

BOSS 338 - 552 HD

Superfast



 **IEMCA**

BOSS HD SUPERFAST

THE COMPLETION OF PERFECTION

The BOSS HD SUPERFAST is an automatic bar feeder able to support bars from 3 to 38 mm (Boss 338 HD Superfast) and from 5 to 51 mm (Boss 552 HD), ideal to work with either fixed or sliding headstock lathes.



 **IEMCA**

**1961**

FOUNDING

**4**

PRODUCTION PLANTS

**550**

EMPLOYEES

**+ 100.000**

INSTALLATIONS

**90**

COUNTRIES

A HISTORY OF SUCCESS

People, Skills, Innovations and Investments have made IEMCA the Worldwide LEADER

The first IEMCA bar feeder, model A, is officially presented at Milan's Trade Show.



MODEL A

IEMCA develops the CS 110 for sliding headstock lathes: it is the first bar feeder able to work bars of 0.8 mm diameter.



MODEL CS

IEMCA launches the first bar feeder in the world for multi spindle turning machines equipped with a revolutionary patent: the "double bar pusher" or "pre-feeding".



PRA

IEMCA develops TAL: the first bar feeder in the world equipped with lubrication inside the guide channel.



TAL

IEMCA BOSS is born and defines the market standard: it is the first bar feeder with full electronic control.



BOSS

1966**1971****1979****1983****1991**



IEMCA develops SIR: the first integral bar feeder for multi-spindle turning machines equipped with guide channels with variable diameter, thanks to the use of "sprockets" (IEMCA patent).



SIR



MASTER



ELITE



MASTER HF



BOSS HD SUPERFAST



INDUSTRY 4.0



SIR HEAVY DUTY

1994

1998

2007

2009

2013

2016

2017

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Photo courtesy of Carlo Nobili S.p.A. Rubinetterie. IEMCA with DMG MORI.

THE LARGE IEMCA FACTORY

Competencies for the Industry of the Future

BOSS HD Superfast is made in the IEMCA plant in Faenza, Emilia Romagna, Italy.

It's the biggest bar feeder plant in the world with an available floor space of more than 20,000 sq. mt. (215,000 sq.ft.). More than 200 people work in this location everyday to develop new innovative technologies to support end users.



THE PERFECT FORMULA

Maximum productivity, reliability and user-friendly solution



BOSS HD Superfast ensures maximum reliability without compromise: continuous improvements of the product, attention to details and over twenty years of history have allowed BOSS range to set the quality standard for the market in any work situation.

PIONEER SINCE 1991

Over 30,000 working units over the world

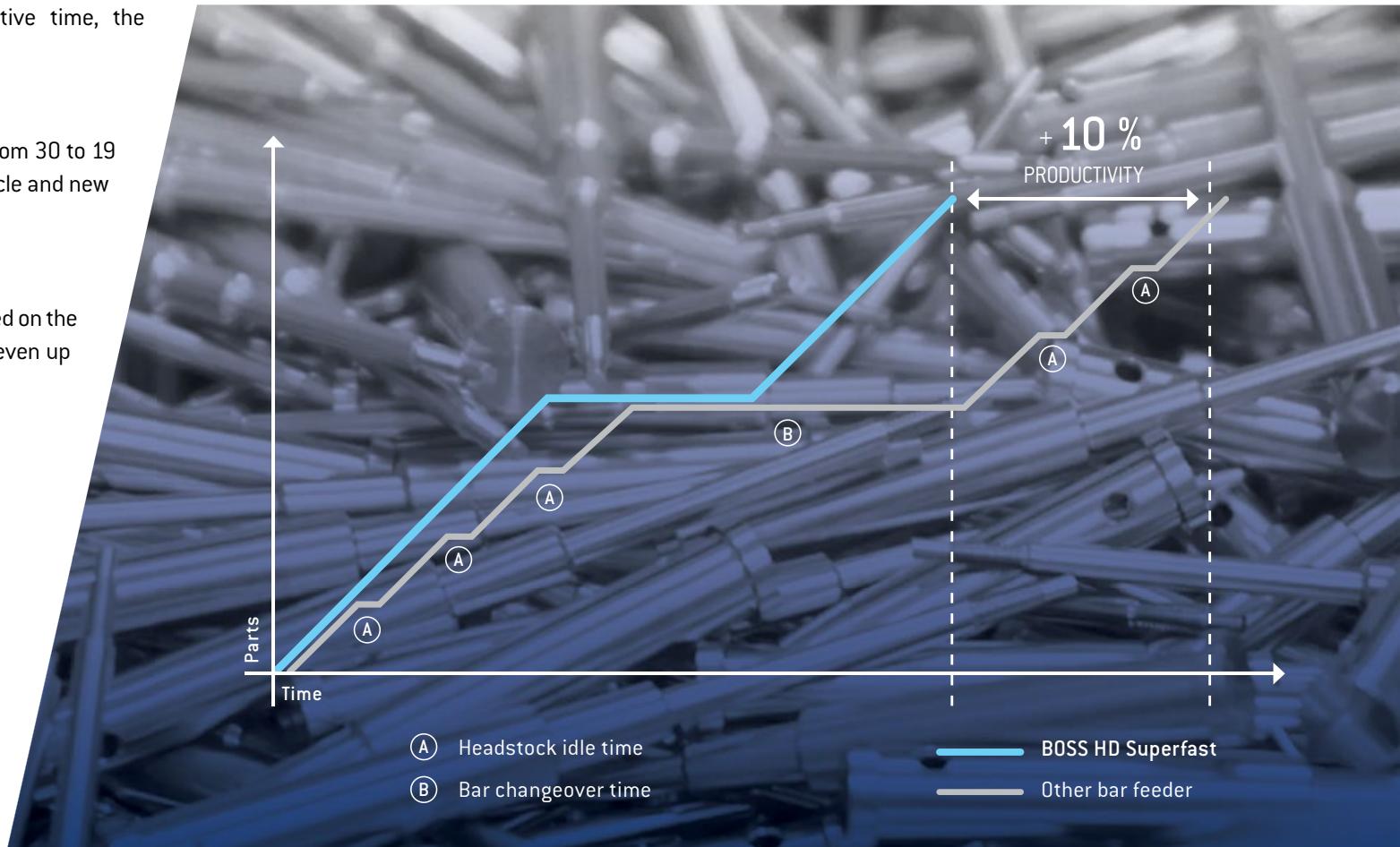
Thanks to the elimination of non-productive time, the increase in productivity can reach up to 10%.

Bar changeover time drastically reduced.

Reduction of bar changeover time by 37% (from 30 to 19 seconds)* through the use of a new work cycle and new components.

Headstock idle times eliminated to zero.

Reduction of the headstock idle times imposed on the lathe by the synchronism of the bar feeder even up to their elimination.



The data are based on specific actual situations. Please contact your nearest IEMCA sales agent in order to receive an estimate for the productivity increase in your specific case.



Elimination of
headstock idle time
0"



Drastic reduction
of bar changeover
time

+ 10 % productivity
increase



GUIDE CHANNEL

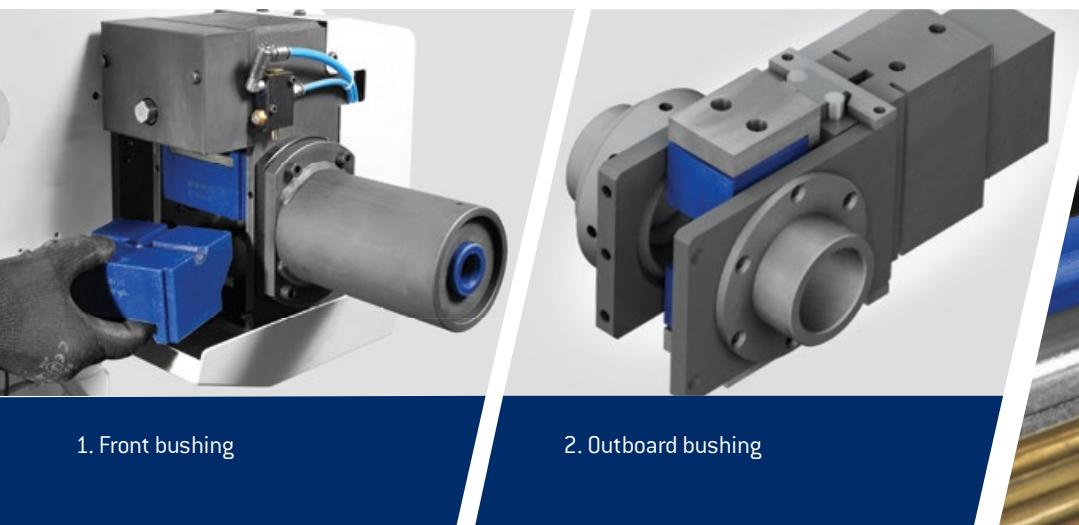
The widest range of workable diameters within a single guide channel

Flexibility without equal.

The guide channel of BOSS Superfast HD is the only one which allows to work such a wide range of diameters without needing to change it. The guide channel is continuous, with a circular section and completely closed (IEMCA patent). These characteristics guarantee the perfect rotation of the bar, without any discontinuity, making it also suitable for the machining process of polygonal bars.

Elimination of vibrations.

The material of the guide channel has been especially designed to absorb and damp vibrations. Front bushings and outboard bushings for the guide system that are installed on the back of the headstock of the lathe are made of the same material.



VERY HIGH RIGIDITY AND RELIABILITY

Reduced vibrations and perfect synchronization

Very high rigidity.

To further increase the stiffness of the new BOSS, we have added the HD (Heavy Duty) options to the well known thick sectioned tube beam.

The HD (Heavy Duty) structure guarantees the bar feeder absorbs a larger quantity of vibration from the rotating bar (even over 60%) even when loading bent bars.

Protected from harmful vibrations, the lathe spindle life is extended.

Even more reliable.

The mechanical syncro device ties the bar feeder rigidly to the lathe regardless of the headstock speed or the bar diameter.

The bar feeder is also able to carry out checks to exclude the production of parts that are too short/long compared to specifications, within a tolerance range set by the operator.



Mechanical synchronization



NEW OPERATOR INTERFACE

One Touch functions

The new operator interface has been enriched with new user friendly functions.

New One Touch features allow the operator to perform multiple operations with just one touch of the HMI panel. Part programs can be stored and recalled easily.

The bar feeder keypad can be relocated on the lathe panel.

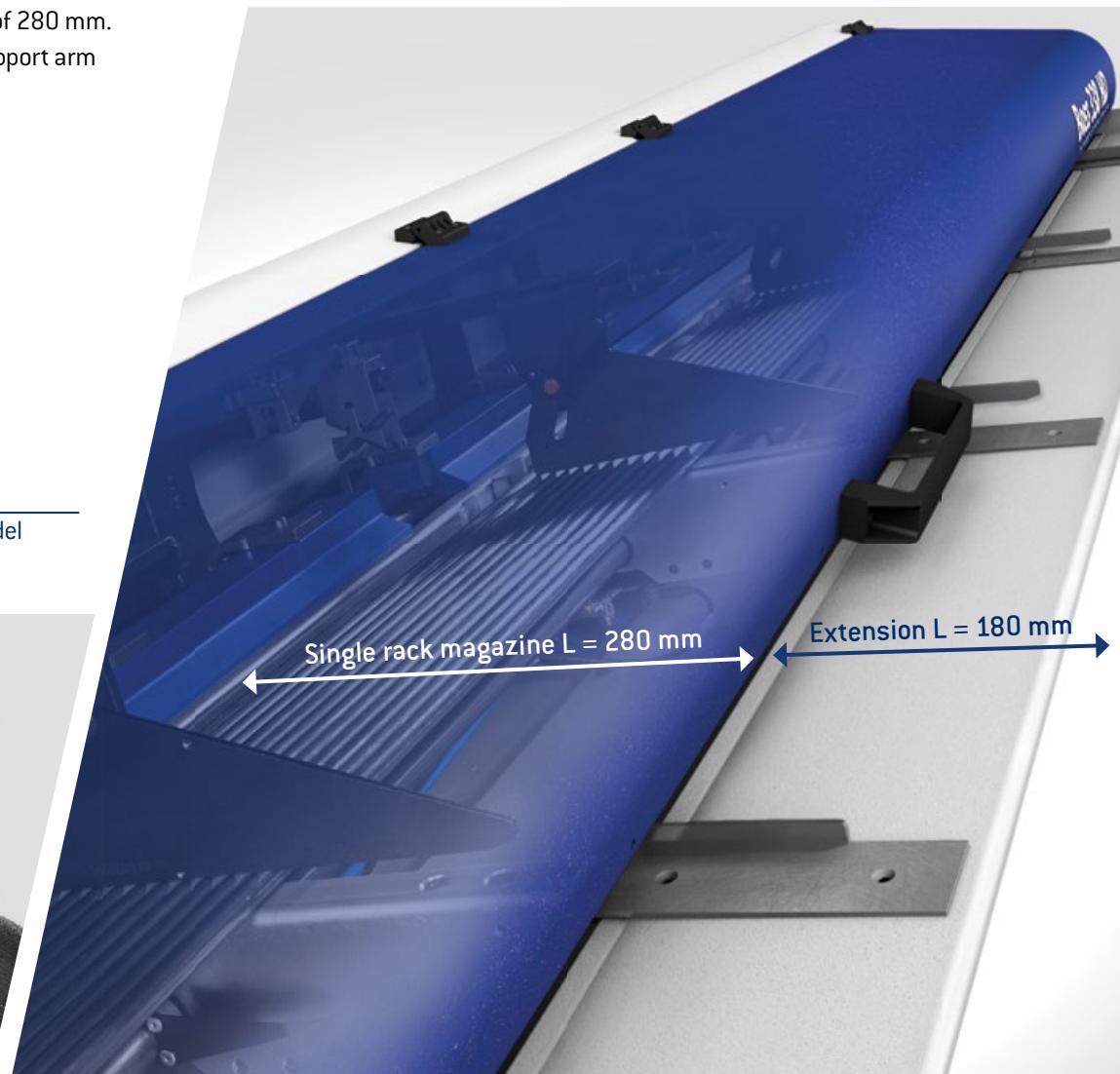


*Available only for touchscreen.

SINGLE RACK MAGAZINE

Practical and safe while loading bar in the magazine

BOSS HD Superfast is equipped with a single rack magazine with a working length of 280 mm. A further 180 mm magazine extension is available too. There's also a bar loading support arm system.



Bar loading support arm optional
for 338 model - standard for 552 model

Single rack magazine L = 280 mm

Extension L = 180 mm

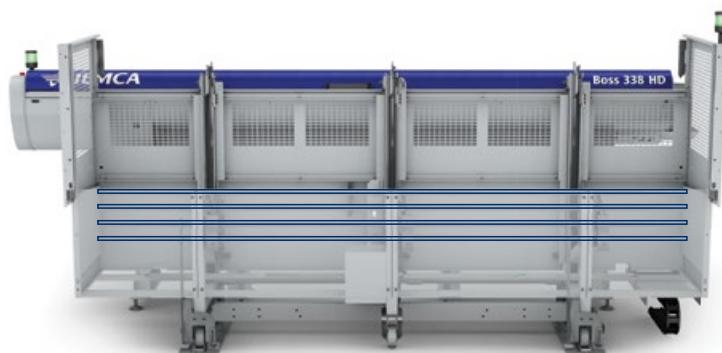


BUNDLE AND MULTI RACK CADDY

For unattended production

BOSS HD Superfast has a large capacity of bars, which allows extended unattended production. Bundle (F type) and multi rack (P type) magazines are available.

The Caddy-F allows direct loading of 250 mm diameter bundles of material extending the single rack magazine capacity by 2 tons. The Caddy-P allows an additional linear capacity of 1800 mm via the multi rack system.



Additional capacity

+ 1.800 mm



Additional capacity

+ 2 Tons

IEMCA INDUSTRY 4.0

The future is now

In January 2017 IEMCA is the first company in the world producing bar feeders to deliver Industry 4.0 machines .

IEMCA devices are able to acquire and share data with other machines and production systems of the end user, contributing to the constant improvement of production processes.



THE FUTURE OF INTERACTION BETWEEN MAN AND MACHINE

The IEMCA Industry 4.0 solution provides:



Sending e-mail and SMS in the event of an alarm on the machine



Telecontrol and remote control



Global assistance on all equipped machines



Backup and restoration of the Machine Parameters



Telecontrol via OPC UA Clients



Telecontrol with camera



Remote control and local remote control



CUSTOMER COMES FIRST

A worldwide network at your service



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IEMCA SUPPORTS YOU KEEPING YOUR MACHINE AT 100%

WORLDWIDE SUPPORT LEVEL

IEMCA customers can count on the support of more than 150 technicians for prompt intervention on site, phone support and spare parts.

Preventive maintenance: IEMCA technical experts support the end user keeping the bar feeder healthy for years

Recommended spare parts: the end user can contact the IEMCA network and get convenient and original spare parts packages.



TECHNICAL SPECIFICATIONS



ROUND BARS
BOSS 338: 3-38 mm
(1/8"-1 1/2")
BOSS 552: 5-51 mm
(3/16"-2")



NUMBER OF SPINDLES
1



HEXAGONAL BARS
BOSS 338: 3-32 mm
(1/8"-1 1/4")
BOSS 552: 5-43 mm
(3/16"-1 11/16")



MAGAZINE MP
280 mm (11") + magazine
extension 180 mm (7")



MULTI RACK MAGAZINE
1800 mm (70 7/8")



BUNDLE MAGAZINE
2 tons (4,000 lbs)



BAR LENGTH
700 - 6,380 mm
(2'4" - 20'11")



REMNANT LENGTH
Min: 70 mm (2 3/4");
Max: 400 mm (15 3/4")
(optional 700 mm (27 1/2"))



MAXIMUM BAR WEIGHT
55 kg (121 lbs)
(40 kg (88 lbs) ver. 64)



BAR CHANGE TIME*
19 sec.
(with bars 3,200 mm long)



COMPRESSED AIR
8 bar (116 psi)



INSTALLED POWER
BOSS 338 - 552: 1,4 kW
Caddy P: 0,7 kW
Caddy F: 1 kW



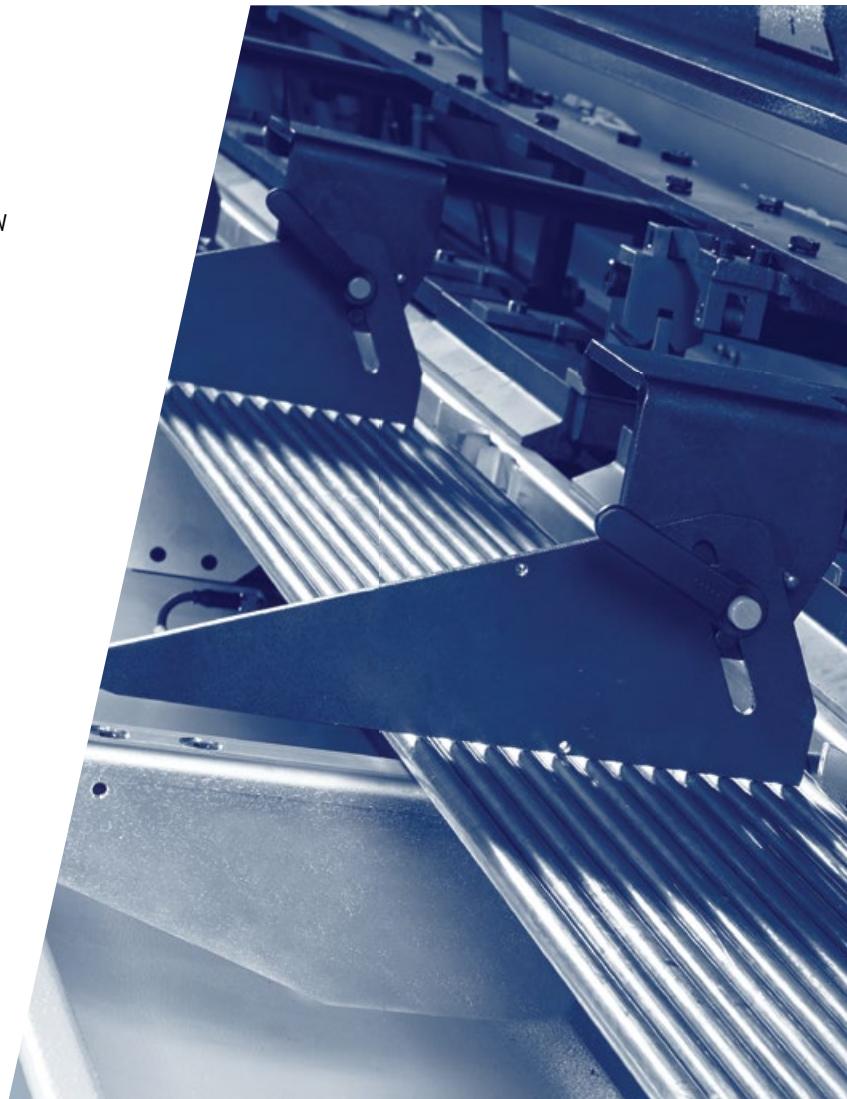
OPERATING VOLTAGE
230/400 VAC



FEEDRATE
Max 1,200 mm/sec
(2,832 in/min)



RETURN FEEDRATE
Max 1600 mm/sec
(3,778 in/min)

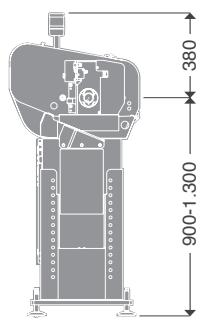
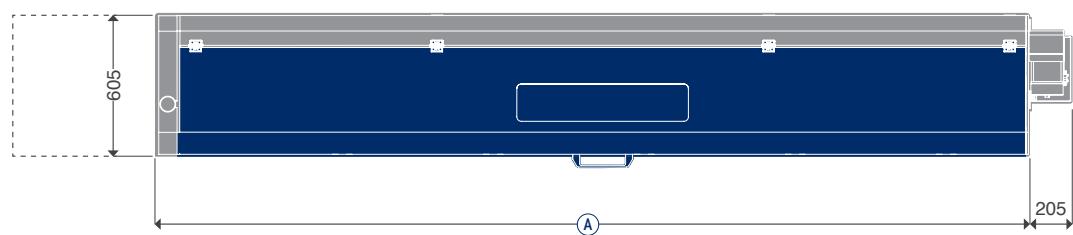
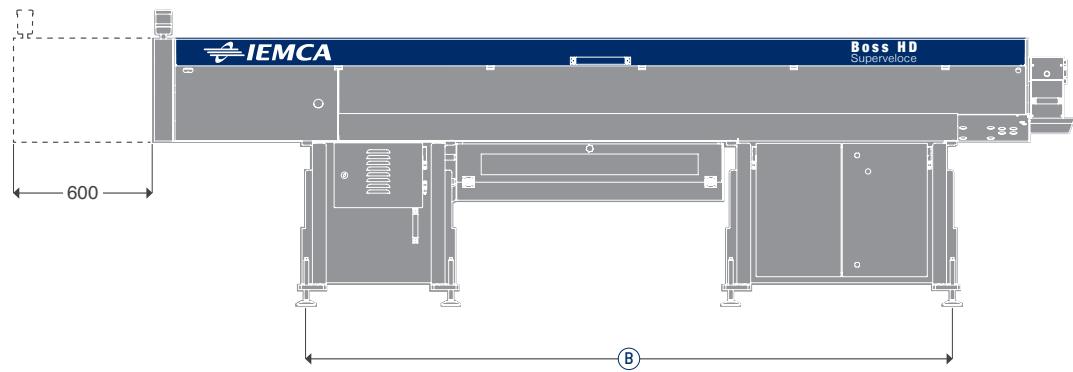


BOSS HD SUPERFAST

Technical data	Boss 338 HD Superfast	Boss 552 HD		
Round bars dimensions	3 mm [1/8"]	38 mm*[1" 1/2"]	5 mm [3/16"]	51 mm*[2"]
Hexagonal bars dimensions (key socket)	3 mm [1/8"]	32 mm [1" 17/64"]	5 mm [3/16"]	43 mm [1" 11/16"]
Square bars side	3 mm [1/8"]	26 mm [1" 1/32"]	5 mm [3/16"]	36 mm [1" 27/64"]
Minimum bar length	Ver. 21 - 700 mm [2'4"] · Ver. 32, 37, 44 - 1000 mm [3'4"] / optional 2000 mm [6'7"] Ver. 64 - 2000 mm [6'7"]			
Maximum bar length	Ver. 21 - 2080 mm [6'10"] · Ver. 32 - 3200 mm [10'6"] Ver. 37 - 3740 mm [12'3"] Ver. 44 - 4400 mm [14'5"] · Ver. 64 - 6380 mm [20'11"]			
MP magazine capacity	28 bars of Ø 10 mm [3/8"] material / 280 mm + magazine extension 180 mm			
Axial shifting	600 mm [1'11"]			
Maximum bar weight	55 kg [121 lbs] (40 kg [88 lbs] ver. 64)			
Feedrate (adjustable)	Max 1,200 mm/sec [2,832 in/min]			
Return feedrate (adjustable)	Max 1600 mm/sec [3,778 in/min]			
Maximum remnant length	295 mm [11 1/2"] Ver. 21 - 400 mm [15 3/4"] standard - 700 mm (27 1/2") optional			
Minimum remnant length	70 mm [2 3/4"]			
Bar change time**	19 sec.			
Operating voltage	230/400 Volt			
Voltage frequency	50/60 Hz			
Control voltage	24 Volt D.C.			
Installed power	1,4 kW			
Oil quantity	20 l (Ver. 21) · 57 l (Ver. 32, 37, 44) · 85 l (Ver. 64)"			
Air pressure	8 bar [116 psi]			
Air consumption	20 Nl/min			
Bar feeder weight	Ver. 21 - 620 kg (1,370 lbs) · Ver. 32 - 835 kg (1,840 lbs) Ver. 37 - 900 kg (2,000 lbs) · Ver. 44 - 980 kg (2,160 lbs) Ver. 64 - 1,450 kg (3,200 lbs)		Ver. 21 - 650 kg (1,430 lbs) · Ver. 32 - 885 kg (1,950 lbs) Ver. 37 - 950 kg (2,210 lbs) · Ver. 44 - 1,030 kg (2,270 lbs)	

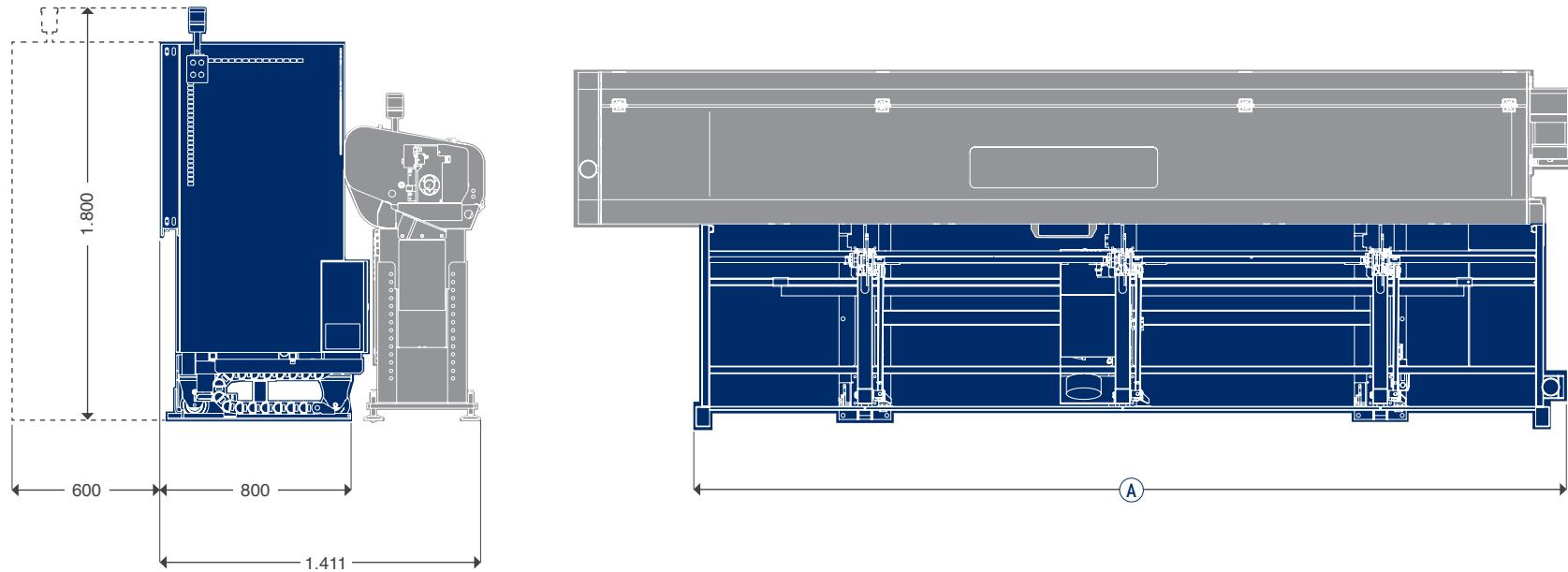
* May require bar end preparation or operation with front ejection of the remnant.

** The table contains purely indicative data. Different factors such as length and material of the barstock, and some of the parameter settings by the operator, can affect the time significantly.



	21	32	37	44	64
A	2685	3802	4342	5002	6982
B	964	2811	3351	4011	5989

CADDY-P MULTI RACK

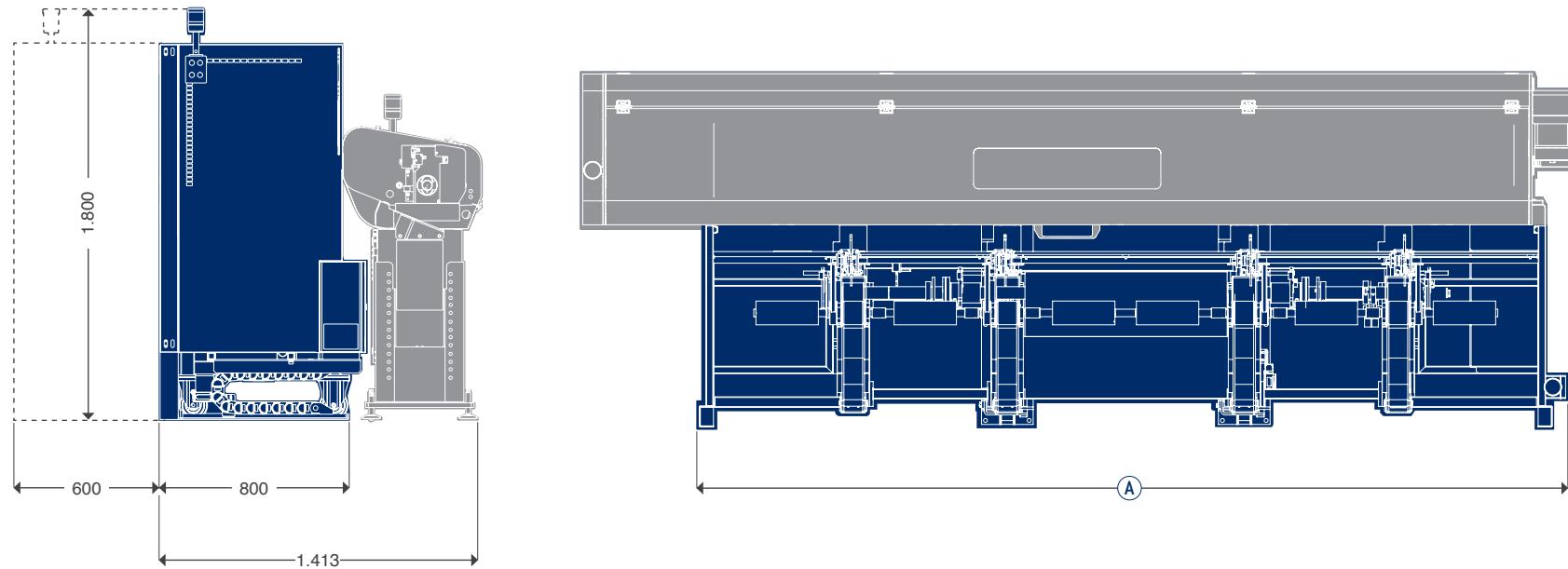



Technical data

Round bar dimensions*	5 mm	51 mm			
Hexagonal bars dimensions (key socket)	5 mm	43 mm			
Maximum magazine capacity	1800 mm linear magazine with 4 racks				
Operating voltage	230/400 Volt				
Network frequency	50/60 Hz				
Control voltage	24 volt D.C.				
Installed Power	0,7 kW				
Weight	Mod. 33 – 410 kg (900 lbs) · Mod. 39 – 750 kg (1,650 lbs) · Mod. 44 – 505 kg (1,110 lbs) · Mod. 64 – 800 kg (1,760 lbs)				
	A	32	37	44	64
		3412	4032	4512	6497

* The minimum diameter of the loading bar depends both on the length of the bar itself and on the material of which it's composed.

CADDY-P MULTI RACK ⚒



Technical data

Round bar dimensions	8 mm (5/16")	51 mm (2")			
Hexagonal bars dimensions (key socket)	8 mm (5/16")	43 mm (1 11/16")	A	32	37
Maximum magazine capacity	~ 2000 kg		A	3416	4016
Operating voltage	230/400 Volt				
Voltage frequency	50/60 Hz		44	4516	6497
Control voltage	24 volt D.C.				
Installed power	1 kW				
Weight	Mod. 33 – 750 kg (1,650 lbs) · Mod. 39 – 770 kg (1,700 lbs) · Mod. 44 – 800 kg (1,760 lbs) · Mod. 64 – 1,100 kg (2,430 lbs)				

*The minimum diameter of the loading bar depends both on the length of the bar itself and on the material of which it's composed.

REFERENCES



Photo courtesy of Hinz Company. IEMCA with HANWHA.

REFERENCES



Photo courtesy of Tajmac ZPS. IEMCA with MANURHIN.



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REFERENCES



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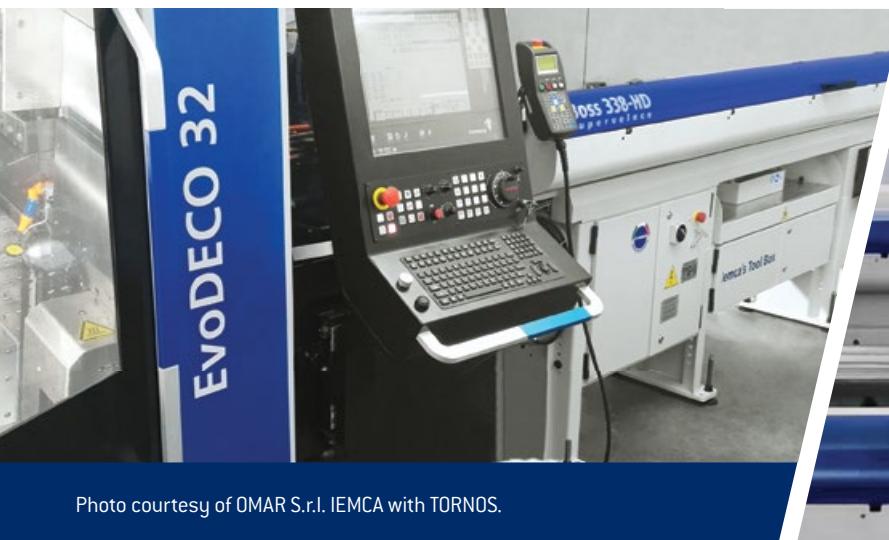


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REFERENCES



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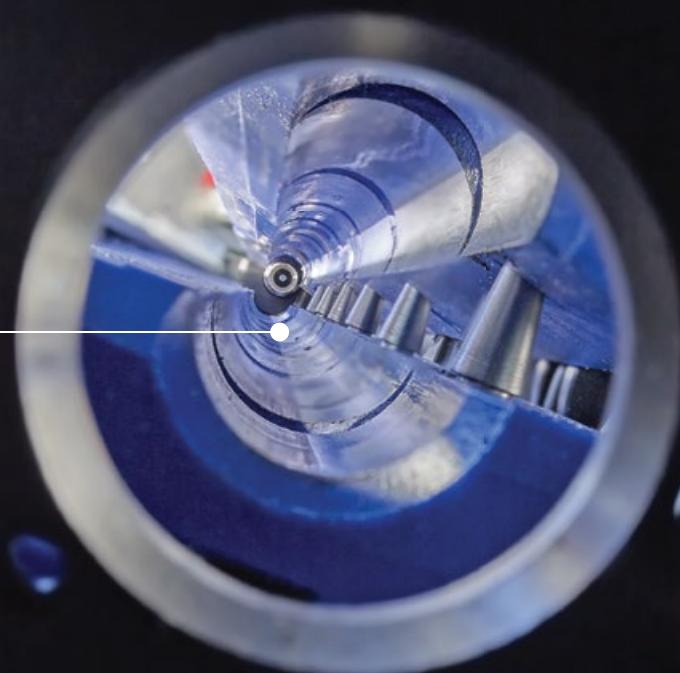
BOSS HD SUPERFAST

Simple

Stiff

Flexible

Superfast



BUCCI INDUSTRIES

People, Passion, Technology!

The BUCCI INDUSTRIES GROUP is worldwide leader in two sectors: in the industrial AUTOMATION & ROBOTICS and in the advanced COMPOSITE MATERIALS..

In the automation industry, Bucci Industries operates with the following brands:

IEMCA: leader in the design and production of bar feeders (www.iemca.com)

GIULIANI: leader in the industry of high productivity and flexibility machine tools and transfer machines (www.giulianico.com)

SINTECO: leader in the automation and robotics for assembly applications and in the management of medical unit doses in the hospitals (www.sintecorobotics.com)

VIRE: point of reference for the packaging of hygiene products (www.vire.it)

Bucci Industries operates with the brand **RIBA COMPOSITES** in the design and production of advanced composite materials, primarily carbon fiber (www.ribacomposites.it)

www.bucci-industries.com



WORLDWIDE
LEADER



950
PEOPLE



150
R&D ENGINEERS



PARTNERSHIPS WITH
UNIVERSITIES AND
RESEARCH CENTERS



+70
YEARS OF
HISTORY



INVESTMENTS TO
CREATE NEW SKILLS



1945

Founding of
CISA



1961

Founding of
IEMCA



1984

Acquisition of
GIULIANI



1985

Inauguration of
Bucci Industries
USA branch



1987

Inauguration of
Bucci Industries
Deutschland branch



1996

Opening of
IEMCA Gimco plant in
Taiwan



1996

Inauguration of
Bucci Industries
France branch



1999

Opening of
IEMCA branch
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IEMCA WORLDWIDE



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