

CVS FERRARI is proud to introduce the "E" version of its best seller F500 Reach Stacker Series, a breed of machines that have forever changed the industry standards for performance and return on investment. This Evolved Edition of a remarkably successful product represents the new benchmark for any comparable equipment. "E" stands for Evolution (of the systems), Economy (of run), Ecology (of its Energy Saving solutions). But also Effective Efficiency, because fuel saving can never come at the expense of productivity. Then Ergonomy (of the cockpit) and "Electronics Excellence", because driver's comfort and safety are fundamentals of the CVS Ferrari DNA. The new CVS Ferrari F500-E Series Reach Stackers exceed every key technical performance Indicator and translate this technical superiority in the field by outperforming any competition, appreciably reducing the operating costs and tangibly extending the typical service life of this kind of machineries. That is why the King of the Yard has now become the EMPEROR OF PRODUCTIVITY.

THE KINGS OF THE YARD ARE THE EMPERORS OF PRODUCTIVITY

THE RANGE

features several models with a wide variety of capacities and configurations that will suit any container handling or intermodal application.

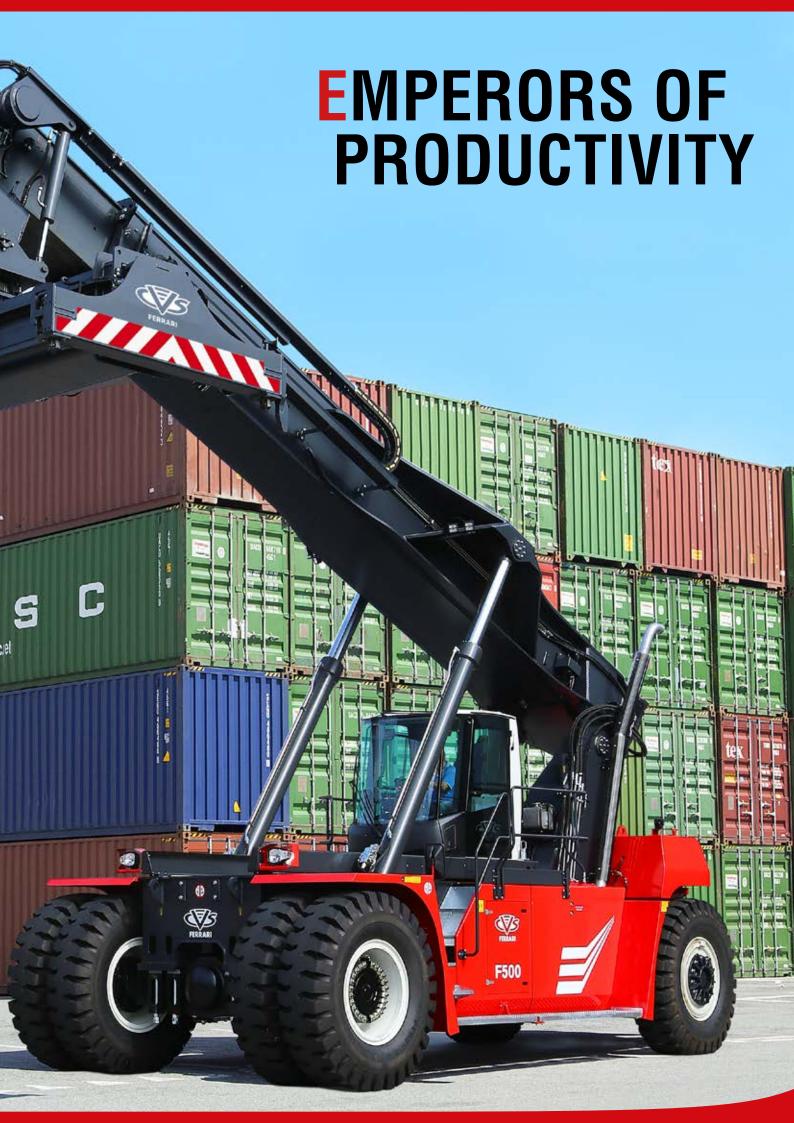
CAPACITY AND LIFTING ABILITY WITH STANDARD TOP PICK SPREADER

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

CAPACITY (Ton) WITH OPTION TOP & BOTTOM PICK SPREADER

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









J nly Kings can become Emperors. The F500-E Series Reach Stackers are the latest Version of the machines that offer the highest standard lifting ability and the best weight distribution. Machines that come with a unique Electronic Dynamic Stability Control system, that incorporates a driver optimization function capable to maximize operational safety whilst minimizing tire wear. The Kings of the Yard, stack higher, faster and heavier than ever.

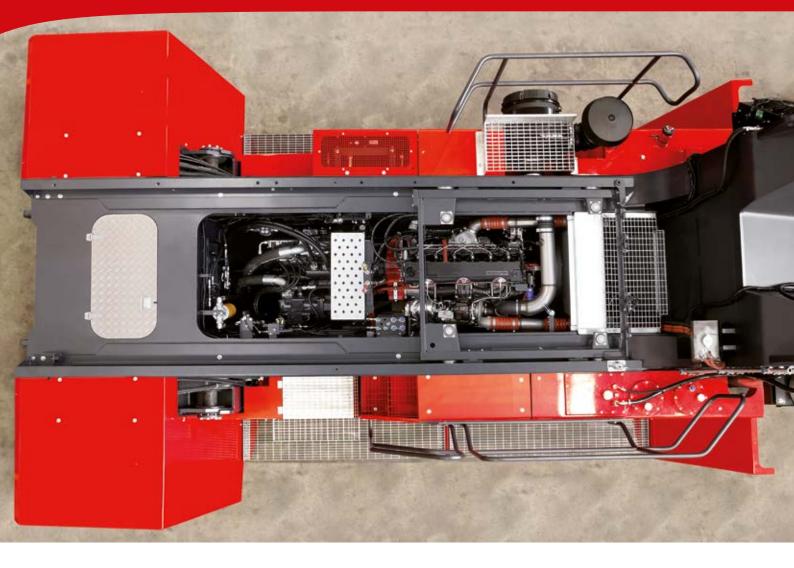
> Standard 46 Ton Capacity and 6 x 8'6" stacking ability

KING OF THE YARD



ENERGY SAVING





EXCELLENCE EVERYWHERE

he CVS FERRARI Reach Stackers feature the best the components industry has to offer. The Key Mechanical Elements, 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 conceived to achieve the best structural strength and the powertrain is strategically positioned to benefit of the best possible filtered air flow as well as to maximize Hydraulic System Efficiency. high lateral chassis walls The ensure excellent torsion and deflection resistance while providing major sound insulation.

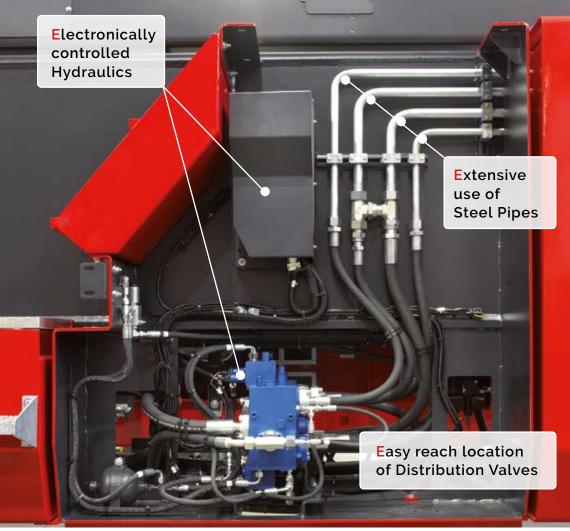


CUMMINS X12 Engine and Dana TE30 Transmission



ELITE HYDRAULICS

he CVS FFRRARI Reach Stackers are the first ever machines of their kind to incorporate Electronic Controlled 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 systems. Their instantaneous response saves operational time and avoids considerable fuel waste. SIXTH SENSE also protects the engine from unnecessary stalling stress thus extending engine life.



UNIQUE ENERGY SAVING SOLUTIONS

SIXTH SENSE is part of a standard Energy Saving Solutions (ESS) package that eliminates unnecessary fuel wastage without impairing productivity. Because there is no real fuel consumption and emission reduction If that has to come at the expence of work volume than generated revenues. The standard ESS Includes, among others, Smart Engine RPM management software, hydraulic driven aircon compressor and cab temperature management as well as thermostatically controlled fans. ESS can be expanded with the optional DANA Transmission Lock-Up function that significantly reduces fuel consumption for drive.





Oversized hydraulic oil cooling system with Thermostatically Controlled Fan and Pressurized Hydraulic Tank.

he best performing and toughest Reach Stacker in the world is also the most intuitive and intelligent in of the bunch. With probably the best driver's **Environment** the industry has ever seen, the CVS FERRARI F500-E Series features a renovated space age design cabin. The futuristic cockpit is roomiest the in the market and comes with the latest in Ergonomic Solutions combined with avionic type standard controls. Operators enjoy unrestricted visibility optimized by the anti-glare tinted and curved windshield.







SPACE AGE ERGONOMY



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.

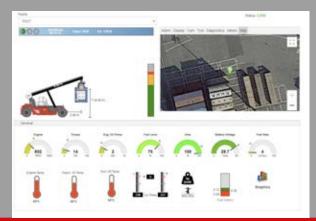












DIGITAL ERA MACHINES

The new F500-E series CVS FERRARI Reach Stackers can be interconnected to allow 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 that provides:

- LIVE MONITORING OF THE TRUCK OPERATIONAL STATUS
 Real time graphic display of the machine status, of the dashboard
 panel and (option) of the live operator's view from fisheye camera.
- REMOTE TELEMETRY SYSTEM

Real time graphic and analog display of all main components related functional parameters with access to real time value diagram.

MULTI LEVEL ALERT

Automatic e-mail alert as defined event of functional or operationa nature occurs.

- FUNCTIONAL EVENTS LOG BOOK WITH DYNAMIC RECORD Life-time recording of every relevant functional event occurred to the machine with analytic tool to sort and classify frequency of events over any selected time frame.
- REAL TIME BI-DIRECTIONAL FAULT DIAGNOSTIC FUNCTION Real time remote access to the equipment on-board computer to perform live remote fault diagnostic with assistance of on-line electric system schematic data.
- PARAMETERS DATA LOG

Up to 500 working hours graphic and analog recording multiple functional parameters to detect any random event and determine its route course.

OPERATIONAL ACTIVITY LOG BOOK

Life-time interactive recording of every single lift performed by the machine and of all the related parameters, such as type and weight of the load, height of pick-up and release, work cycle travelled distance in empty and loaded conditions, lift cycle consumed fue and completion time.

- LIFE-TIME FUNCTIONAL AND OPERATIONAL DATA- BASE
 Life-time data-base of a key operational costs with data analysis
 tools
- AUTOMATIC REPORTING OF SELECTED KPIs and GRAPHS Daily, weekly, monthly and yearly e-mail delivered report over performed machine activity providing customer selected operational KPIs in numeric and graphic format.
- GPS REAL TIME EQUIPMENT TRACKING

Displayed on satellite view of the machine working theater. Tracking of every performed lift movement route.





he 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



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-E Series superior when compared to any equivalent machine in its class.



"sandwich type"
Steer Axle
with giant rubber
Shock Absorbant

Quality Tires on heavy duty nterchangeable



he CVS FERRARI F500-E modular design is utilized throughout the range. This extreme standardization increases realibility and parts availability. Across all models of the F500-E Series allows for only wheel size counterweights and wheelbase to vary.



ENGINEERING MASTERPIECES



CVS FERRARI

SPREADER OPTIONAL DEVICES:



he new F500-E Series Reach Stacker by CVS FERRARI is offered either with the CVS FERRARI or with the **ELME Innovation** Spreader. Both spreader options come with externally mounted extension cylinders, which make servicing very simple and efficient. Twin gear reducers with lamellar brakes are powered by two hydraulic motors acting on an oversized rotation gear. The full floating twist-locks have a double safety system and are individually monitored.



SPREADER WITH HYDRAULIC FOLDABLE OVERHEIGHT LEGS

F500-E

dling or negative lift applications, an optional spreader with INTEGRATED HYDRAULIC FOLDABLE LEGS is available. The spreader is "block stow" type and retains all the electric and mechanical safeties both with stowed or extended legs.





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.



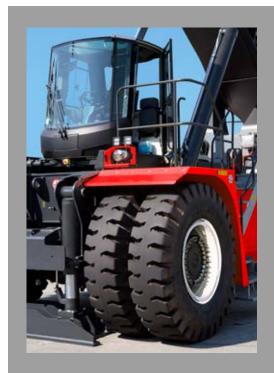




VV orking the lifts, working them swiftly, safelyand shift after shift. That is what the CVS FERRARI F500-E Series Reach Stackers have been designed for. Productiveness is the result of reliability, ease of maneuvering, comfort of use and Efficiency of run. All properties that are embodied in these com-plete and rich products. The quality of the components, the robustness of the structures,

the extended service intervals turn out into increased performed work volumes and therefore higher Earnings generation. Staggering uptime, extended service life and low running costs, put the CVS FERRARI F500-E Reach Stackers atop the ranking of the best investment returners of the whole container equipment industry.







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.







On several models of the CVS FERRARI F500-E 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



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.



he CVS FERRARI F500-E 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, framed in 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.









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

Amazing system solutions and components distribution choices that simplify and expedite periodic service tasks and minimize the 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. To maximize convenience, fluid level check and refill points are easily accessible by a wide and safe standing platform.







