

F500

S E R I E S



FERRARI

CVS FERRARI

R E A C H S T A C K E R S

**KING
OF THE
YARD**

CVS FERRARI is proud to introduce the F500 Series Reach Stacker; a new breed of machines that will forever change the industry standards for performance and return on investment. Through state-of-the-art engineering and a strong focus on reliability, the CVS FERRARI Reach Stacker is designed to outperform any other machine in its class, while reducing operating costs and extending the typical service life. This is achieved through superior structures which are certified to withstand virtually endless duty cycles, and by unique energy saving solutions with powerful onboard intelligence that complement the best components available in the market today. Discover the unmatched reliability, safety and productivity today.

PREPARE TO EXPERIENCE THE FUTURE.

THE RANGE

The CVS FERRARI Reach Stacker range features several models with a wide variety of capacities and configurations that will suit any container handling or intermodal application.

CAPACITY AND LIFTING ABILITY WITH STANDARD TOP PICK SPREADER

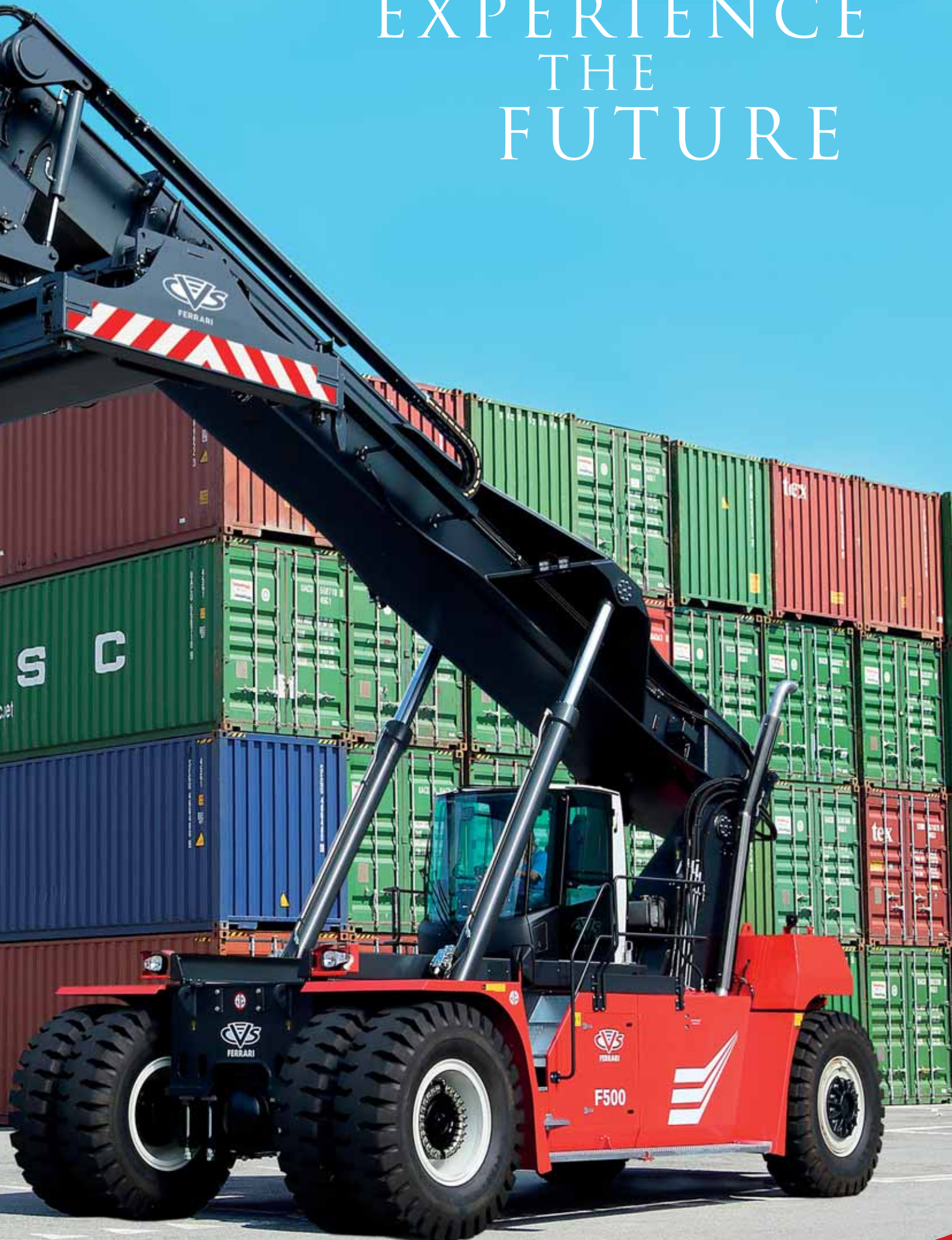
MODEL	WHEELBASE (mm)	Capacity (Ton)			Stacking ability First Row	
		1st	2nd	3rd	9'6"	8'6"
F500.RSV2	6,500	45	27	13	5	5
F500.RSV3	6,500	46	31	16	5	5
F500.RS2	6,500	46	31	16	5	6
F500.RS3	6,500	46	33	17	5	6
F500.RS5	6,500	46	36	19	5	6
F500.RS6	6,500	46	39	21	5	6
F500.RS7	7,500	46	44	25	5	6
F500.RS8	8,000	46	44	27	5	6

CAPACITY (Ton) WITH OPTION TOP & BOTTOM PICK SPREADER

MODEL	WHEELBASE (mm)	No jacks Row			Jacks applied Row		
		1st	2nd	3rd	1st	2nd	3rd
F500.RS4	6,500	45	30	14	N/A	N/A	N/A
F500.RS5	6,500	45	31	14	45	37	22
F500.RS6	6,500	45	34	16	45	37	24
F500.RS7	7,500	45	39	20	45	42	28
F500.RS8	8,000	45	42	24	45	45	31



EXPERIENCE THE FUTURE



CVS FERRARI



We offer the highest standard lifting ability and the best weight distribution. Our unique **Dynamic Stability Control** system incorporates a driver optimization function to maximize operational safety while minimizing tire wear. The "lift and carry" technology has its new peak in the CVS FERRARI Reach Stacker, the new King of the Yard.

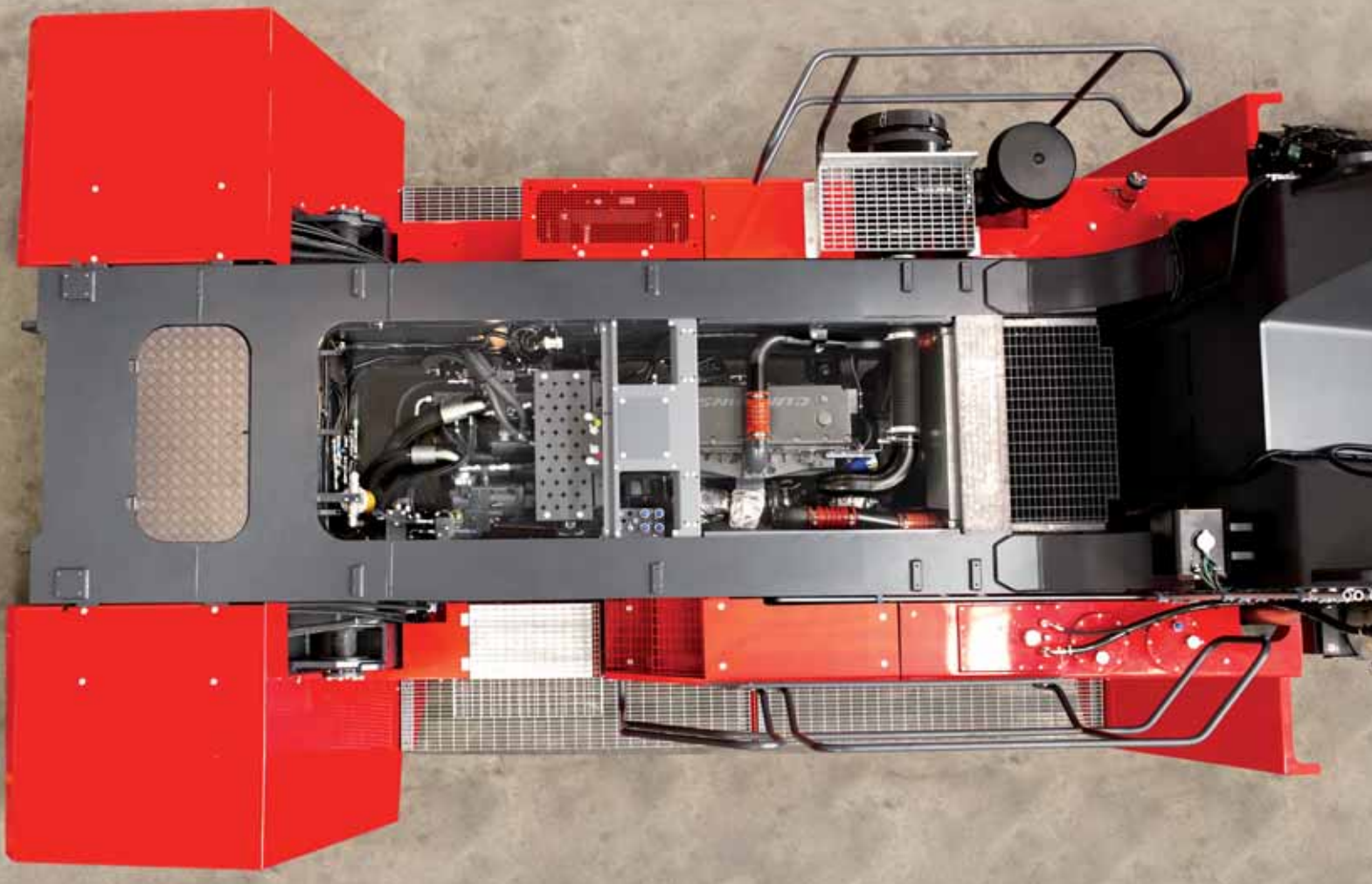
Standard
46 Ton capacity
and 6x8'6"
stacking ability

KING OF THE YARD

F500

SERIES





THE ART & SCIENCE OF MANUFACTURING

The CVS FERRARI Reach Stackers feature the best that the components industry has to offer. The machine components, along with the routing of hoses, piping and cabling have been seamlessly integrated into the design allowing for convenient and easy access for service. The frame is designed to achieve the best structural strength within the market and the powertrain is strategically positioned to provide the best possible filtered air flow and to maximize hydraulic oil system efficiency. The high lateral chassis walls ensure excellent torsion and deflection resistance while providing major sound insulation.



For EU Stage 4 engines the urea reservoir is conveniently located next to the fuel tank

NEXT GENERATION HYDRAULICS

The hydraulic system is the beating heart of the CVS FERRARI Reach Stacker; it is the system that translates engine power to smooth and quick container moves. We have equipped our machines with the state-of-the-art technology in high power hydraulics and we control it using our **SIXTH SENSE** hardware/software solution, a system that will save you money and reduce downtime to your business.



The CVS FERRARI F500 series Reach Stackers are the first ever machines of their kind to incorporate Electro-Hydraulics. These modern load sensing distribution valves, which are managed by the **SIXTH SENSE** software, react much quicker to power demand and modulation than conventional load sensing systems. Their instantaneous response saves operational time and avoids considerable fuel waste. **SIXTH SENSE** also protects the engine from unnecessary stalling stress which will prolong the engine life. With a large cooling capacity for both the transmission and hydraulic system, the F500 series machines are suited for both tropical hot and polar cold environments.



Oversized Hydraulic Oil cooling



Pressurized Hydraulic Oil tank





WELCOME ABOARD THE FUTURE

The best performing and toughest Reach Stacker in the world is also the most intuitive and intelligent in the world. With one of the best driver environments the industry has ever seen, the CVS FERRARI F500 series features a brand new space age cabin design. The futuristic cockpit is the roomiest in the market and comes with the latest in ergonomic solutions combined with avionic type standard controls. The driver will enjoy the visibility of the modern anti-glare curved front windshield. The large top window with electric defrost is FOPS certified. The location of the buttons and switches are easy to see and easy to reach. The driver's air ride seat has two adjustments and the steering column has three. Our design caters to all shapes and sizes. The console also encompasses a "capacitive type", contactless joystick that proportionally controls the boom and spreader functions.

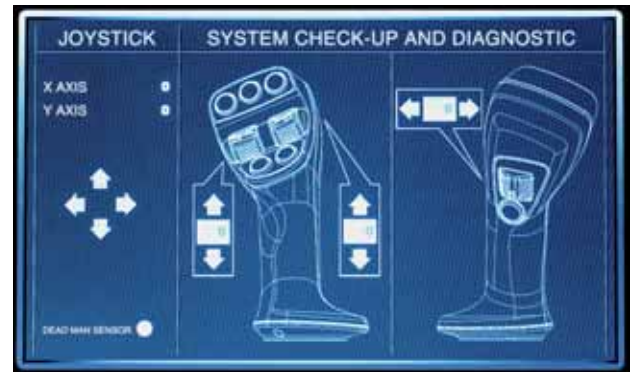




A powerful on-board computer integrates the machinery systems data and parameters providing Real Time Information as well as Driver's aids, Enhanced safety functions, in depth fault diagnostic and Functional and Operational recording of KPIs.



Handled load and stability reserve display, boom and spreader status information, key functional parameters monitor.



Extensive Systems Diagnostic.

REMOTE MONITORING SYSTEM

The new F500 series CVS FERRARI Reach Stacker provide real time monitoring of the machine activities and lifetime data tracking analysis. The optional **REMOTE MONITORING SYSTEM (RMS)** hardware and software package transfers the data to a server which makes the information available in real time on a variety of devices. The system is supplied with tools that provide:



- Live Status of the truck and fleet activity
- Remote Systems Telemetry
- Multi-level important event Alert Process
- Interactive database of functional and operational Machine Data History
- Data Analysis Tools
- Tables and Graphs for reporting processes

ID	Date	Time Start	Time End	Box Size	Weight	Height Start	Height End
1	02/04/2014	12.02	12.05	40	26.2	3S	T
2	02/04/2014	11.58	12.01	20	18.8	2S	T
3	02/04/2014	11.53	11.57	20	24.5	4H	T
4	02/04/2014	11.50	11.53	40	22.6	T	3H
5	02/04/2014	11.46	11.49	40	30.1	T	4H
6	02/04/2014	11.38	11.44	40	24.4	T	6S
7	02/04/2014	11.26	11.32	40	3.0	6S	1S
8	02/04/2014	11.21	11.25	20	18.4	5H	2H
9	02/04/2014	11.11	11.16	30	25.2	4H	T
10	02/04/2014	11.07	11.09	30	25.1	3H	1H

The **Functional Log Book** keeps track of every warning or alarm occurred. The **Operational Log Book** records every load handling performed by the machine.

OPERATIONAL STATS			
TOTALS		AVERAGES	
Working Hours	8.680	Lifts / Working Hour	12.31
Idle Hours	812	TEUs / Working Hour	19.29
Hydraulics Work Hours	1.025	Tonnes / Working Hour	253.79
Consumed Fuel in Litres	101.046	km / Working Hour	3.98
Handled Containers (Lifts)	82.212	Tonnes / Lift	20.52
Handled TEUs	128.828	km/Lift	0.32
Lifted Load (Tonnes)	1.095.518	Idle Time per W. Hour	12%
Distance Travelled (km)	26.617	Hydraulic Work per W. Hour	15%

The **Operational Statistics** function provides Key Performance Indicators in real time. The **Energy Usage Statistics** function automatically determines fuel usage in relation to the main operational variables.

EVERLASTING STRUCTURE



The CVS FERRARI Reach Stackers are the first and only in their class to have **all structures certified** by a major international third party inspection and verification institute to be **fully compliant with Standard DIN 15018/H2 B4 Classes**.

This superior structural design strength speaks to the extended service life of our machines, which translates to a greater return on investment, and lower cost of ownership.

CVS FERRARI



Engineered to resist the heaviest applications in the harshest environments, the F500 Series Reach Stackers do not compromise in size, material grade or specification. The precision tolerances of our pins and cylinders, the chroming depth of our saline fog resistant rods along with our bearing size, makes the F500 series superior when compared to any equivalent machine in its class.



King Size
"sandwich type"
Steer Axle
with giant rubber
Shock Absorbers

Quality Tires
on heavy duty
interchangeable
rims



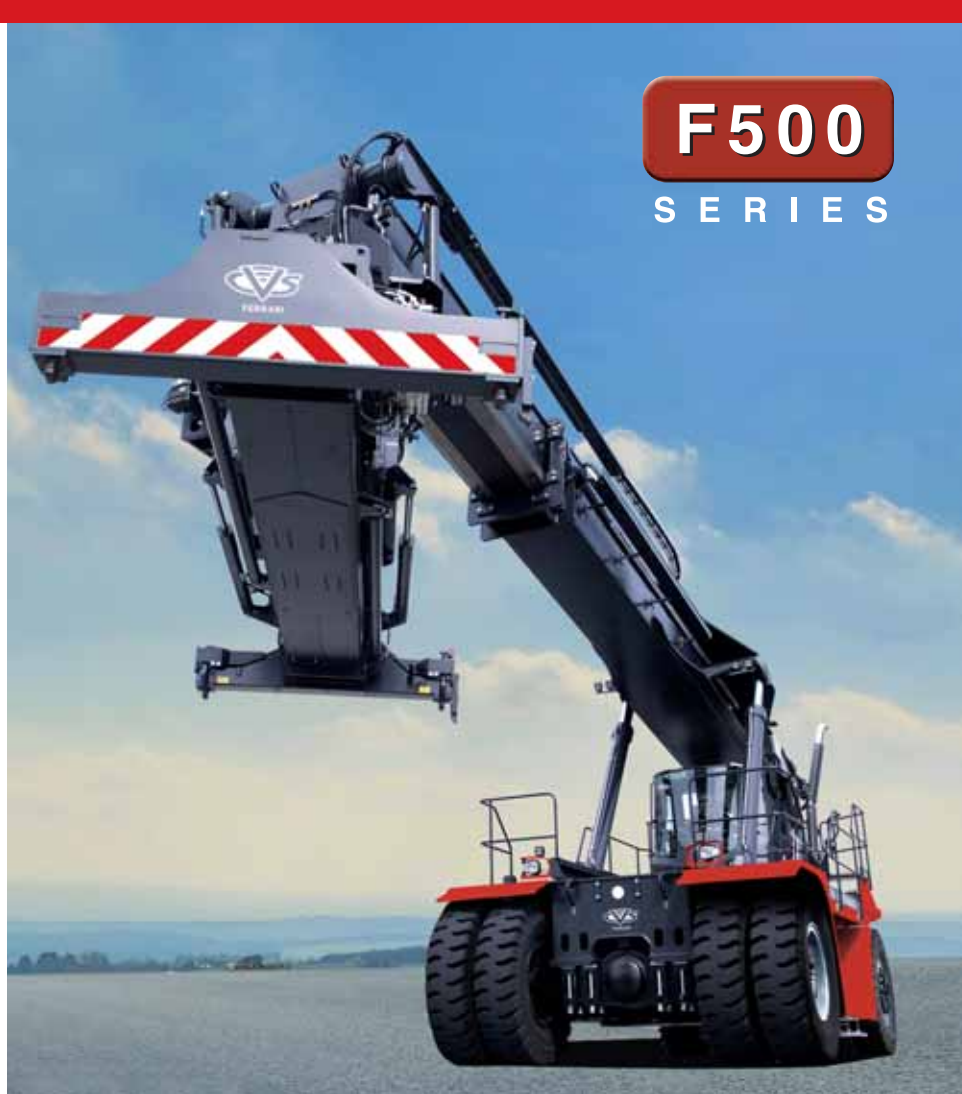
The CVS FERRARI F500 modular design is utilized throughout the range. This extreme standardization increases reliability and parts availability. Across the full range of machines the standardization of the F500 series allows for only wheel size and counterweights to vary.



ENGINEERING MASTERPIECES

The new F500 Series Reach Stacker by CV S FERRARI features an engineering achievement that has arrived from 40 consolidated years of experience in the development of Reach Stacker Spreaders. This collective effort resulted in a lightweight yet extremely





F500

S E R I E S

strong attachment built from high tensile strength steel. With its long overlapping boxed welded telescopic beams, this spreader is the ultimate in stress resistance. The spreader's twin beam design with externally mounted extension cylinders, makes servicing very simple and efficient. Twin gear reducers with lamellar brakes are powered by two hydraulic motors proportionally control the rotation that is driven by an oversized rotation gear. The full floating twist-locks have a double safety system that is individually monitored.



SPREADER WITH HYDRAULIC FOLDABLE OVERHEIGHT LEGS

For overheight containerized cargo handling or negative lift applications, a spreader with INTEGRATED HYDRAULIC FOLDABLE LEGS is available. The spreader is "block stow" type, and it retains all the electric and mechanical safeties both with stowed or extended legs.



F500

SERIES

LORDS OF PRODUCTIVENESS



CVS FERRARI designs and builds all its Reach Stacker attachments with no compromise to functionality, reliability and safety. Block stow **COMBINED TOP AND BOTTOM PICK SPREADER** with grapples is available in European, Australian and North American versions. All equipped with standard hydraulic pile slope and full set of safeties and operator's aid functions. Machines featuring these spreaders come standard with hydraulic sliding cab to allow full visibility of operator's side legs.





The manually sliding cab is a standard feature that eases drive line bay service access. The OPTIONAL HYDRAULIC SLIDING CAB optimizes drivers visibility in every working condition thanks to its long stroke range. When in the forward position it also enables the cab doors full opening.



Working the lifts, working them swiftly, safely and shift after shift. That is what the CVS FERRARI F500 Reach Stackers have been designed for. Productiveness is the result of reliability, ease of manoeuvring, comfort of use and efficiency of run. All qualities that are embodied in these complete and rich products. The quality of the components, the robustness of the structures, the extended service intervals are all turning out in higher availability and productivity of these tireless working trucks. Their staggering uptime, their long extended service life along with their low running cost put the CVS FERRARI F500 Reach Stackers atop the ranking of the best investment returners of the whole container equipment industry.



CVS FERRARI



F500

SERIES

EXTRAORDINARY CAPACITY AND STABILITY



On several models of the CVS FERRARI F500 Reach Stacker range it is possible to order HYDRAULIC JACKS that greatly increase the capacity of the machine at extended load centres. This system consists of a very large front pad activated by two vertical jacks. The pad and its activation mechanism that is protected by a strong bumper, do not protrude beyond the edge of the front tires, this way never interfering with the machine manoeuvrability. The pad is fully applied or retracted in less than

5 seconds and actually whilst the boom also extends or retracts, with no cycle time loss. The large shape of the pad is such that its ground bearing pressure is less than those of the tires and its mounting on spherical bearings enables it to adapt to uneven ground surfaces





The CVS FERRARI F500 Series Reach Stackers feature the highest lifting capacity in their respective product classes and retain the highest stability too. It is the result of their excellent weight distribution and high resilience structures, made of the best quality steel framing a solid and proven design. That is why our machines are the product of choice of many of the hardest working railway operators, constantly handling containers in the second rail or one chassis over one rail.



CVS FERRARI

FRIENDLY
TO USE
EASY TO
SERVE



When developing this product, CVS FERRARI took full consideration for the people who make use of it; the owners, the drivers and the service technicians. This is why even the smallest details were scrutinized from every angle bringing you an easy to operate, extremely reliable machine with a low cost of ownership.

RELIABLE ELECTRICS

Through the extensive use of CAN BUS components, the electrics have been reduced to a minimum. Electronics are safely enclosed in IP67 proof casings and cabling is certified to -40 degrees temperature. Exposed connectors are top quality aluminum casted military type.



SMART SYSTEM SOLUTIONS

System solutions and components distribution choices that simplify and expedite periodic service tasks and minimize maintenance cost. Like the handy and safe dual stage cyclone air filter positioning and the brilliant hydraulic and externally placed aircon compressor unit.

TOTAL ACCESSIBILITY

The standard sliding cab provides complete access to the engine and transmission bays. For convenience, fluid level check and refill points are easily accessible by a wide safe standing platform.





FERRARI

CVS FERRARI S.P.A.
VIA EMILIA LOC FAVORITA
29010 ROVELETO DI CADEO (PC) ITALY
Tel. +39.0523.503511
www.cvsferrari.com

F500

S E R I E S

