

Equipment For Tyre Retreading

Since 1953

Our history starts in 1953

CIMA Impianti was established in 1953 as a company manufacturing moulds for tyre retreading. In the after coming years it widened its range of products starting to manufacture also curing presses initially sold in the national market. During the 70's, with the introduction of tyres with radial casing, the first presses of the Radial Pneus series were developed and manufactured, the first and for many years the only ones conceived for this new type of tyres.

From that moment the process was started which brought CIMA Impianti to be introduced into the international markets, where it became the major manufacturer of "turn-key" plants for tyre retreading.

Thanks to the growing experience in this field and to the always deeper knowledge of the specific requirements of retreaders and of new tyre manufacturers, during the 20 years from 1980 to 2000 it designed and realized machines aimed at satisfying a wider and more demanding range of customers, setting up relationships based on mutual trust and cooperation with the biggest new tyre manufacturers, for which, during the years and thanks to the efficiency and flexibility shown, it became sole supplier of presses and moulds for tyre retreading.

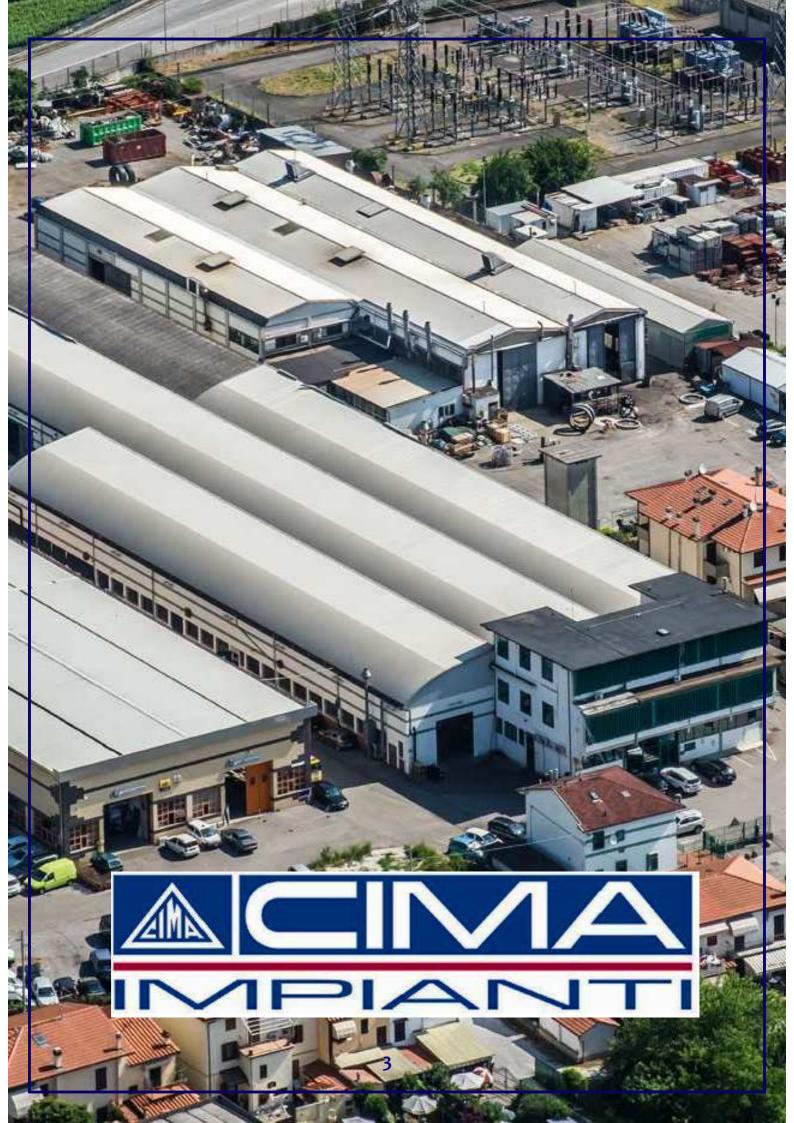
Applying its big experience in the field of tyre retreading to the production of new tyres, CIMA Impianti realized during the 90's the first really innovative curing press for new tyres, for which it received a recognition inside the LIFE program of the European Community.

During the last 10 years, CIMA Impianti devoted itself to the constant improvement of its products in order to make them always compliant to the market evolution and anticipating often the new requirements which would have been requested only years later by the customers.

CIMA IMPIANTI also works for the steel industry sector where it developed considerable competence in developing, assembling and testing of plants for rodmills and cutting-painting band machinery.

The premises cover an area of approx. 6000 square meters including factory and offices. In the same area, but with separate structures, also operate strategic subcontractors.





RP PRESSES

Mould cure has never been so automatic and safe. Our complete range of curing presses, together with our aluminium moulds, represent the perfect combination of quality and reliability for the best retreading results.

RP PRESSES peculiar radial closing system is still the simplest and fastest on the market, and easiest to maintain

Equipment For

Passenger, 4WD, Light Truck, Truck & Bus and Aircraft Tyre Retreading





Dimensions and specification shown are not binding and could be changed without notice by the manufacturer



Retreading Passenger, 4WD, Truck & Bus and Aircraft Tyres

CMA IMPIANTI produces one of the widest ranges of fully automatic machines for the hot (mould cure) retreading technique, covering all sizes of tyres available on the market.

From 14" passenger up to 63" O.T.R., from a simple mould to a complete TURN-KEY plant, our customers can always find the appropriate solution for their retreading requirements.

IN	IDEX	
BUFFING MACHINES CI-MAXI 2100		8
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CI-MAXI 29 (2100) CNC Buffing Peeling Grooving Machine for Truck tyres and small O.T.R. sizes

Tyre holding group with steel plates (low pressure inflation), tyre drive by Brushless motor and hydraulic tyre support for easy load & unload

Data storage

Exclusive Touch Screen PC (with Lan, Ethernet, USB Port for NetCam)

NEW and reinforced exclusive inclined tyre holding frame design

5 axis tooling frame (3 positions Peeling / Buffing / Grooving) working with 3 axis during Peeling and Buffing and with 5 axis during Grooving

Tyre sizes: from 19,5" to 33"



FCT 850 sidewall veneering machine

FULLY AUTOMATIC

The machine applies the sidewall veneer strip at the same time to both sides of the tyre.

The program allows to apply the strip in one or alternatively in two passes depending on the width of the sidewall of the tyre.

For Passengers, 4WD, Light Trucks



SIDEWALL VENEERING MACHINE **FCT** 1200



Wrapping unit swings around the tyre to copy perfectly the tyre sidewall shape.

For T.B.R. tyres.

TECHNICAL FEATURES

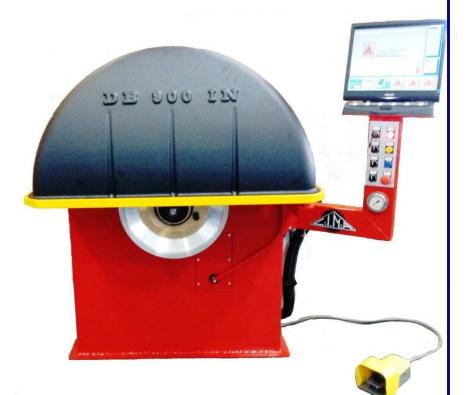
MODEL	MAX TYRE EXT. DIA (inch)	MAX AIR PRESSURE (bar)	EL. POWER INSTALLED (Kw)	WEIGHT (Kg)	TYRE LIFTING DEVICE
FCT 850	Up to 19.5	7	2	1250	Optional
FCT 1200	Up to 22.5	7	4,3	1700	Included

DB 900 **IN/UG**

DYNAMIC BALANCING MACHINE

FULLY AUTOMATIC

The machine allows to identify and compensate the unbalances on casings to be retreaded. Operations are managed on a user friendly screen.



For Passenger and 4WD tyres



The operator can select to make either a static or a dynamic balancing, with the possibility to set the indication of the unbalance in grams or in ounces and to fix the minimum reading level and the approximation degree required.

CI-MASTER 22,5

BASIC EXTRUDER for PCR & TBR tyres

Automatic application of tread rubber

Azimut (drum support rotation) axis with brushless motor and drive
 Radius (drum support forward/reverse movement) axis with
 brushless motor and drive

- One zone temperature control with water pump, electric heater, water/air exchanger with fan, water tank



 - 10" touch screen display for operator interface
 - Drives, brushless motors and electric equipments made by Schneider Electric

- Extruder a.c. motor: 18Kw - 400/460v 50/60Hz - 3ph with inverter

- 76 mm smooth extruder screw; L/D ratio: 12/1; Rated speed 75 rpm

CI-MASTER 24 CNC CONTROLLED STRIP WINDING EXTRUDER

for PCR & TBR tyres

Automatic application of tread rubber Data storage Touch Screen PC (LAN-Ethernet)

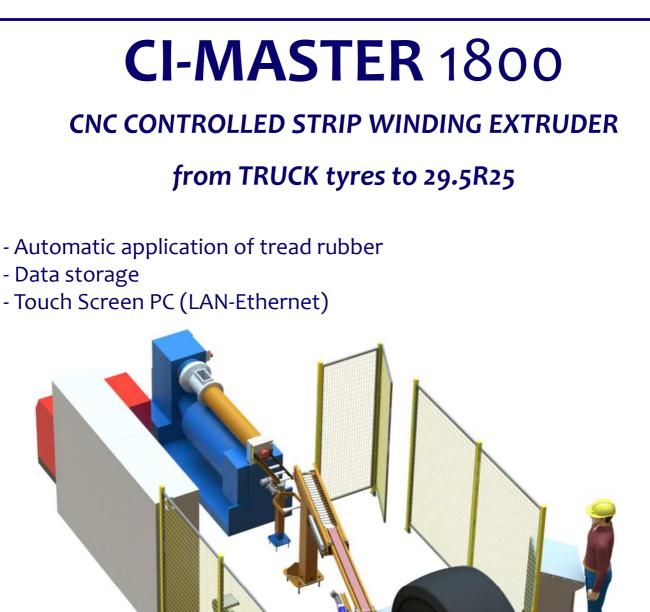
CI-MASTER 24

MONOBEAM 80 P

- Laser circumference reader
- Buffed shape acquisition
- Driver for extrusion speed adjustment

- Available with 80, 90 or 120 mm pin type extruder screw.

CI-MASTER 24 AVIO



- Laser circumference reader
- Buffed shape acquisition
- Driver for extrusion speed adjustment
- Available with 80, 90 or 120 mm pin type extruder screw.

RP PRESSES

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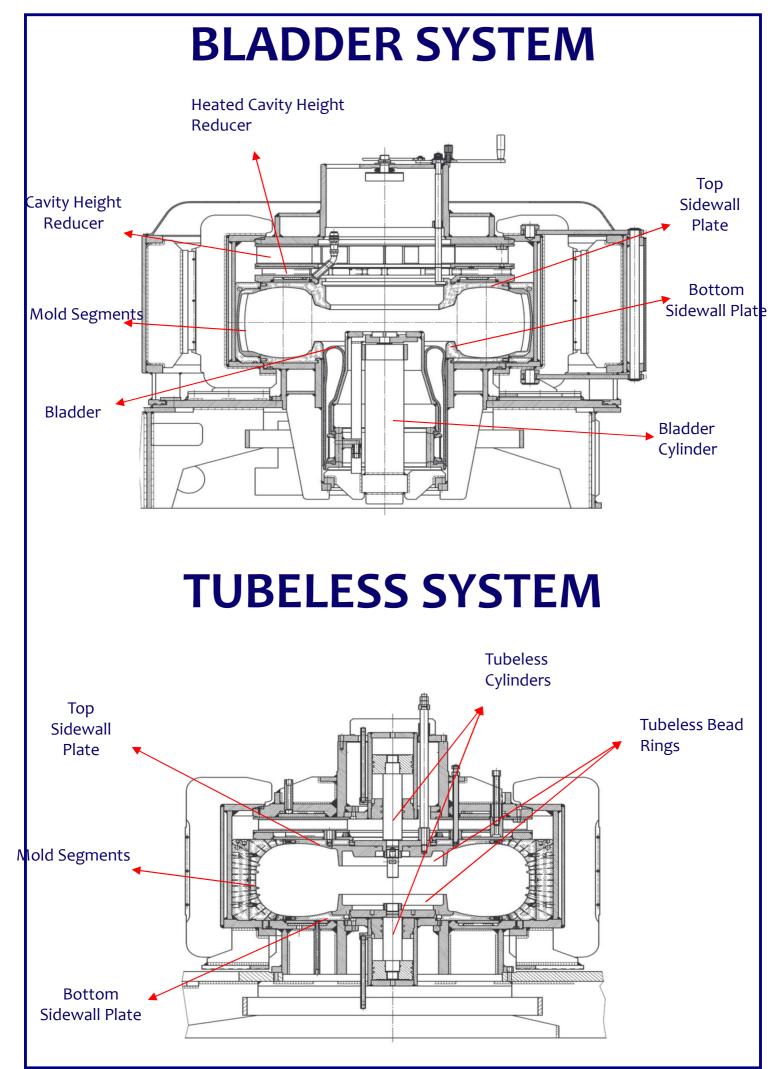
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14

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RADIAL CLOSING SYSTEM





Eliminate a contaminant, save time and money!

Request remote technical support on your next machine!

Invest in technology!

QUICK-MOULD CHANGE OUR TIME SAVING SOLUTION FOR RP PRESSES

LOADING AND UNLOADING MOULDS IN ONE PIECE ONLY, SAVING MACHINE DOWN TIME. EASIER AND FASTER TO STORE, ALWAYS READY TO BE LOADED INTO THE PRESS CAVITY.

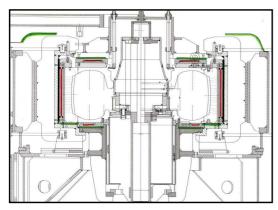




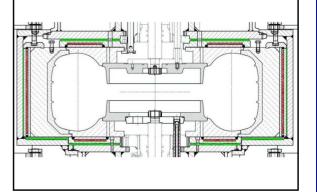


BUILT-IN, HIGH GRADE INSULATION MATERIAL PLACED WHERE NEEDED, TO REDUCE HEAT LOSS, SAVING ENERGY COSTS





Bladder press



Tubeless press



SMART-R.S.K.

REMOTE SUPPORT KIT FOR PRESSES

USABLE WITH ANY CIMA PRESS WITH ML1100 OR NEWER PLC

Works both Wi-Fi or using a cable connection to an internet line.

One of these Kits is all you need to get Cima's remote technical support to trouble-shoot your press.



RP 1 – 1,5



The RP 1 and 1,5 presses allow to retread passenger car and aircraft tyres, can be manufactured tubeless, bladder and curing tube and with high belt to increase the tyre width range.

Heating by steam, electricity or diathermic oil

TECHNICAL FEATURES

RP 1H

Ø DIAMETER OF THE CAV	/ITY mm	695
HEIGHT OF THE CAVITY	mm	190/230
MAX TYRE O.D.	mm	665
MAX TYRE C.S.	mm	210
WEIGHT	Kg	1290
AIR CONSUMPTION	Nlt/h	1250
STEAM CONSUMPTION	Kg/h	12
MAX INFLAT. PRESSURE	Bar	16
ENGINE POWER	HP	2
WIDTH	mm	1550
LENGTH	mm	1700
CLOSED HEIGHT	mm	1200
OPEN HEIGHT	mm	1850

TYRES SIZES

695
190/270
665
250
1600
1250
12
16
2
1550
1700
1200
1950

From 13" to

245/35R 19

RP 1HH

RP 1,5

740
255/330
700
310
2300
1350
14
16
2
1800
2000
1200
2100

From 205/70R 15 to 285/40R 18

From 13" to

205/55R 16

RP 2

The RP 2 presses allow to retread passenger car, light truck, 4x4 and aircraft tyres, can be manufactured tubeless, bladder and curing tube and with high belt to increase the tyre width range.

Heating by steam, electricity or diathermic oil



TECHNICAL FEATURES

RP 2H

RP 2HS

RP 2HHS RP 2,5HH

Ø DIAMETER OF THE CAVITY mm	830	880	880	850/860	
HEIGHT OF THE CAVITY mm	230/280	280	280/330	280/340	
MAX TYRE O.D. mm	800	850	850	820	
MAX TYRE C.S. mm	260	260	310	320	
WEIGHT Kg	2300	2500	2600	2700	
AIR CONSUMPTION Nlt/h	1450	1450	1500	1600	
STEAM CONSUMPTION Kg/h	16	16	18	18	
MAX INFLAT. PRESSURE Bar	16	16	16	16	
ENGINE POWER HP	2	2	2	2	
WIDTH mm	1800	1800	1800	1900	
LENGTH mm	2100	2100	2100	2200	
CLOSED HEIGHT mm	1300	1300	1400	1350	
OPEN HEIGHT mm	2200	2200	2300	2500	
	n 195/80R 15 to 265/60R 18	From 195/80R15 15 to 265/45R20	From 195/80R15 to 305/50R 20	From 195/80R 15 to 315/35R20	
24					

RP 3



The RP 3 presses allow to retread light truck, 4x4, truck and aircraft tyres, can be manufactured tubeless, bladder and curing tube and with high belt to increase the tyre width range.

Heating by steam, electricity or diathermic oil

TECHNICAL FEATURES

Ø DIAMETER OF THE CAVITY mm		
HEIGHT OF THE CAVITY	mm	
MAX TYRE O.D.	mm	
MAX TYRE C.S.	mm	
WEIGHT	Kg	
AIR CONSUMPTION	Nlt/h	
STEAM CONSUMPTION	Kg/h	
MAX INFLAT. PRESSURE	Bar	
ENGINE POWER	HP	
WIDTH	mm	
LENGTH	mm	
CLOSED HEIGHT	mm	
OPEN HEIGHT	mm	

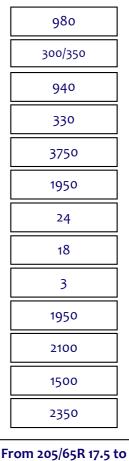
TYRES SIZES

RP 3

950
250/300
910
280
3600
1750
23
18
3
1950
2100
1500
2250

From 235/85R 16 to 285/70R 19.5

RP 3H



305/70R 19.5

The RP 5 presses allow to retread truck and aircraft tyres, can be manufactured tubeless, bladder and curing tube and with high belt to increase the tyre width range.

Available in Curing Tube, Bladder or TUBELESS system

Heating by steam, electricity or diathermic oil

Press model by tyre size

RP 5
RP 5H
RP 5 HS
RP 5 HH

From **9 R 20** to **315/80 R 22.5** From **9 R 20** to **425/65 R 22.5** From **10 R 20** to **445/60 R 22.5** From **315/80 R 22.5** to **495/45 R 22.5**

TECHNICAL FEATURES

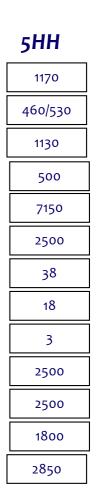
Ø DIAMETER OF THE CAVITY mm				
HEIGHT OF THE CAVITY mm				
MAX TYRE O.D. mm				
MAX TYRE C.S. mm				
WEIGHT Kg				
AIR CONSUMPTION Nlt/h				
STEAM CONSUMPTION Kg/h				
MAX INFLAT. PRESSURE Bar				
ENGINE POWER HP				
WIDTH mm				
LENGTH mm				
CLOSED HEIGHT mm				
OPEN HEIGHT mm				

5	
1170	
325/360	
1130	
345	
4600	
2500	
35	
18	
3	
2750	
2950	
1400	
2650	

5H	
יי <u>ר</u>	-
1170	
25/460	
1130	
445	
5600	
2500	
35	
18	
3	
2600	
2700	
1700	
2750	

503				
1250				
325/460				
1200				
445				
5900				
2500				
35				
18				
3				
2600				
2700				
1800				
2750				

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AVAILABLE OPTION

- QMC – Quick Mould Change system,

- Built-in Cavity Insulation system,

- Standard configuration 6 segments, 10 or 12 segments available on request

Press model by tyre size

RP 5HHS
RP 5,3
RP 5,5
RP 5,5 H

TECHNICAL FEATURES

Ø DIAMETER OF THE CAVITY mm
HEIGHT OF THE CAVITY mm
MAX TYRE O.D. mm
MAX TYRE C.S. mm
WEIGHT Kg
AIR CONSUMPTION NIt/h
STEAM CONSUMPTION Kg/h
MAX INFLAT. PRESSURE Bar
ENGINE POWER HP
WIDTH mm
LENGTH mm
CLOSED HEIGHT mm
OPEN HEIGHT mm

<u>\S:</u>	RP 5	
d		

5,3

Γ

5HHS	
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Г

5,5

5,5H

1250	1280	1370	1370
460/530	325/360	325/360	360/480
1130	1230	1320	1320
500	345	345	365
7000	5200	7000	7500
2500	2500	2600	2800
38	40	50	60
18	18	18	18
3	3	3	3
2500	2100	2700	2700
2500	2800	3200	3200
1800	1400	1500	1700
2800	2650	2800	3000

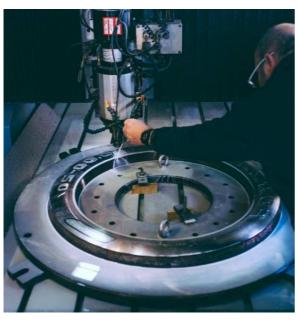
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MOULDS

CIMA IMPIANTI is specialized in the production of molds for tyre retreading, available in different sizes, models and materials, depending on the specific requirements of the customer



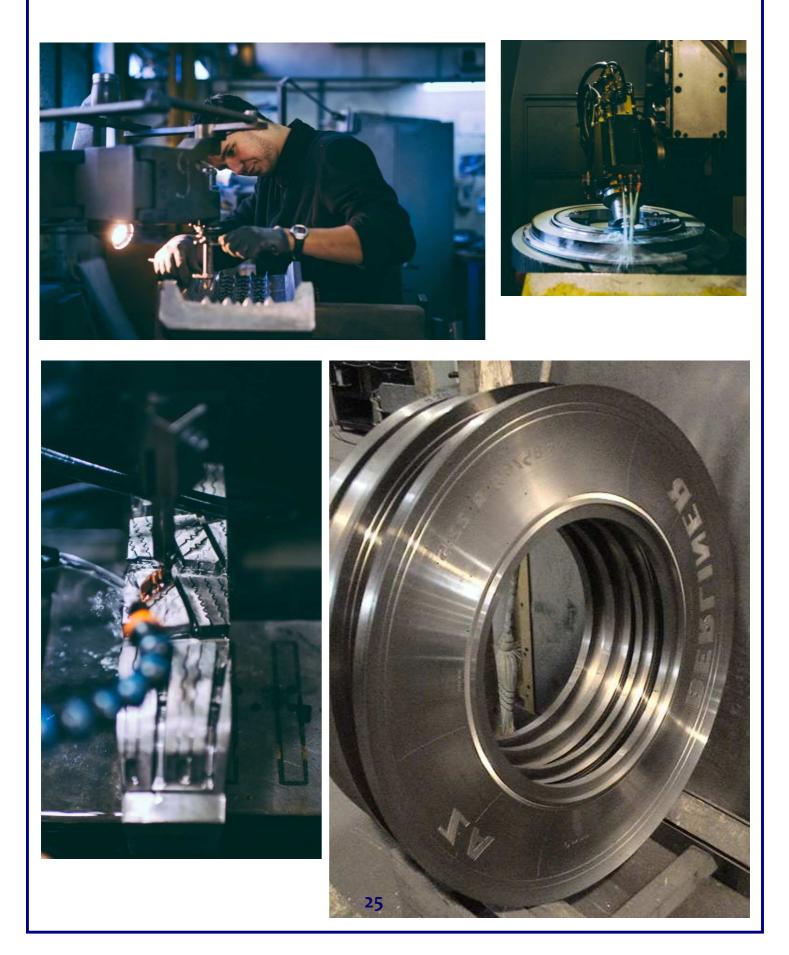


Winter profiles are produced with the insertion of sipes/blades made of special steel.



MOULDS

Each assembly phase has a programmed, intermediate check-list control, in order to guarantee maximum quality and repeatibility



EQUIPMENT FOR AIRCRAFT TYRE RETREADING

Today, one important application for our presses is the Aircraft Tyre retreading market.

CIMA IMPIANTI supplies most of the major retreaders of Aircraft tyres in the world with specific machines and moulds.

High pressure curing presses up to 25 bar inflation pressure are available on most of our standard range of machines. Special moulds made of high grade aluminium assure the best quality available on the market of tyre retreading.

CIMA IMPIANTI has also developed one HOT NITROGEN inflation system:

- Nitrogen extends life of bladders because not oxydating

- Nitrogen is preferred by aircraft tyre retreaders working at high pressure because it assures the maximum adherence between the aircraft tyre (more rigid) and the mould

- Nitrogen reduces the curing time if used heated



HOT NITROGEN SYSTEM The group has the function to heat the nitrogen and assure its circulation inside the curing presses during the curing cycle of tires. The machine is interfaced with the curing press to which it is connected and is composed by:

Electrical cabinet
Heating Units
Electric motor
Turbine

AIRCRAFT TYRES/CIMA PRESSES

Tyre Size	Model	Tyre Size	Model
20x5.5x10**	RP 1 H	41x15.0x18	RP 5 H
22x6 . 75x10**	RP 1 H	44.5x16.5x18	RP 5 HS
24x7 . 7x10	RP 1 H	44x16x18	RP 5 HS
24x5.5x14	RP 1 H	H40x14.5x19	RP 5 H
26x6.6x14	RP 1 H	H41x15.0x19	RP 5 H
28x7 . 7x14	RP 2 H	46x16x20	RP 5 HS
30x11 . 50x14	RP 2 HHS	46x17x20	RP 5,5 HH
H31x13.0x12	RP 2 HHS	49x17x20	RP 5,5 HH
34x11x14	RP 3 H	49x19.0x20	RP 5,5 HH
40x16x14	RP 5 H	50x21.0x20	RP 5,5 HH
27x7.75x15	RP 2 H	H44.5x16.5x20	RP 5 H
30x8.8x15	RP 2 H	H46.x18x20	RP 5 HS
32x11.50x15	RP 2 HHS	H44.5x16.5x21	RP 5 H
H37x14.0x15	RP 3 H	1270x455x223	RP 6
1050x395x16	RP 5 H	50x20x22	RP 6
36x11x16	RP 3 H	H49x19. 0x22	RP 5,5 HH
40x14x16	RP 5 H	1400x530x23	RP 6
40x15 . 5x16	RP 5 H	52x20x23	RP 6
H30x9.5x16	RP 2 H	H54x21.0x24	RP 6

TUBELESS SYSTEM



Equipment For Off The Road (O.T.R.) Tyre Retreading





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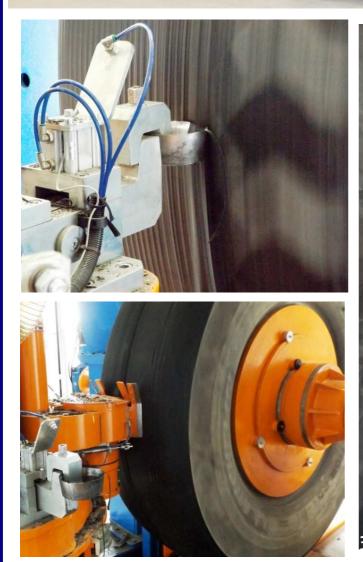
Retreading Off-The-Road

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CI-MAXI Peeling/Buffing/Grooving Machine

CI-MAXI 51





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OTR CNC Buffing Peeling Grooving Machine

Tyre holding group with steel plates (low pressure inflation), tyre drive by Brushless motor and hydraulic tyre support for easy loading and unloading (no pit required)

Data storage

Exclusive Touch Screen PC (with Lan, Ethernet, USB Port for NetCam)

NEW and reinforced exclusive inclined tyre holding frame design

5 axis tooling frame (3 positions Peeling / Buffing / Grooving) working with 3 axis during Peeling and Buffing and with 5 axis during Grooving

MACHINE AVAILABLE IN FOUR DIFFERENT SIZES

CI-MAXI 29 (2100)

for tires from 19,5" up to 33"

CI-MAXI 35

for tires from 24" up to 24.00R35

CI-MAXI 51

for tires up to 36.00 R 51 and 45/65 R 45

CI-MAXI 63

for tires up to 59/80 R 63 and 70/70 R 57



Extruder Builde





OTR CNC Extruder Builder

Tyre holding group with steel plates (low pressure inflation), tyre drive by Brushless motor and hydraulic tyre support for easy loading and unloading (no pit required)

Exclusive Touch Screen PC (with Lan, Ethernet, USB Port for NetCam)

NEW and reinforced inclined tyre holding frame

- DC motor for extruder speed adjustment;
 - "Cold Feed Pin Type" extruder;
 - 4 zones of temperature control

5 axis strip application group with calendering rollers and strip supporting device

MACHINE AVAILABLE IN FOUR DIFFERENT SIZES

CI-MASTER 29 (2100)

for tires from 19,5" up to 33"

CI-MASTER 35

for tires from 24" up to 24.00R35

CI-MASTER 51

for tires up to 36.00 R 51 and 45/65 R 45

CI-MASTER 63

for tires up to 59/80 R 63 and 70/70 R 57

CI-MASTER SKF

AUTOMATIC SKIVE FILLER AND CUSHION GUM APPLICATOR







- 50 mm extruder with cooling unit;
- 2 Cameras to monitor tire surface;
- Manual override to fill big skives

CI-MASTER CRATFILL

Easy to use, compact, 60 mm extruder for all crater filling operations;

Operator panel and temperature control unit mounted on board;

Easy C-CLAMP closing system;

Thermo regulated barrel, screw and extrusion head



Weight: 900 Kgs Dim.: 120x80x100 cm Extruder motor: 15 Kw



Extrusion head and screw



Rubber feeding mouth

Extruder mounted on wheels for easy positioning



O.T.R. MOULDS



CIMA IMPIANTI produces moulds for O.T.R. tyres up to 63" rim dia. for any kind of press available on the market





RP Presses for Off-The-Road Tyre Retreading

RADIAL CLOSING SYSTEM

RP 6 – 7H – 8

The RP 6 presses allow to retread tyres for agricultural purpose, aircraft and small OTR.

The presses can be manufactured tubeless, bladder, curing tube and with high belt to increase the tyre width range



TECHNICAL FEATURES

VITY mm mm
mm
mm
mm
Kg
Nlt/h
Kg/h
Bar
HP
mm
mm
mm
mm

RP 6

1550
550/600
1490
580
11000
3500
80
18
5.5
3300
3900
1450
3250

From 13.00R 20 to 20.5 R 25 RP 7H

From 14.00 R 24 to

23.5 R 25

RP 8

1950
700/850
1880
820
22000
7500
130
18
10
3500
4300
2500
5000

Up to 29.5 R 25

RP 9 – 9H – 10



The RP 9 and 10 presses allow to retread tyres for agricultural purpose, and OTR.

The presses can be manufactured tubeless and with curing tube.

TECHNICAL FEATURES

Ø DIAMETER OF THE CAV	/ITY mm
HEIGHT OF THE CAVITY	mm
MAX TYRE O.D.	mm
MAX TYRE C.S.	mm
WEIGHT	Kg
AIR CONSUMPTION	Nlt/h
STEAM CONSUMPTION	Kg/h
MAX INFLAT. PRESSURE	Bar
ENGINE POWER	HP
WIDTH	mm
LENGTH	mm
CLOSED HEIGHT	mm
OPEN HEIGHT	mm

TYRES SIZES

RP 9

2150
750/850
2080
820
25000
7500
150
18
10
3500
4700
2500
5000

RP 9H

2150
800/1000
2080
970
29000
8000
180
18
10
3500
4700
2650
5150

From 23.5 R 25 to 35/60 R 33

RP 10

2500
800/1100
2420
1050
32000
10000
230
14
12,5
3900
5300
2800
5500

From 24.00 R 35 to 37/25 R 35

From 23.5 R 25 to

29.5 R 29

RP 11



TECHNICAL FEATURES

Ø DIAMETER OF THE CAV	ITY mm
HEIGHT OF THE CAVITY	mm
MAX TYRE O.D.	mm
MAX TYRE C.S.	mm
N. OF SEGMENTS	
AIR CONSUMPTION	Nlt/h
STEAM CONSUMPTION	Kg/h
MAX INFLAT. PRESSURE	Bar
ENGINE POWER	HP

TYRES SIZES

RP 1	1
------	---

3100
1250
2850
1160
12
12000
250
13
30

From 35" to 49" incl. 45/65R45 and 27.00R49 The RP 11 and RP 14 presses allow to retread tyres for big OTR vehicles.

The presses can be manufactured tubeless.



RP 14





TECHNICAL FEATURES*

Ø DIAMETER OF THE CAVI	TY mm
HEIGHT OF THE CAVITY	mm
MAX TYRE O.D.	mm
MAX TYRE C.S.	mm
N. OF SEGMENTS	
AIR CONSUMPTION	Nlt/h
STEAM CONSUMPTION	Kg/h
MAX INFLAT. PRESSURE	Bar
ENGINE POWER	HP

TYRES SIZES

RP 14

4250
1600
4030
1500
12
15000
300
13
40

From 57" to 63" incl. 40.00R57 and 59/80R63

CIMA IMPIANTI S.p.a.

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