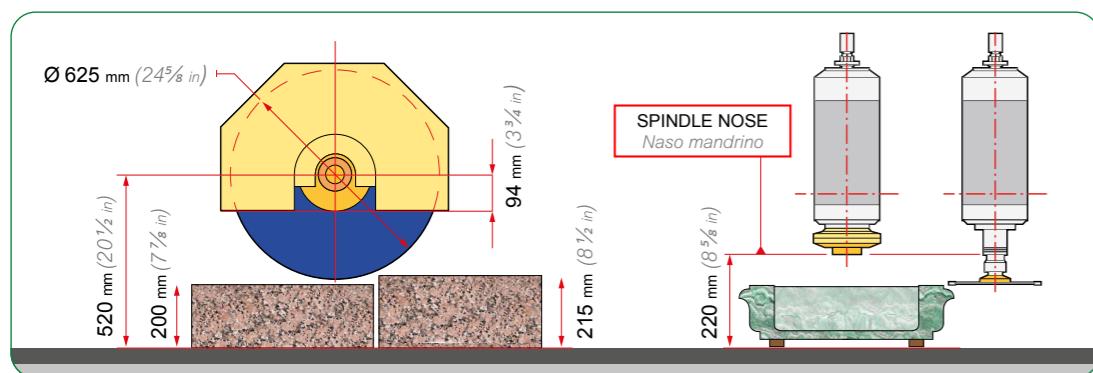
NEW CHAMPION 55/CL WITH SIDE LOADING



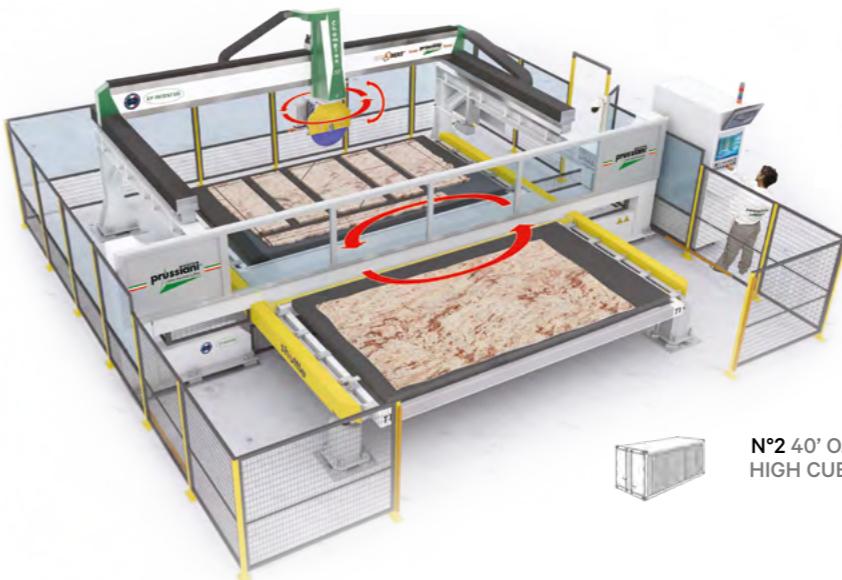
Nº1 40' O.T.
+ Nº1 20' O.T.

Width	4.300 mm (139 3/4 in)
Height	2.900 mm (114 1/4 in)
Capacity suction cups	420 kg (926 lb)
Minimum width for lifting	120 mm (4 3/4 in)
Optional *	* 50 mm (2 in)

- Automatic centralized greased lubrication. In case of anomalies the machine stops;
Lubrificazione centralizzata automatica a grasso. In caso di anomalie la macchina si arresta.
- Watertight IP 55 electric cabinet with safety thermostat;
Armadio elettrico a tenuta stagna IP 55 e termostato di sicurezza.
- Sound power level: 80 ÷ 90 dB(A);
Livello di potenza sonora: 80 ÷ 90 dB(A).



NEW CHAMPION 55 SHUTTLE WITH ROTATING TABLES



Nº2 40' O.T.
HIGH CUBE

Max total adsorbed power	18 kW
Approximate total weight	10.800 kg (23.809 lb)
Length	8.400 mm (330 3/4 in)
Width	7.600 mm (299 1/4 in)
Height	2.900 mm (114 1/4 in)
Capacity suction cups	420 kg (926 lb)
Minimum width for lifting	120 mm (4 3/4 in)
Optional *	* 50 mm (2 in)

CHAMPION[®] 65



3 or 5 year warranty
for mechanical electric
and electronic
components



Marmo Macchine
Mark guarantees the
italian excellence of
Prussiani machine

3 o 5 anni di garanzia per i componenti
meccanici ed elettronici



Consolidated experience
the first to patent the
suction cups manipulator
system "CUT&MOVE"

Consolidata esperienza, i primi a brevettare il sistema con
manipolatore a ventose "CUT&MOVE"



Prussiani Engineering
dinamic company able to
professionally and quickly
meet its customers needs

Prussiani Engineering, azienda dinamica e
capace di rispondere in modo professionale e
rapido alle esigenze dei suoi Clienti

CHAMPION 65

TECHNICAL DATA - CHAMPION 65

DATI TECNICI - CHAMPION 65

CE

X axis stroke Corsa carro asse X	mm (in)	3.800 (149 5/8)
Y axis stroke - GANTRY Corsa carro asse Y - GANTRY	mm (in)	2.500 / 3.500 / 6.500 (98 %) (137 25/32) (255 1/8)
Z axis stroke Corsa carro asse Z	mm (in)	450 (17 3/4)
A axis rotation Rotazione asse A	degrees gradi	- 185° + 185° (370°)
C axis tilting Ribaltamento asse C	degrees gradi	0° ÷ 90°
X axis rapid speed Velocità in rapido del carro asse X	m/min (fpm)	75 (147,6)
Y axis rapid speed Velocità in rapido del carro asse Y	m/min (fpm)	75 (147,6)
Z axis rapid speed Velocità in rapido del carro asse Z	m/min (fpm)	8 (32,8)
Main disk-holder electrosindle power Potenza elettromandrino portadisco	HP S9 (kW)	26,5 (19,5)
Main disk-holder electrosindle torque Coppia elettromandrino portadisco	Nm	130
Main disk-holder electrosindle rotation speed Velocità di rotazione elettromandrino portadisco	rpm	0 ÷ 10.000
Electrosindle tool holder Attacco utensile elettromandrino	-	ISO 40
Max disk diameter Diametro massimo del disco	mm (in)	750 (29 1/2)
Axes servomotors for axis X-Y-Z-A-C with absolutes encoder Servomotori per assi X-Y-Z-A-C con encoder assoluti	-	BRUSHLESS

- Automatic centralized greased lubrication. In case of anomalies the machine stops;

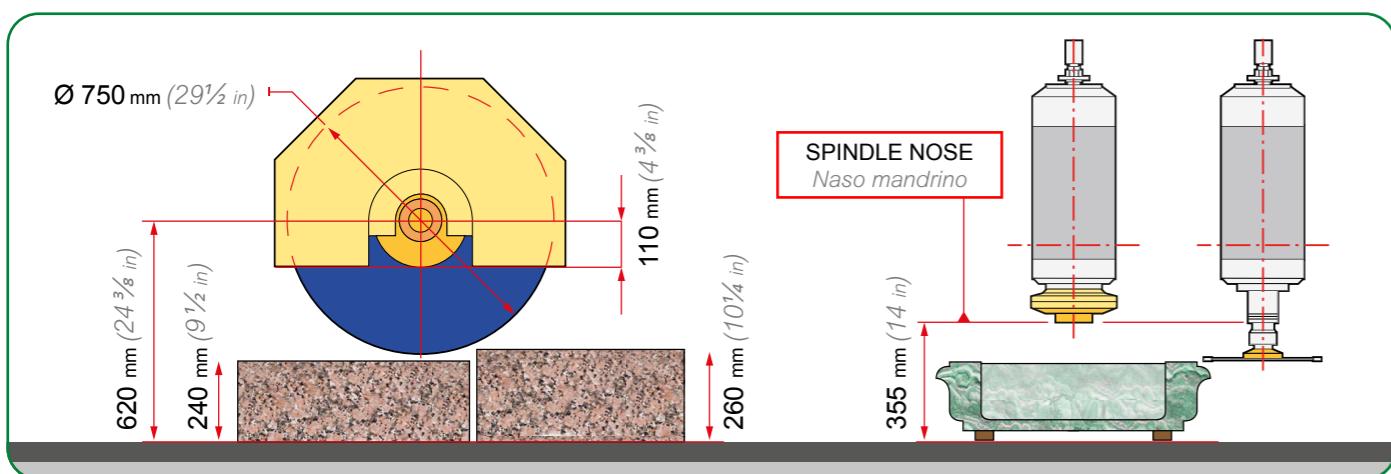
Lubrificazione centralizzata automatica a grasso. In caso di anomalie la macchina si arresta.

- Watertight IP 55 electric cabinet with safety thermostat;

Armadio elettrico a tenuta stagna IP 55 e termostato di sicurezza.

- Sound power level: 80 ÷ 90 dB(A);

Livello di potenza sonora: 80 ÷ 90 dB(A).



NEW CHAMPION 65 WITH TABLE



Max total adsorbed power	24 kW
Approximate total weight	5.200 kg (11.500)
Length	6.900 mm (271 5/8 in)
Width	4.470 mm (176 in)
Height	3.270 mm (128 3/4 in)
Maximum capacity suction cups	800 kg (1.763 lb)
Minimum width for lifting	50 mm (2 in)

NEW CHAMPION 65/CL WITH SIDE LOADING



Max total adsorbed power	26 kW
Height	3.270 mm (128 3/4 in)
Approximate total weight	8.500 kg (18.750 lb)
Length	10.900 mm (429 1/8 in)

NEW CHAMPION 65 WITH CONVEYOR BELT + MOTORIZED SIDE TILTING ROLLERS TABLE



VARIANTE: Shuttle con Leve

NEW CHAMPION 5



ZEUS
Automatic loading of slabs with anthropomorphic robot

Sistema robotizzato per il carico automatico delle lastre



NEW CHAMPION 5



3 or 5 year warranty
for mechanical electric
and electronic
components

3 o 5 anni di garanzia per i componenti
meccanici ed elettronici



Marmo Macchine
Mark guarantees the
italian excellence of
Prussiani machine

Marmo Macchine Mark garantisce l'italianità
delle macchine Prussiani



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the first to patent the
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dynamic company able to
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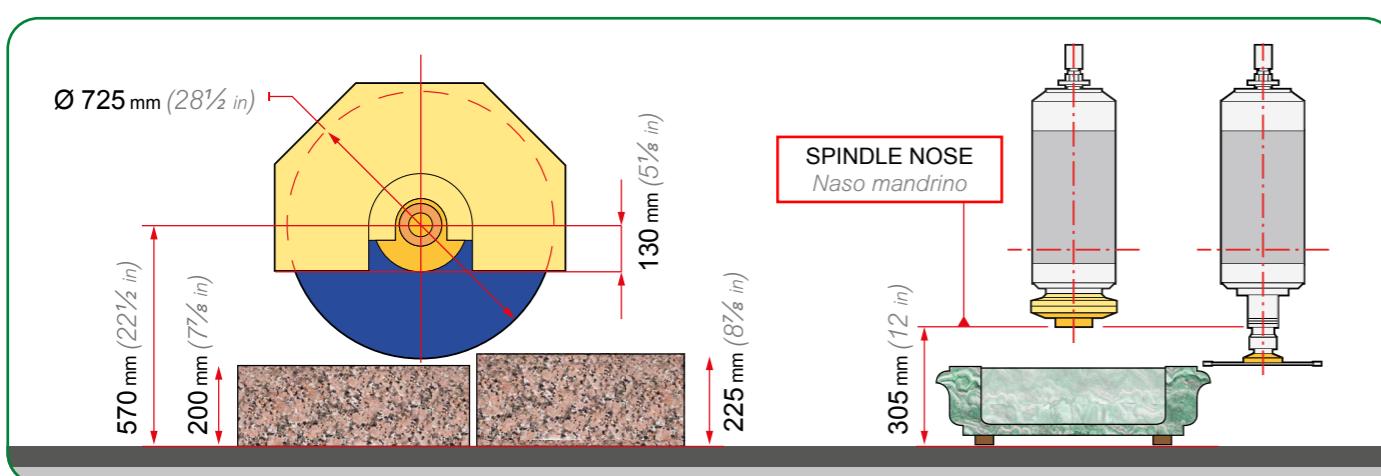
Prussiani Engineering, azienda dinamica e
capace di rispondere in modo professionale e
rapido alle esigenze dei suoi Clienti

TECHNICAL DATA - NEW CHAMPION 5 CE

DATI TECNICI - NEW CHAMPION 5

X axis stroke Corsa carro asse X	mm (in)	3.800 (149 5/8)
Y axis stroke - GANTRY Corsa carro asse Y - GANTRY	mm (in)	2.500 / 3.500 / 6.500 (98 3/8) (137 25/32) (255 7/8)
Z axis stroke Corsa carro asse Z	mm (in)	400 (15 3/4)
A axis rotation Rotazione asse A	degrees gradi	- 185° + 185° (370°)
C axis tilting Ribaltamento asse C	degrees gradi	0° ÷ 90°
X axis rapid speed Velocità in rapido del carro asse X	m/min (fpm)	65 (213,3)
Y axis rapid speed Velocità in rapido del carro asse Y	m/min (fpm)	65 (213,3)
Z axis rapid speed Velocità in rapido del carro asse Z	m/min (fpm)	11,4 (37,4)
Main disk-holder electrosaw power Potenza elettromandrino portadisco	HP S6 (kW)	36 (26,4)
Main disk-holder electrosaw torque Coppia elettromandrino portadisco	Nm	207
Main disk-holder electrosaw rotation speed Velocità di rotazione elettromandrino portadisco	rpm	0 ÷ 8.000
Electrosaw tool holder Attacco utensile elettromandrino	-	ISO 40
Max disk diameter Diametro massimo del disco	mm (in)	725 (28 1/2)
Axes servomotors for axis X-Y-Z-A-C with absolutes encoder Servomotori per assi X-Y-Z-A-C con encoder assoluti	-	BRUSHLESS

- Automatic centralized greased lubrication. In case of anomalies the machine stops;
Lubrificazione centralizzata automatica a grasso. In caso di anomalie la macchina si arresta.
- Watertight IP 55 electric cabinet with safety thermostat;
Armadio elettrico a tenuta stagna IP 55 e termostato di sicurezza.
- Sound power level: 80 ÷ 90 dB(A);
Livello di potenza sonora: 80 ÷ 90 dB(A).



NEW CHAMPION 5 WITH TABLE



Y axis stroke GANTRY	2.500 mm (98 3/8 in)
Max total adsorbed power	31 kW
Approximate total weight	7.500 kg (16.550 lb)
Length	6.925 mm (272 1/2 in)
Width	5.100 mm (200 3/4 in)
Height	3.700 mm (145 5/8 in)
Capacity suction cups	800 kg (1.763 lb)
Minimum width for lifting	50 mm (2 in)

NEW CHAMPION 5/CL WITH SIDE LOADING



Y axis stroke GANTRY	2.500 mm (98 3/8 in)
Max total adsorbed power	33 kW
Approximate total weight	8.500 kg (18.750 lb)
Length	14.150 mm (557 1/4 in)
Width	5.100 mm (200 3/4 in)
Height	3.700 mm (145 5/8 in)
Capacity suction cups	800 kg (1.763 lb)
Minimum width for lifting	50 mm (2 in)

NEW CHAMPION 5/2T WITH TWO TABLES



Y axis stroke GANTRY	6.500 mm (255 7/8 in)
Max total adsorbed power	33 kW
Approximate total weight	11.500 kg (25.350 lb)
Length	6.926 mm (272 1/2 in)
Width	9.350 mm (368 1/8 in)
Height	3.700 mm (145 5/8 in)
Capacity suction cups	800 kg (1.763 lb)
Minimum width for lifting	50 mm (2 in)

NEW CHAMPION 5 / NT

WITH CONVEYOR BELT + MOTORIZED SIDE TILTING ROLLERS TABLE

Y axis stroke GANTRY	2.500 mm (98 3/8 in)
Max total adsorbed power	31 kW
Approximate total weight	12.300 kg (27.150 lb)
Length	15.200 mm (598 3/8 in)
Width	5.100 mm (200 3/8 in)
Height	3.700 mm (145 5/8 in)
Capacity suction cups	800 kg (1.763 lb)
Minimum width for lifting	50 mm (2 in)



N°1 20' O.T.
+ N°2 40' O.T.
HIGH CUBE



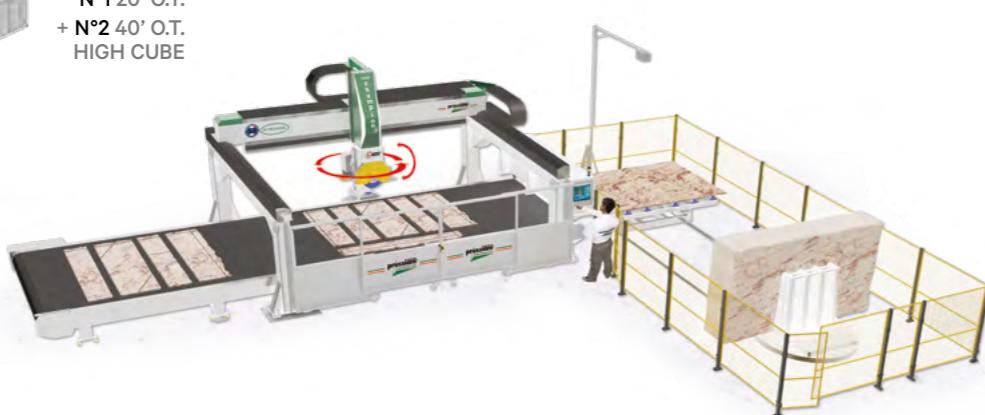
NEW CHAMPION 5 / NT + CA

WITH CONVEYOR BELT + AUTOMATIC SLABS LOADER

Y axis stroke GANTRY	2.500 mm (98 3/8 in)
Max total adsorbed power	40 kW
Approximate total weight	13.500 kg (29.770 lb)
Length	15.200 mm (598 3/8 in)
Width	6.000 mm (236 1/4 in)
Height	3.700 mm (145 5/8 in)
Capacity suction cups	800 kg (1.763 lb)
Minimum width for lifting	50 mm (2 in)



N°1 20' O.T.
+ N°2 40' O.T.
HIGH CUBE



NEW CHAMPION 5 / NT + NS

WITH CONVEYOR BELT + AUTOMATIC SLABS LOADER

Y axis stroke GANTRY	2.500 mm (98 3/8 in)
Max total adsorbed power	40 kW
Approximate total weight	13.500 kg (29.770 lb)
Length	15.200 mm (598 3/8 in)
Width	6.000 mm (236 1/4 in)
Height	3.700 mm (145 5/8 in)
Capacity suction cups	800 kg (1.763 lb)
Minimum width for lifting	50 mm (2 in)

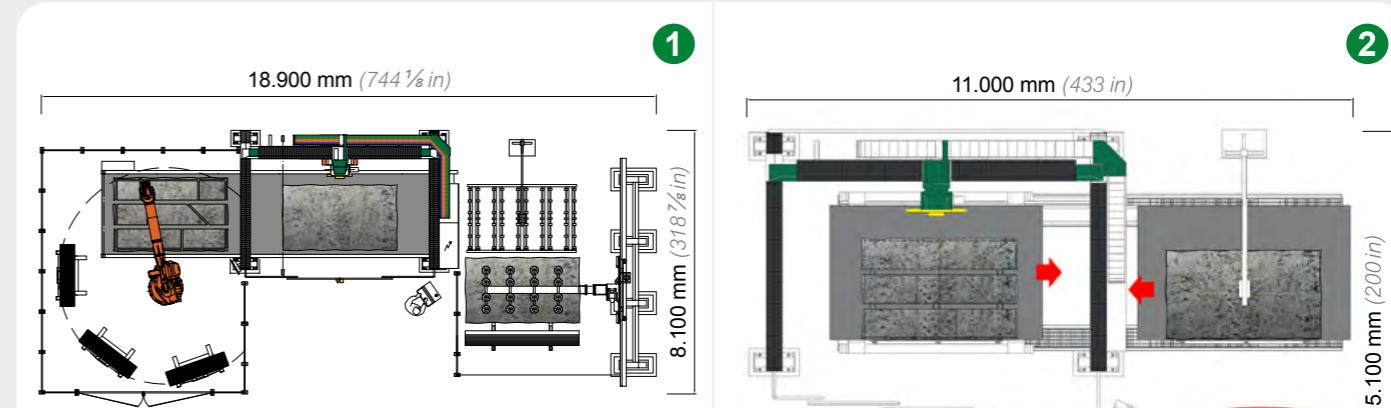


N°1 20' O.T.
+ N°2 40' O.T.
HIGH CUBE



CUSTOMIZED MACHINES

MACCHINE PERSONALIZZATE



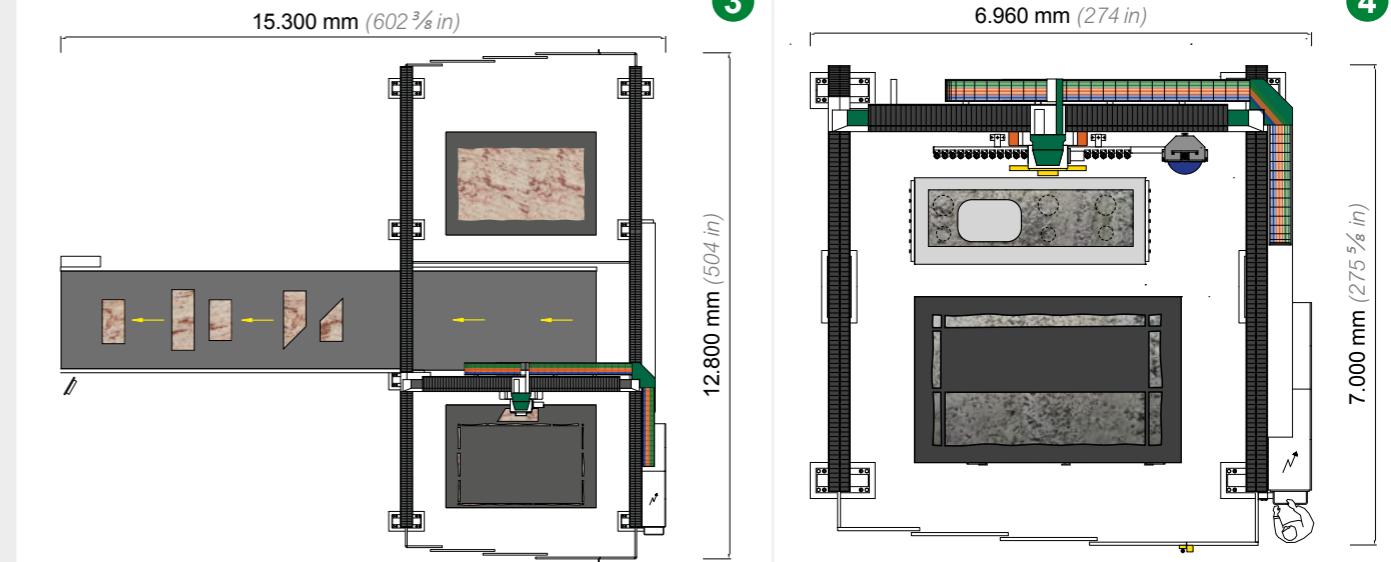
With automatic loader of the book/match slabs and unloading robot.



Automatic tables exchanger with tilting levers

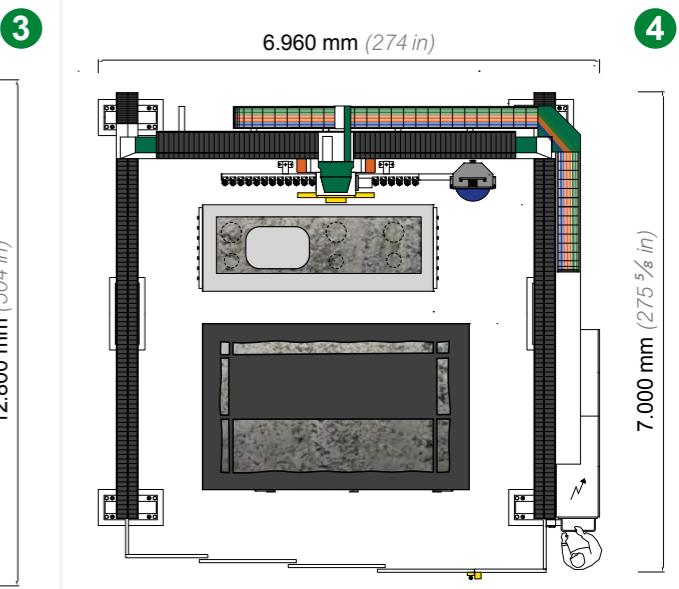
2

3



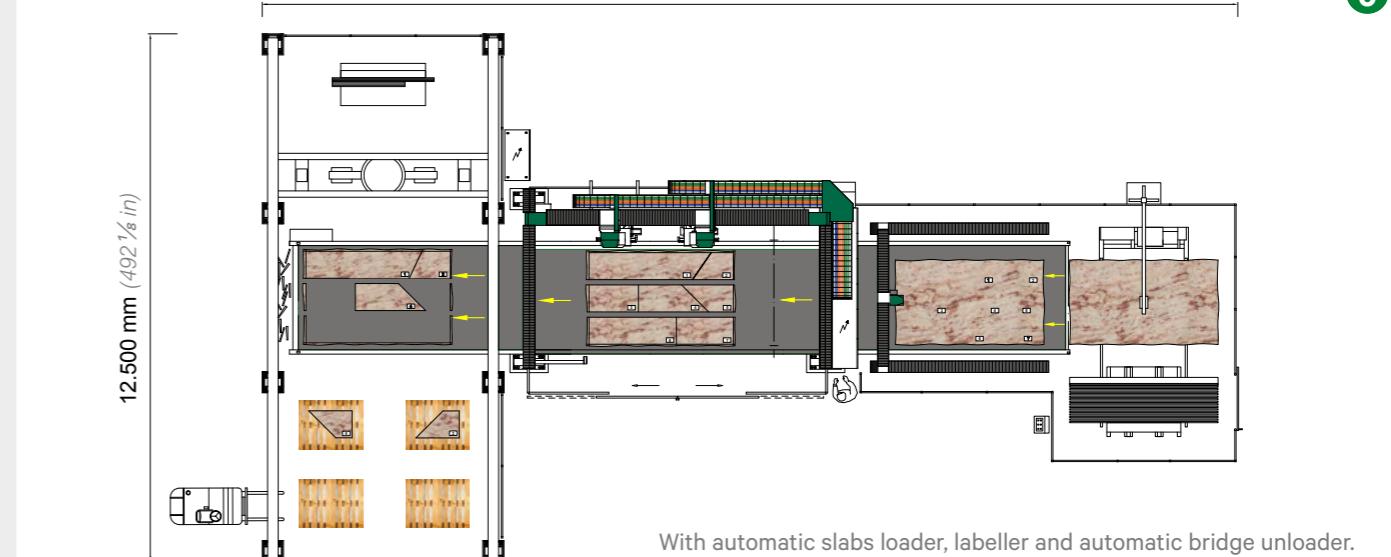
With two tables and unloading belt.

4



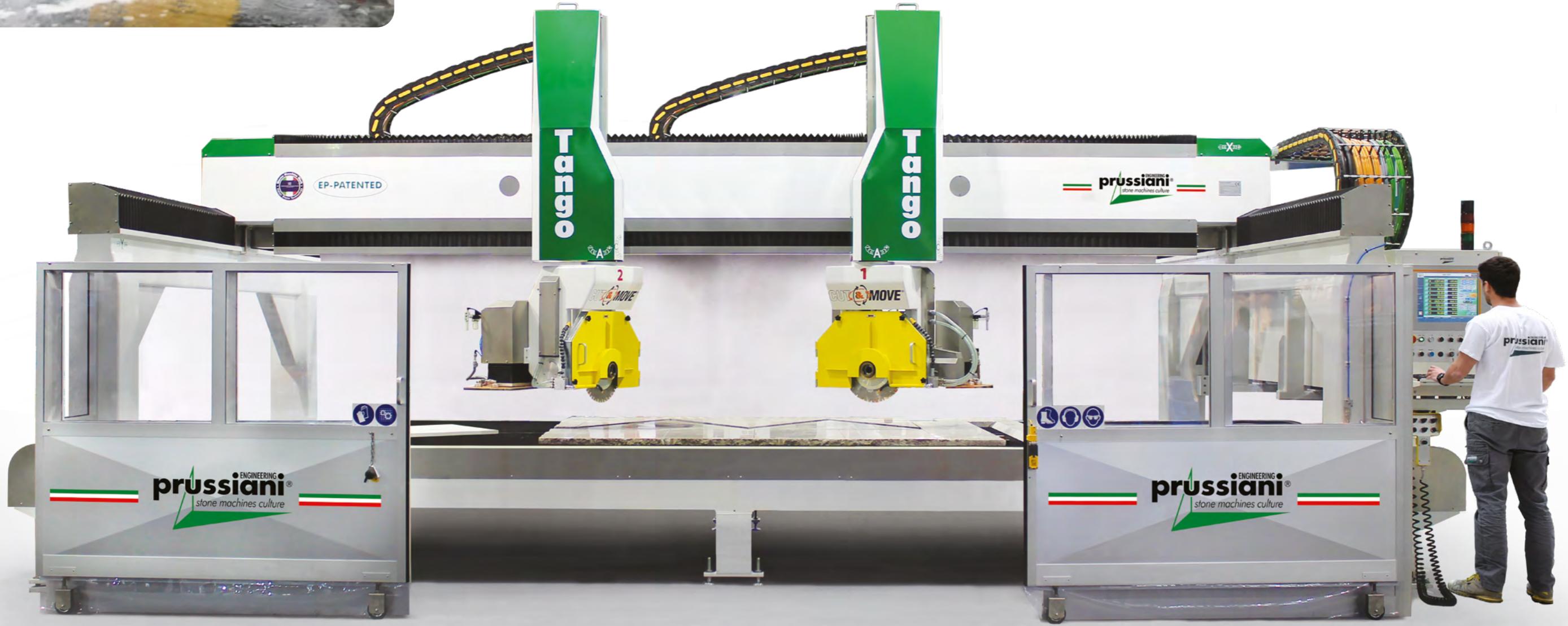
With aluminium table for kitchen and vanity tops.

5



With automatic slabs loader, labeller and automatic bridge unloader.

TANGO



3 or 5 year warranty
for mechanical electric
and electronic
components



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TANGO

TECHNICAL DATA - TANGO

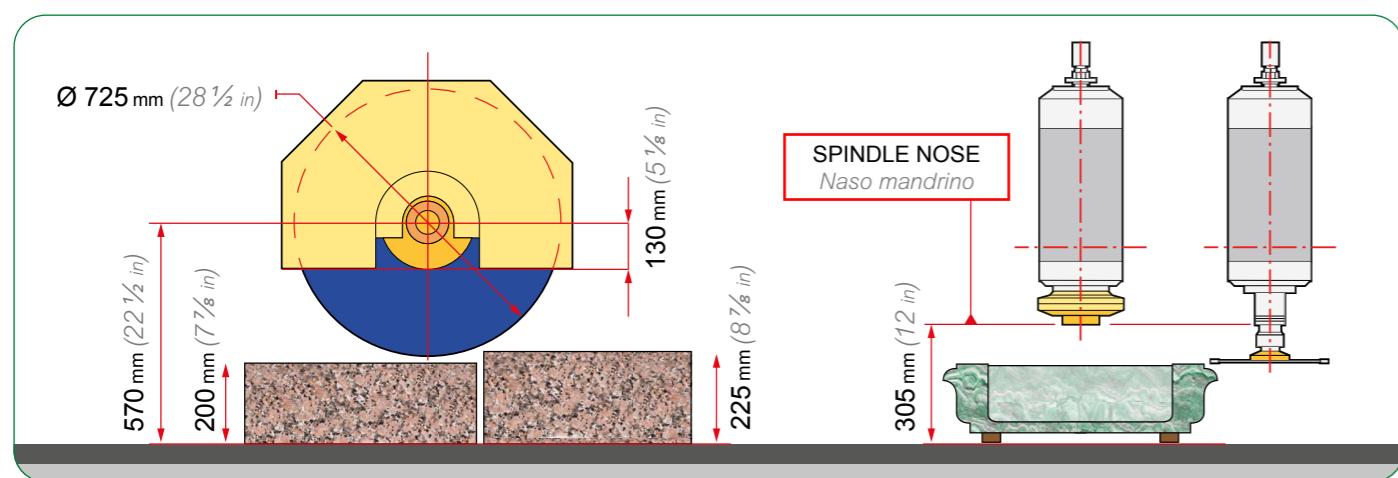
DATI TECNICI - TANGO

CE

TANGO

X axis stroke Corsa carro asse X	mm (in)	4.550 (179 1/8)
Y axis stroke - GANTRY Corsa carro asse Y - GANTRY	mm (in)	2.500 (98 %)
Z axis stroke Corsa carro asse Z	mm (in)	400 (15 3/4)
A axis rotation Rotazione asse A	degrees gradi	-185° +185° (370°)
C axis tilting Ribaltamento asse C	degrees gradi	0° ÷ 90°
X axis rapid speed Velocità in rapido del carro asse X	m/min (fpm)	65 (213,3)
Y axis rapid speed Velocità in rapido del carro asse Y	m/min (fpm)	65 (213,3)
Z axis rapid speed Velocità in rapido del carro asse Z	m/min (fpm)	11,4 (37,4)
Main disk-holder electrospindle power Potenza elettromandrino portadisco	HP S6 (kW)	36 (26,4)
Main disk-holder electrospindle torque Coppia elettromandrino portadisco	Nm	207
Main disk-holder electrospindle rotation speed Velocità di rotazione elettromandrino portadisco	rpm	0 ÷ 8.000
Electrospindle tool holder Attacco utensile elettromandrino	-	ISO 40
Max disk diameter Diametro massimo del disco	mm (in)	725 (28 1/2)
Axes servomotors for axis X-Y-Z-A-C with absolutes encoder Servomotori per assi X-Y-Z-A-C con encoder assoluti	-	BRUSHLESS

- Automatic centralized greased lubrication. In case of anomalies the machine stops;
Lubrificazione centralizzata automatica a grasso. In caso di anomalie la macchina si arresta.
- Watertight IP 55 electric cabinet with safety thermostat;
Armadio elettrico a tenuta stagna IP 55 e termostato di sicurezza.
- Sound power level: 80 ÷ 90 dB(A);
Livello di potenza sonora: 80 ÷ 90 dB(A).



Y axis stroke GANTRY	4.550 mm (179 1/8 in)
Max total adsorbed power	65 kW
Approximate total weight	15.000 kg (33.070 lb)
Length	17.000 mm (669 1/4 in)
Width	5.150 mm (202 3/4 in)
Height	3.700 mm (145 5/8 in)
Capacity suction cups	800 kg (1.763 lb)
Minimum width for lifting	50 mm (2 in)



AUTOMATIC LOADER WITH SUCTION CUPS

CARICATORE AUTOMATICO CON VENTOSE

CE

The **AUTOMATIC LOADER WITH SUCTION CUPS** is used to grab the slabs from a suitable vertical support, revolving or fixed, and turn them from the vertical to horizontal processing position.

Il **CARICATORE AUTOMATICO CON VENTOSE** consente di prelevare le lastre da un apposito supporto verticale, girevole o fisso, e farle ruotare dalla posizione verticale a quella di lavorazione orizzontale.



ADVANTAGES

- **COMPLETELY AUTOMATIC** loading cycle in coordination with the entire line process.
- Special “**TIILT FUNCTION**” to avoid grabbing two or more slabs “glued” together
- **HIGH FLEXIBILITY** thanks to 21 suction cups organized in several independent vacuum groups, with automatic exclusion of the zones that does not intercept a slab, to allow loading of slabs of different sizes.
- **VENTURI VACUUM CIRCUIT**, no maintenance required and low energy consumption



VANTAGGI

- Ciclo di carico completamente automatico in coordinamento con l'intero processo di linea.
- Speciale “funzione di ribaltamento” per evitare la presa di due o più lastre “incollate”
- Elevata flessibilità grazie a 21 ventose organizzate in più zone indipendenti, con esclusione automatica delle zone che non intercettano la lastra, per consentire il carico di lastre di diverse dimensioni.
- Impianto del vuoto con sistema Venturi, nessuna manutenzione richiesta e ridotto consumo energetico

SLABS DIMENSION DIMENSIONI LASTRE

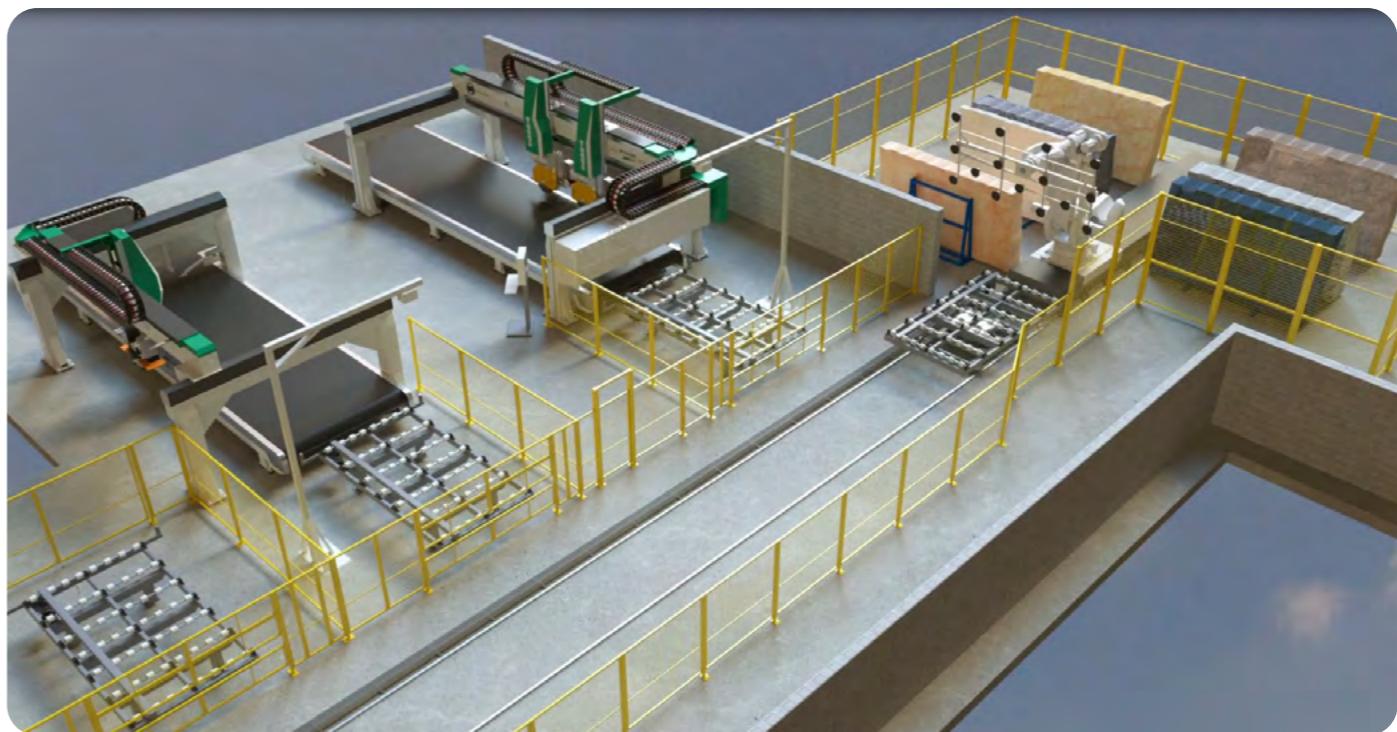
From 1.500 x 1.000 mm up to 3.600 x 2.200 mm Da 1.500 x 1.000 mm fino a 3.600 x 2.200 mm

SLAB WEIGHT PESO DELLA LASTRA

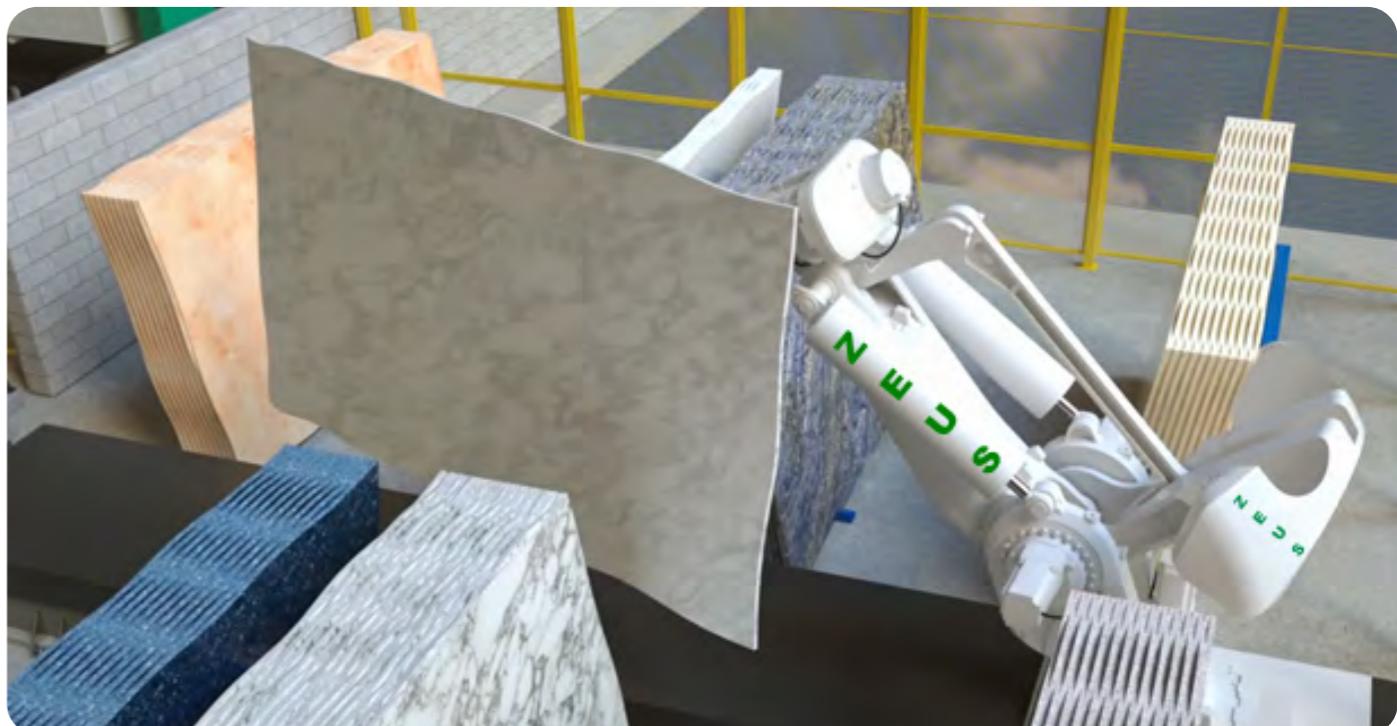
Up to 2.000 kg (4,409 lbs)
Fino a 2.000kg

AUTOMATIC LOADING OF SLABS

WITH ANTHROPOMORPHIC ROBOT

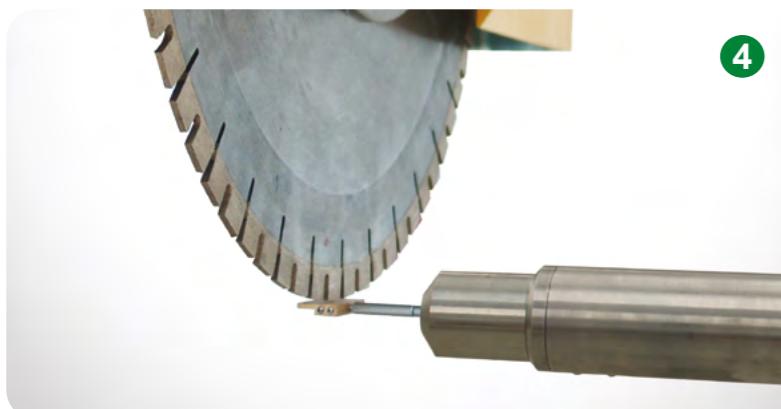
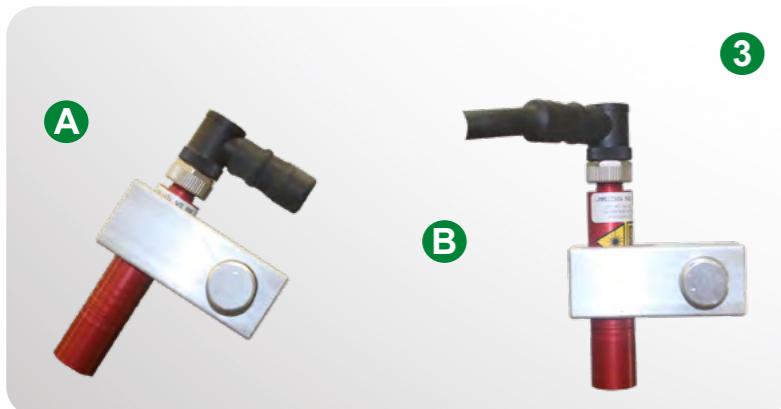
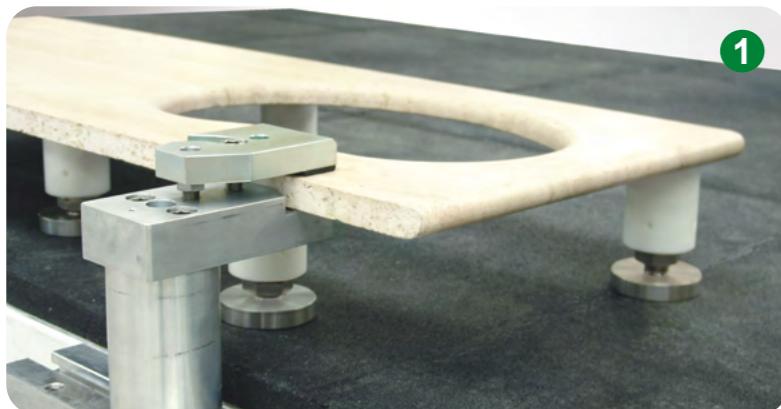


Automatic loading of slabs with anthropomorphic robot
Sistema robotizzato per il carico automatico delle lastre



INNOVATIVE DEVICES

DISPOSITIVI INNOVATIVI



Kit for vanity and kitchen tops.

Kit per la lavorazione di piani da bagno e cucina.

Cutting unit for reinforcement bar complete with disk diameter 400 mm (15 3/4 in) for granite.

Gruppo per esecuzione canalini sottopiano completo di disco diametro 400 mm per granito.

A) Laser beam showing cutting line, 3 positioned on the rotating head.

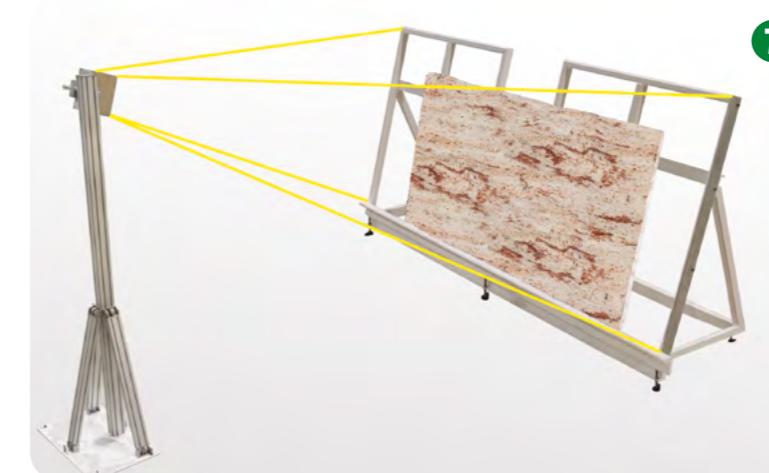
Laser segnataglio fissato sulla testa rotante. (Disponibile di colore rosso o verde)

B) Laser beam "Dry Run" showing cross pointer, positioned on the rotating head.

Laser a croce, funzione "Dry run" fissato sulla testa rotante. (Disponibile di colore rosso)

Electronic presetting feeler for automatic measuring of the disk diameter.

Sonda presetting per la misurazione automatica del diametro del disco.



Camera with protective pressurized cover.

Macchina fotografica con box di protezione pressurizzato.

Electronic feeler for automatic measuring of the thickness of the slab to cut indispensable for a perfect cutting at 45°.

Sonda elettronica per la misurazione automatica dello spessore della lastra da tagliare indispensabile per un perfetto taglio a 45°.

Save programming time by taking pictures of your slabs in advance, thanks to the special slabs "check-in" photo-system. Your digital slabs will be ready to use for programming cuts at any time.

Risparmia tempo di programmazione salvando le foto delle lastre in anticipo, grazie allo speciale sistema di "check-in" lastre. Le tue lastre digitali saranno pronte all'uso in qualsiasi momento per la programmazione tagli.

Manipulator Dual-Zone with suction cups for the automatic movement of the work-pieces. Prussiani Engineering European Patent EP 1651409.

Manipolatore a ventose BI-ZONA per lo spostamento automatico pezzi. Brevetto Europeo Prussiani Engineering EP 1651409.



PRUSSIANI'S Stonapp. & CRM

Funziona su smartphone e tablet

STONAPP

The APP for being informed on the productivity of your Prussiani machines

CRM

The APP for an excellent organization of after-sales service, for buying spare parts and receiving answers to your questions.



STONAPP

L'APP per essere informati sulla produttività delle vostre macchine Prussiani.

CRM

L'APP per un'eccellente organizzazione del servizio post-vendita, per l'acquisto di pezzi di ricambio e per ricevere risposte alle vostre domande.



CNC BRIDGE SAWS

SEGATRICI A PONTE CNC

CNC MILLING MACHINES

FRESATRICI A PONTE CNC

CNC CUT&JET COMBINED

COMBINATE CUT&JET CNC

CNC WATERJET

GETTO D'ACQUA CNC

CNC WORKING CENTERS

CENTRI DI LAVORO CNC

CNC SINK HOLE MACHINES

MACCHINE PER FORI LAVANDINI CNC

CNC LATHES

TORNI CNC

CNC SLABS POLISHING MACHINES

LUCIDALASTRE CNC

EDGE POLISHING MACHINES

LUCIDACOSTE

AUTOMATIC LOADING OF SLABS WITH ANTHROPOMORPHIC ROBOT

CARICO AUTOMATICO DELLE LASTRE CON ROBOT ANTROPOMORFO

AUTOMATIC STORAGES FOR SINGLE SLABS

MAGAZZINI AUTOMATICI PER SINGOLE LASTRE



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E-mail: info@prussiani.com

