



VELOCEX LINE

MINIMUM USE OF RESOURCES TO MAXIMIZE PROFIT

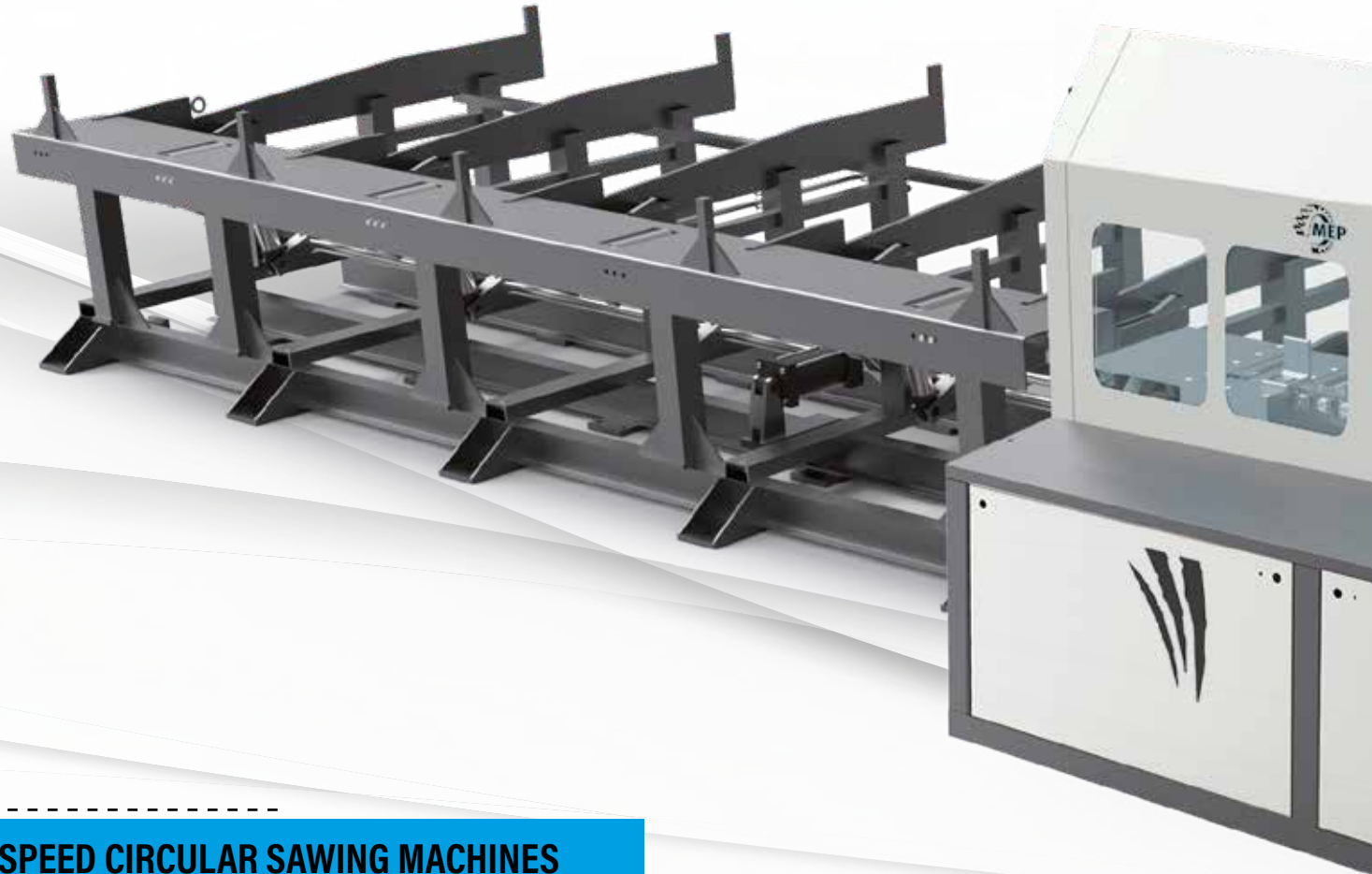
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VELOCEX 65 / VELOCEX 80 / VELOCEX 100 / VELOCEX 125 / VELOCEX 150 / VELOCEX 175

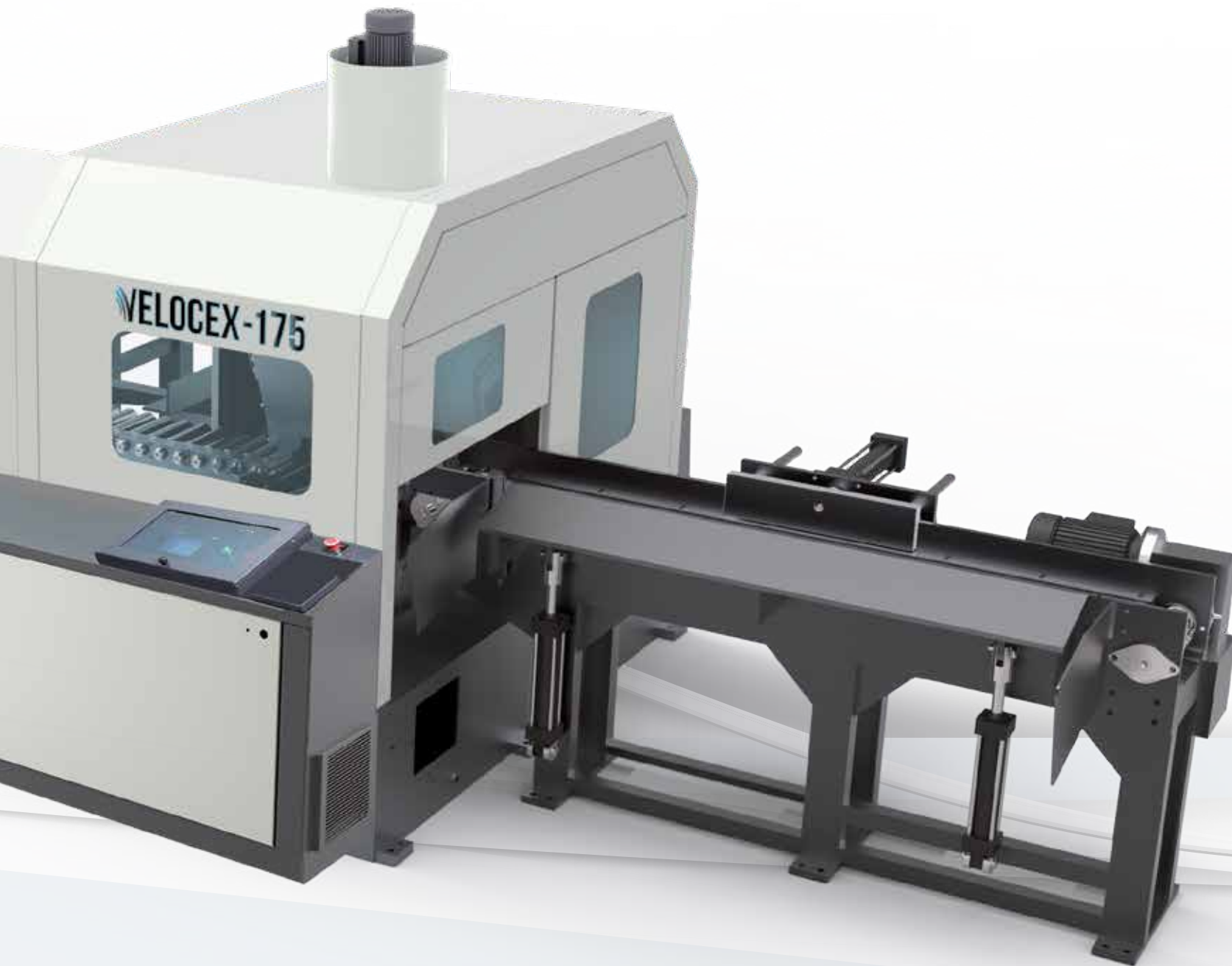
CIRCULAR MACHINES > AUTOMATIC > CARBIDE TIPPED BLADE

- 0° cuts, suitable for ferrous & non-ferrous materials
- solid / structural - section round / square / rectangular / hollow tubes



HIGHLY EFFICIENT AND PRODUCTIVE HIGH SPEED CIRCULAR SAWING MACHINES

WITH TUNGSTEN CARBIDE TIPPED OR CERMET BLADES, HIGH PRODUCTIVITY, GOOD FINISH, PRECISE LENGTH AND BURR FREE CUTS CAN BE OBTAINED ON CONTINUOUS BASIS!



SEQUENTIAL CONTROL OF THE MACHINE IS BY PLC & COLOUR TOUCH SCREEN HMI.

Operational parameters like feed rate, load per tooth, blade speed, number of cuts, job size, cut length can be set. PLC can store different cutting programs for quick setup.

- For sections and tubes special feature of slow entry and slow exit is possible to program.
 - > Colour touch screen HMI (Mitsubishi).
 - > "Set up wizard" for easy set up of jobs.
 - > 200 program can be saved with 12 digit alpha numeric name.
- Control indicates cutting time, cycle time & number of cuts completed.
 - > Comprehensive US steel grades menu with capability to program additional custom material grades.
 - > Job monitoring with cycle time, job duration, parts count, tool life counter.
 - > Up to 5 different cut off lengths per bar.
 - > Bar optimization by repeating same sequence per bar.
 - > Manual operation for all moveable units and easy control.
 - > On the fly length correction, after pause. Also PTL & saw speed can be changed.
 - > Auto home facility to achieve-conditions for automatic operation.
 - > Error codes displayed with explanation of problem.
 - > For hollow sections special features such as slow entry, slow exit is provided.
 - > Diagnostics of all input, outputs and axis parameters.



SPECIFICATIONS

	VELOCEX - 65
Bar stock length	3000-6000 mm
Trim cut	0 - programmable 10 mm to longer
Cut off length	6 mm up to full bar length
Single stroke	6 to 500 mm
Remnant length	40 mm / 40 mm + cut length
Circular saw blade dimension	carbide/cermet tipped 250 x 2.0 x 1.70 x 32, 4/9/50 & 4/11/63 mm
Blade speed	50 to 200 rpm, infinitely variable
Blade drive motor	75 Kw
Hydraulic motor	2.2 Kw
Bar loading magazine	Inclined type with storage width of 710 mm
Maximum capacity of inclined magazine	1700 Kg
Weight of machine	2500 Kg
Size of machine	2500 x 1950 x 1900
Shipping dimensions	1950 x 1980 x 2225
Bar-feed speed mm per second	200 mm/sec
Index Accuracy of the machine at 100 mm travel	0.03 mm
Cut length accuracy in 100 mm cut length	+/- 0.1 mm

Cut lengths longer than 200mm require an output support

●	10 - 65 mm
■	10 - 50 mm
■	10 - 55 mm

	VELOCEX - 80	VELOCEX - 100	VELOCEX - 125	VELOCEX - 150	VELOCEX - 175
Bar stock length	3000-6000 mm	3000-6000 mm	3000-6000 mm	3000-6000 mm	3000-6000 mm
Trim cut	0 - programmable 10 mm to longer	0 - programmable 10 mm to longer	0 - programmable 10 mm to longer	0 - programmable 10 mm to longer	0 - programmable 10 mm to longer
Cut off length	6 mm up to full bar length	10 mm to full bar length	10 mm to full bar length	20 mm to full bar length	20 mm to full bar length
Single stroke	6 to 1000 mm	10 to 1000 mm	10 to 1000 mm	20 to 1000 mm	20 to 1000 mm
Remnant length	65 mm / 80 mm + cut length	100 mm / 90 mm + cut length	100 mm / 90 mm + cut length	100 mm / 120mm + cut length	100 mm / 120 mm + cut length
Circular saw blade dimension	carbide/cermet tipped 285 x 2.0 x 1.70 x 32 , 4/9/50 & 4/11/63 mm 315 x 2.0 x 1.70 x 32 , 4/12/90 & 4/11/63 mm	carbide/cermet tipped 360 x 2.6 x 2.25 x 40, 4/15/80 & 4/12/90 mm 390 x 2.6 x 2.25 x40, 4/15/80 & 4/12/90 mm	carbide/cermet tipped 420 x 2.7 x 2.25 x 50, 4/15/80 & 4/12/90 mm 460 x 2.7 x 2.25 x 50, 4/15/80 & 4/12/90 mm	carbide/cermet tipped 460 x 2.7 x 2.25 x 50, 4/15/80 & 4/12/90 mm 530 x 2.7 x 2.25 x 50, 4/15/80 & 4/12/90 mm	carbide/cermet tipped 560 x 3.0 x 2.5 x 50, 4/15/80 & 4/12/90 mm
Blade speed	50 to 200 mpm, infinitely variable	50 - 200 mpm, infinitely variable	50 - 200 mpm, infinitely variable	50 - 200 mpm, infinitely variable	50 - 200 mpm, infinitely variable
Blade drive motor	11 Kw	15 Kw	18.6 Kw	30 Kw	30 Kw
Hydraulic motor	2.2 Kw	2.2 Kw	2.2 Kw	2.2 Kw	2.2 Kw
Bar loading magazine	Inclined type with storage width of 710 mm	Inclined type with storage width of 1070 mm	Inclined type with storage width of 1070 mm	Inclined type with storage width of 885 mm	Inclined type with storage width of 885 mm
Maximum capacity of inclined magazine	1700 Kg	4700 Kg	4700 Kg	5700 Kg	5700 Kg
Weight of machine	3000 Kg	4000 Kg	4500 Kg	5000 Kg	5500 Kg
Size of machine	2500 x 2550 x 1900	2800 x 2550 x 2050	2800 x 2550 x 2050	3700 x 2600 x 2100	3700 x 2600 x 2100
Shipping dimensions	2150 x 2585 x 2245	2150 x 2660 x 2360	2150 x 2660 x 2360	2170 x 2660 x 2485	2170 x 2660 x 2485
Bar-feed speed mm per second	200 mm/sec	200 mm/sec	200 mm/sec	200 mm/sec	200 mm/sec
Index Accuracy of the machine at 100 mm travel	0.03 mm	0.03 mm	0.03 mm	0.03 mm	0.03 mm
Cut length accuracy in 100 mm cut length	+/- 0.1 mm	+/- 0.1 mm	+/- 0.1 mm	+/- 0.1 mm	+/- 0.1 mm

CUTTING CAPACITY


	10 - 80 mm	25 - 100 mm	25 - 125 mm	30 - 150 mm	50 - 175 mm
	10 - 60 mm	25 - 80 mm	25 - 90 mm	30 - 130 mm	50 - 130 mm
	10 - 65 mm	25 - 90 mm	25 - 100 mm	30 - 140 mm	50 - 145 mm



"USER FRIENDLY" PROGRAMMING OF CUTTING CYCLES

After every cut, saw does not return back till bar stock and cut piece moves away from the saw so that blade teeth do not touch material on return stroke to optimize tool life.



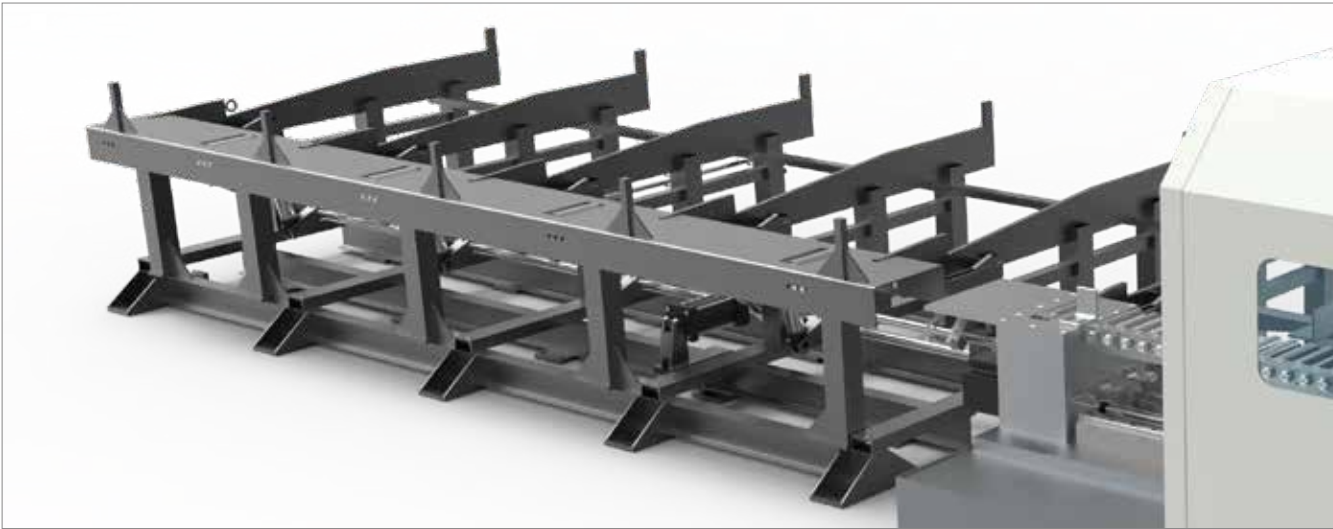
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- Electro Magnetic Particle Clutch is provided for good finish and enhanced tool life.
 - The blade feed is controlled by ball screw and servo motor.



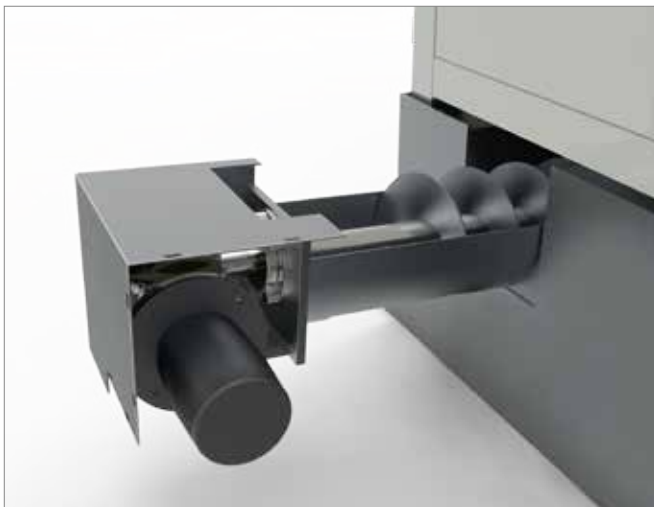
Electric motor is directly coupled ■
to the reduction Gear Box
through timing pulley & Belt and
inclined cutter drive arrangement
is mounted on inclined Linear
Guides in order to have the most
suitable touch of the blade into
the material.

> PRODUCTIVITY

_ Bar loader for storage and loading of the bars into the shuttle infeed.



_ Chip auger for all type of materials with max discharge height of 300mm granting the right operational conditions of the saw.
Optional Magnetic style chip conveyor for ferrous metals ONLY, can be retrofitted.



_ Hydraulic wire chip brush for constant removal of chips from the blade teeth granting a longer blade life.



_ Automatic oil lubrication of most critical moving parts to grant the right operational conditions of the saw and consequently a longer life. Lubrication is timed through the main machine controller.

_ Low oil level sensor for warning of operator and avoid any stop in the production process or let the disk running without coolant.





- HMI display feature lot size programmed & cut completed, program number in use, current drawn by motor.
- HMI touch screen located at the front-bottom for easy operation and maintenance.
- Digital display of saw motor on HMI with adjustable overload shut-off.

> PRECISION

_ Trim cuts and remnants are sorted automatically from good parts via heavy-duty discharge sorting chute (single point adjustment of bar diameter) *Optional Out feed chain powered conveyor for longer cut lengths is available upon request in different lengths.



_ Automatic retraction of bar for contact free return stroke of the saw blade.

_ Easily replaceable Wear resistant carbide blade guides to insure tolerances.



> SAFETY

_ Machine is completely enclosed.

_ All access doors to the machines are electrically interlocked and machine will stop if door is opened during operation.

_ Front access door opens on hinges to allow complete and easy access for blade change.

_ Low pneumatic pressure shut down sensor switch for Micromist.

_ Bar loader safety guarding (OPTIONAL)

> **ADVANCED TECHNOLOGY FOR HIGH PERFORMANCE AT HIGH SPEED**

_AC servo driven ball screw arrangement.

_Saw head slides on heavy duty Roller LMG bearings with ball screw.

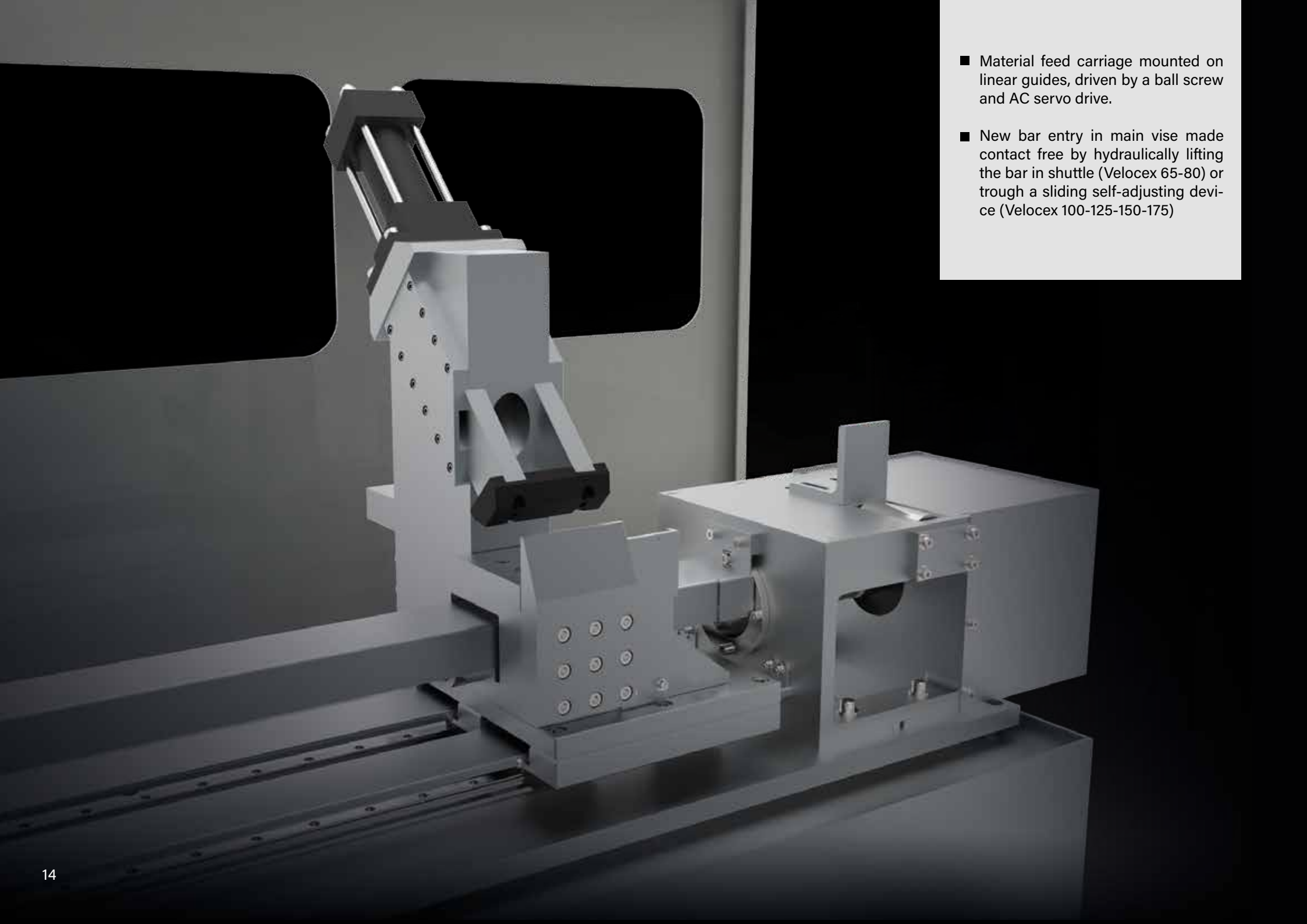


_Variable cutting speed with frequency drive and rpm display.

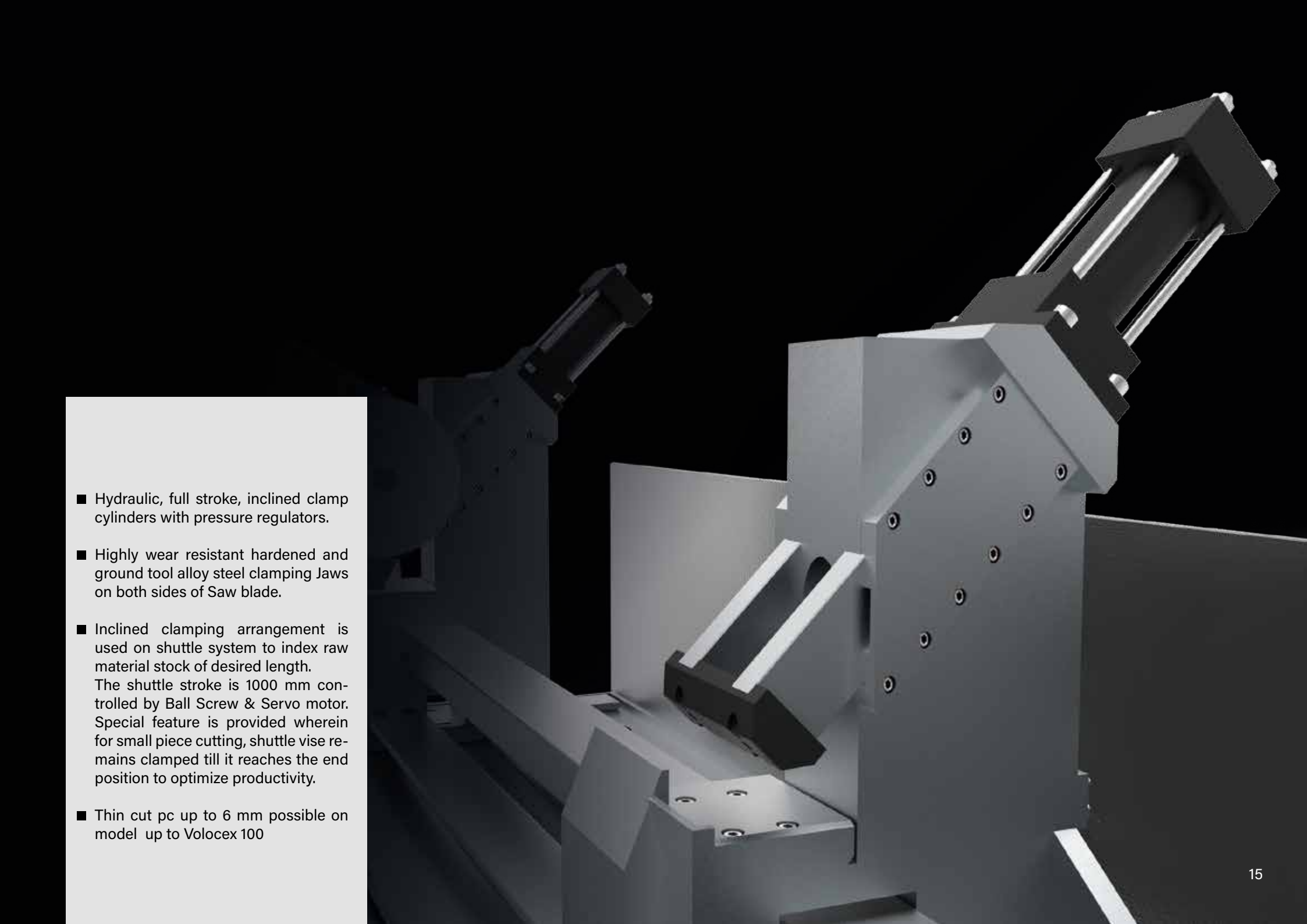
_Electromagnetic Powder Break to eliminate gearbox backlash and enhance blade life.

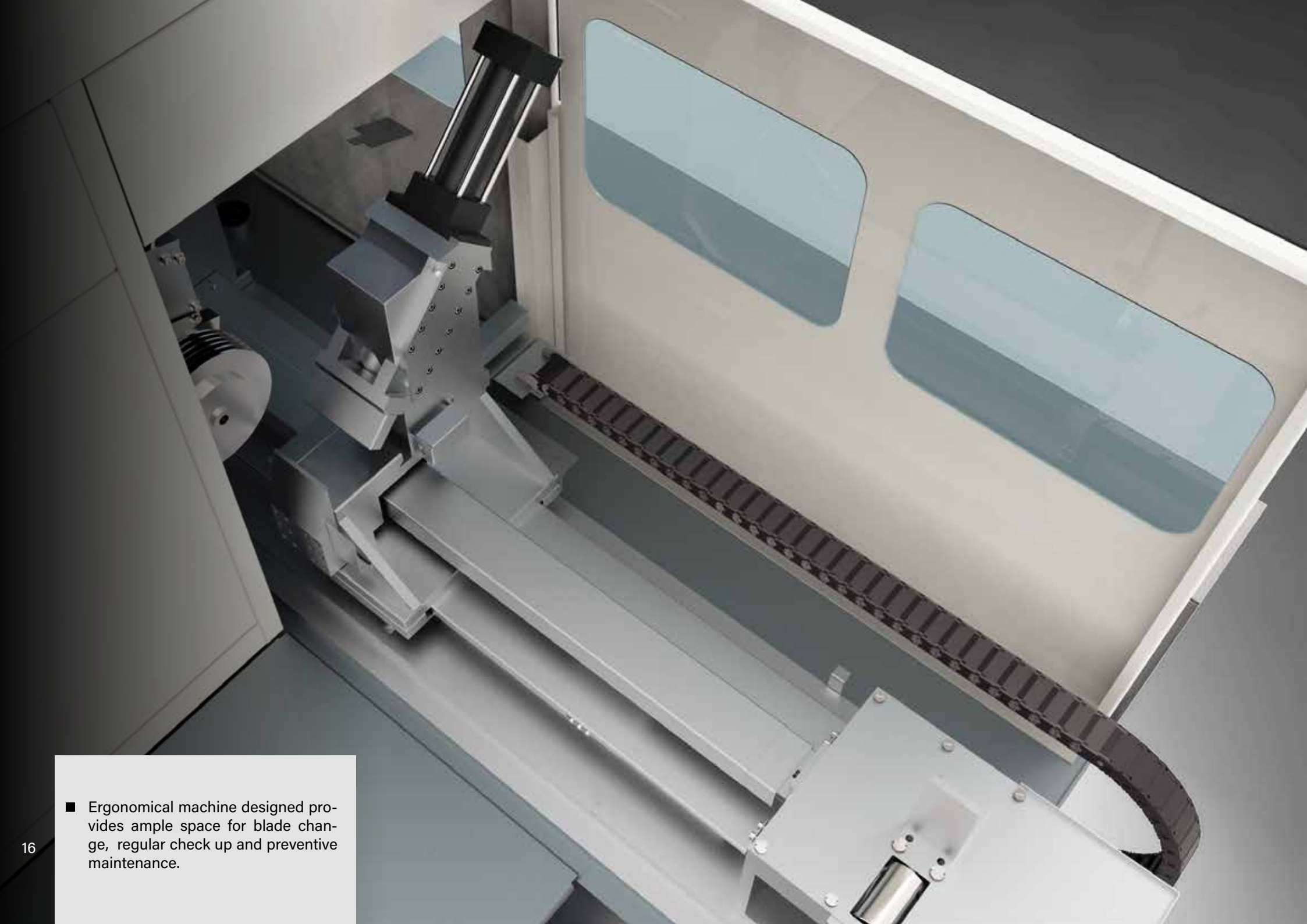


LATEST GENERATION HYDRAULIC POWER PACK, WITH HIGH EFFICIENCY AND LOW CONSUMPTION.



- Material feed carriage mounted on linear guides, driven by a ball screw and AC servo drive.
- New bar entry in main vise made contact free by hydraulically lifting the bar in shuttle (Velocex 65-80) or trough a sliding self-adjusting device (Velocex 100-125-150-175)

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- Hydraulic, full stroke, inclined clamp cylinders with pressure regulators.
 - Highly wear resistant hardened and ground tool alloy steel clamping Jaws on both sides of Saw blade.
 - Inclined clamping arrangement is used on shuttle system to index raw material stock of desired length. The shuttle stroke is 1000 mm controlled by Ball Screw & Servo motor. Special feature is provided wherein for small piece cutting, shuttle vise remains clamped till it reaches the end position to optimize productivity.
 - Thin cut pc up to 6 mm possible on model up to Volocex 100



- Ergonomical machine designed provides ample space for blade change, regular check up and preventive maintenance.

- Bar loader for rounds (horizontal with pins) 6,0 M
- Bar loader for rounds (inclined) 6,0 M
- Belt bundle loader to be connected to incl. or horizontal bar loader 6 m max. 2T
- Fume extractor
- Z type magnetic chip conveyor (in place of chip auger)
- Z type belt chip conveyor (in place of chip auger)
- Safety bar loader cover
- Trafo for V.208, 220, 240, 480, 575
- Belt sorting station 1 M for min. Length of 50mm
- Belt sorting station 2 M for min. Length of 50mm
- Belt sorting station 3 M for min. Length of 50mm
- Belt sorting station 1 M with hydraulic pusher *
- Belt sorting station 2 M with hydraulic pusher **
- Belt sorting station 3 M with hydraulic pusher ***
- Floating shuttle system to avoid scratches of material
- Tele service device
- Blade cermet or tct

*** max length of piece for pusher: 500mm**

**** max length of piece for pusher: 1000mm**

**** * max length of piece for pusher: 1500mm**

DESIGN AND PRODUCTION OF CUSTOM CUTTING LINES

MEP's passionate team of designers and technical experts use the latest mechanical design software to keep at the forefront of metal cutting technology, and to choose the best, most innovative and advanced solutions to all possible needs in metal cutting.

MEP's technical staff are able to design and build custom cutting machines and equipments to meet all possible needs, from dedicated cutting lines to railmounted machines for cutting continuously formed tube, etc..

MEP SERVICE PROGRAM:

- > GLOBAL SERVICE
- > LOCAL SERVICE

OUR EXPERIENCE AND SUPPORT, TO GRANT YOUR EFFICIENCY, ALWAYS!

MEP offers a variety of solutions as guarantee of high productivity:

- > TRAINING,
- > SOFTWARE,
- > SERVICE & SUPPORT,
- > MAXIMISING SOLUTIONS,
- > INTEGRATIONS,
- > REFURBISHING OF USED MACHINES



SPARE PARTS

- **Worldwide stock availability for parts and logistics:**
Pergola (ITALIA), Woodstock (CANADA), Conway (USA), San Paolo (BRASILE), Suzhou (P.R. CHINA)
- **Availability of majority of parts for prompt delivery**

SERVICE & SUPPORT

- Customer service is definitely the added value to company task; a reliable organization, dynamic and with a great technical background capable to service, install and commission all our machines as well as organize in-house training both for sales and engineering team.

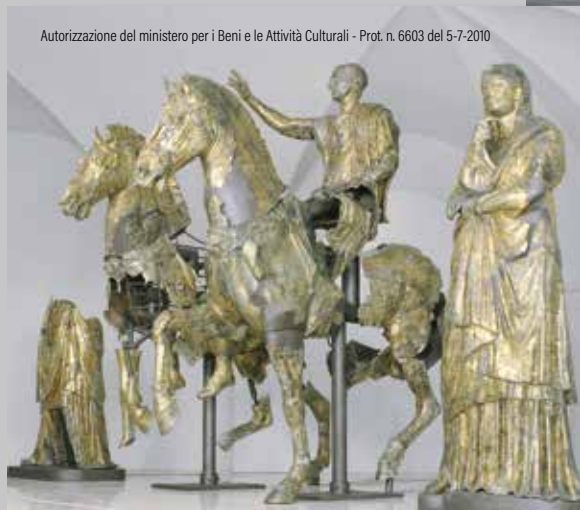
SOFTWARE UPDATING

- DATA TRANSFER EXTREMELY EASY AND FAST: to get **updating and changes of software via email**, to be transferred through USB, SD or MMC card using the slot on main console.

TRAINING

- MEP has highly qualified and certified trainers to increase your know-how on our products.
- In-house training for operators to show the right use.

Autorizzazione del ministero per i Beni e le Attività Culturali - Prot. n. 6603 del 5-7-2010



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STATUES IN THE WORLD

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