C-SERIES GRADERS
836C I 836C AWD I 856C I 856C AWD

LEAD
THE WAY

www.casece.com
EXPERTS FOR THE REAL WORLD
SINCE 1842
HERITAGE
A TRADITION OF INDUSTRY FIRSTS

CASE is founded.
1842 Eisenwerk Gebruder Frisch KG was Founded.
1867 Road building equipment production.
1926 The First Frisch grader is also the first european motor grader.
1934 Dedicated Frisch road building plant in Kissing.
1936 First automatic blade guidance based on ultrasonic system.
1967 Articulated frame introduction.
1970 AWD introduction.
1972 Frisch company acquired by Faun.
1977 Encapsulated slewing ring introduction.
1982 Faun grader operations acquired by Orenstein and Koppel (O&K).
1986 Load Sensing hydraulic system introduction and grader production moved to Berlin.
2000 High visibility engine hood design introduction.
2005 FPT engines introduction and 6 cylinder installation on 13 t grader.
2010 All around visibility cab introduction.
2013 Low Profile cab introduction.
2015 Case branded graders enter the European Market.
LOW EMISSIONS
Tier 4 Final

The patented FPT Hi-eSCR is the key for performance and success. The CASE grader is the only one in the market satisfying the restrictive Tier 4 final demands with SCR-only aftertreatment technology. None of the others can provide such a smart solution hugely cost efficient thanks to the following exclusivities:

- No DPF regeneration during the working activities means no waste of fuel
- No DPF filter periodical replacement
- No need of double stage aftertreatment DPF+SCR
- The FPT engine implies no gas recirculation improving consequently the combustion efficiency
- Neat engine layout thanks to the after treatment small size
- Lower engine cooling requirement and consequently smaller radiator size for better rear visibility and easy cleaning

DUAL POWER CURVE
Get more productive at higher speed

The engine is completely application-engineered to power motor graders which require fast torque response to keep high productivity levels. For even higher performances the Dual Power maximizes operation at higher speed thanks to the power curve flattening from 4th gear.

SAFE AND EASY MAINTENANCE
Never so undemanding

Daily maintenance operations have never been so undemanding: all the main check points, on the left hand side of the machine, are easily reachable from ground level. The tandem mudguards are conceived to be the most functional and safer places to fulfill periodical maintenance operations like the air filter cleaning or the oil refill. The smallest aftertreatment package in the market doesn’t impact the engine layout sharpness: the emergency maintenance operations will then be faster and less expensive.
ERGOPOWER TRANSMISSION WITH TORQUE CONVERTER

Jerk free shifting
The automatic shifting function eases the operator concentration and optimizes the machine performances letting the grader engine work on the most productive area of the power curve. The function combined with the torque converter never reaches the power unit stall, making the real difference from competitors in the grader sector.

100% automatic diff. Lock: the automatic «no-Spin» differential instantaneously transfers the torque from the slipping tyre to the wheel with better grip. The system doesn’t require any driver intervention allowing the operator to be focused on the blade movement control.

AWD WITH CREEP MODE DRIVE

Precise at any speed
Creep mode on AWD models: 2 machines in one, the hydrostatic creep mode makes the front speed virtually independent from the engine revolutions: therefore the grader can be used in compaction application reducing the overall fleet deployed in road construction. Independently from the transmission chosen, 4 WD or 6WD, the 836C can be also equipped with 24" tyres: the ideal solution on uneven soils and when a low tyre bumping effect is required.
**MULTI-RADIUS BLADE**

Easy material rolling

The infinitely variable radius blade reduces the traction effort, and in finishing operations improves the material mixing effect.

**ROLLER MOUNTED ENCAPSULATED SLEWING RING**

Zero friction engineering solutions

Moldboard design revolutionizes and maximizes controllability: very low friction developed during operation, jolt-free high rotation torque for a very smooth and accurate blade rotation and steadiness.

The slewing ring is mounted on roller bearings activated by internal gearing avoiding backlash, wear and supporting high mechanical strain. The exclusive moldboard design, with fewer greasing points, reduces the daily maintenance drastically.

During the machine service life, periodical substitution of wear inserts is not required cutting down overall maintenance costs.

**“A-SHAPE” FRAME**

Stress free structure

The “A-Shape” structure constantly compensates the efforts while working. The typical lateral stress on off-set position are virtually eliminates for longer operating life.

The saddle can be hydraulically set on 5 different positions very easily thanks to a pin lock system; the exclusive moldboard geometry enables the operator to rotate the blade over 90° for each working side without any mechanical interference.
EXTREME PRECISION

LOAD SENSING HYDRAULIC SYSTEM
Flow at your fingertip
The new CASE graders have the most precise hydraulic circuit in the market. With highly responsive and precise controls, the load sensing hydraulics make any operation easy and smooth. A directly activated axial piston pump delivers only the required amount of oil where it is needed, avoiding any power waste. The Control valves provide pressure compensation enabling the moldboard to be lifted or lowered in parallel. A dedicated switch installed on the cab floor allows the operator to obtain maximum output from the hydraulic circuit, independently from the engine revolutions, for faster reactions (Full Flow mode).

DIRECTLY MOUNTED CONTROL LEVERS
Banning power waste, spinning productivity
The exclusive hydraulic block, directly controlled, reduces any lever free play over the entire grader life, meanwhile the operator can benefit from a direct feed-back of the hydraulic system increasing the working accuracy. The float function, available as an option, lets the oil flow unobstructedly in the cylinders so to let the moldboard naturally follow the ground contour. Independently from CASE certified high quality components, this exclusive hydraulic system has been conceived to ensure always unbeatable performances, fuel saving, reliability and grader controllability.
BLADE CONTROL SET UP

Flexible performance

The CASE “800 series” grader can be equipped from factory with the most common blade control installation set up. The unit is delivered to the customer with all the sensors, cables and supports. It’s a real “plug and play” solution: the customer has just to install the antenna and the monitor on the cab and the blade control is ready to work. The system is compatible with different types of controls: Sonic, Laser, GPS or Universal Total Station. The automatic blade control allows even the less skilled operator to get a considerable working capacity from CASE grader, this helps to get the job done faster meaning fewer rounds and always the right amount of material moved. Consequently, grader cost effectiveness in terms of operation and working time.

With CASE control set up each customer can even use blade control devices already installed in other construction units of its fleet making the return on investment more immediate. The installation of main components in factory provides an easier accessibility and consequently faster maintenance service: this is a guarantee of high manufacturing standard, almost impossible to achieve through aftermarket solutions.
REAR MOUNTED CAB
Aligned with performance

The rear mounted ROPS/FOPS cab offers a highly valuable advantage in comfort and convenience:
- Operators are aware of the articulation angle at all times
- The rear located cab improves visibility on the moldboard
- The cab weight carried on the rear frame emphasizes the machine traction
- Pneumatic and heated seat offered as a standard strengthens operator well-being at work

The wide tinted glass mounted on the front and on the side of the cab provides unobstructed all-around visibility. Even when the driver is working seated, he can have full moldboard visibility till its heel angle. The safety too is improved:
- The new rear view camera guarantees a safer rear visibility and an excellent operator comfort.
  The driver doesn’t have to turn back anymore when he has to drive the machine backward.
- Any obstacle can be easily recognized from a quick look at the wide 7” color screen.

LOW CAB PROFILE
A new Cabin equipped with all “mod cons”

Finally, CASE offers an elegant low profile cab on its graders providing best-in class comfort and visibility while reducing the machine’s total height of 180mm, so that there are no transport limitations.
HIGH VERSATILITY
Tools for every task
CASE graders can be completed with a wide variety of fittings making them suitable for a great number of applications:

- 3 customizable moldboard widths for each model to easily adapt the pushing power to different material density and working conditions
- Different Moldboard extensions for better lateral material retention in fine grading
- Moldboard overload clutch to preserve frame and moldboard from any unexpected collision, recommended in forestry applications
- Moldboard scarifier for easier light soil preparation in a single pass
- 3 or 5 teeth ripper to better scarify the sturdier soil roots
- Front blade for faster dozing operations and for improved productivity in combination with the central blade thanks to the engine power high level
- Specific front counterweight: better machine balance and higher tractive effort
- Rear hydraulic set up providing the right oil flow for additional implements such as compactors, it represents the ideal combination with the exclusive creep mode
- Fuel tank refill pump: easier daily tank refill in any working environment
- Additional lights packages:
  - on the rear counterweight
  - on the lower part of the cab for higher light intensity on the moldboard
MAIN REASONS TO CHOOSE THE C-SERIES

«A–SHAPE» FRAME
- An optimized effort distribution in any condition ensures long operating life.

LOAD SENSING HYDRAULIC SYSTEM
- The balanced flow for all applications and for simultaneous moldboard movements.

SAFE AND EASY MAINTENANCE
- The easy serviceability is part of CASE DNA: all the main checks can be easily performed from the wide and safe tandem fenders; all the service points are conveniently grouped and positioned.

HIGH VERSATILITY
- The wide variety of options offers, to any customer, the possibility to create a tailored grader suitable for the most demanding applications.

BLADE CONTROL SET UP
- Leading brands plug and play blade control system.

MULTI-RADIUS BLADE
- Lower power absorption and optimized rolling effect.

ROLLER MOUNTED, ENCAPSULATED SLEWING RING
- Maintenance free technology and effortless moldboard rotation.
**LOW PROFILE CAB**
- Less 180 mm transport height / transport on trucks below 4 mt.

**REAR MOUNTED CAB**
- Best in class controllability and comfort: the operator is always in line with the working direction.

**DIRECTLY MOUNTED CONTROL LEVERS**
- Better moldboard control over the years, no free play between levers and main control valve.

**LOW EMISSIONS**
- The exclusive «HI-eSCR» technology, with AdBlue-only aftertreatment, dramatically reduces fuel consumption cutting off the after treatment maintenance costs.

**ERGOPower Transmission with Torque Converter**
- Smooth shifting for perfect controllability and automatic mode for stress-free operations.

**Dual Power Curve**
- Higher power rate at high speed (4th gear) increases the grader productivity.

**AWD with Creep Mode Drive**
- Full traction in any condition and optimized torque transfer adapted to operator needs.
TELEMATICS

CASE® CONSTRUCTION

SiteWatch™
**THE SCIENCE BIT**

The Case SiteWatch telematics system uses a high-tech control unit mounted on each machine to collate information from that machine and from GPS satellites. This data is then sent wirelessly through the mobile communication networks to the Case Telematics Web Portal.

**SiteWatch: centralised fleet control benefits at your fingertips**

 ê **Measure your true asset availability and optimise it**
- Eliminate the “phantom fleet”: SiteWatch allows to identify spare units or under loaded machines on each site.
- Become able to reallocate units where they are more needed.
- Forward Maintenance Planning is easier since the actualised working hours are always available.
- Extend the benefits of SiteWatch to the rest of your fleet: SiteWatch can be installed on the units of other brands as well.

 ê **Challenge your Total Cost of Ownership!**
- Being able to compare the fuel usage of different machine types will allow you choose the right equipment.
- Save on transport costs with planned and grouped maintenance tasks.
- Peace of mind, optimised uptime and lower repair costs: with preventive maintenance you can for example be alerted if the engine needs to be serviced and avoid a disruptive breakdown.
- Be able to compare your asset Return On Investment on different sites.
- Your equipment is used only during working hours. You can set up alerts so that you know if it is in use during the weekend or at night.
- Integrate with the programmed maintenance package, so that you can be sure every machine is at the right place at the right time.

 ê **More Safety, Lower Insurance Premium**
- Keep thieves away: dissuade them from attacking your asset because it is geo-localised. SiteWatch is hidden so that thieves can’t find it quickly.
- Your fleet is used only where you decide. You can define a virtual fence and receive an email when a machine exits that perimeter.
ENGINE TIER 4 FINAL “HI-eSCR”

Maximum Power (ISO 14396/ECE R120)
From 1st to 3rd gear ________________________ 102 kW/138 hp
From 4th to 6th gear ________________________ 115 kW/156 hp
Governed _________________________________ 2100 rpm
Make & model _________________________ NEF 6 cyl. CR TAA 4V
Aftertreatment system _____________________ SCR only
Donaldson air filter with dust ejector ____________ std
Type __ diesel, common rail, dual power, turbocharged and intercooler
Displacement _____________________________ 6.7 l
Number of cylinders __________________________ 6
Bore & stroke _____________________________ 104x132 mm
Maximum torque at 1400 rpm ________________ 725 Nm
Remote engine oil filter for easy replacement
-25°C outside temperature start as standard equipment
The engine complies with 97/68/EC standards TIER 4 Final

TORQUE CONVERTER

Single-stage torque converter integrated into shift gearbox
Automatic matching of output torque to changing travel conditions
Converter ratio __________________________ 1.87:1
Cooling by heat exchanger

TRANSMISSION

Full powershift transmission with 6 forward and 3 reverse gears.
Electric single-lever shift with reverse-lock in ranges 3-6.

Speeds in km/h

<table>
<thead>
<tr>
<th>Gear</th>
<th>Forwards</th>
<th>Reverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>5.4</td>
<td>5.7</td>
</tr>
<tr>
<td>2.</td>
<td>8.3</td>
<td>13.3</td>
</tr>
<tr>
<td>3.</td>
<td>12.6</td>
<td>29.2</td>
</tr>
<tr>
<td>4.</td>
<td>19.2</td>
<td>-</td>
</tr>
<tr>
<td>5.</td>
<td>27.9</td>
<td>-</td>
</tr>
<tr>
<td>6.</td>
<td>39.9</td>
<td>-</td>
</tr>
</tbody>
</table>

Ttractive effort (adeherence coefficient 0.8)
836C ________________ 66 kN
836C AWD ________________ 85 kN

AXLE FRONT

Oscillating axle with wheel spindle steering and hydraulic wheel lean adjustment

<table>
<thead>
<tr>
<th>836C</th>
<th>836C AWD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axle oscillation</td>
<td>± 15°</td>
</tr>
<tr>
<td>Wheel lean</td>
<td>± 21.45°</td>
</tr>
<tr>
<td>Ground clearance</td>
<td>485 mm</td>
</tr>
</tbody>
</table>

AXLE REAR TANDEM

CASE tandem grader axle with automatic No-Spin differential
Oscillating tandem drives with heavy-duty roller chains
Planetary reduction
Oscillation ___________________________ ± 15°
Tandem box dimensions:
Height _______________________________ 599 mm
Width ________________________________ 201 mm
Wall thickness _________________________ 20 mm
Chain pitch __________________________ 50.8 mm
Tandem wheelbase ______________________ 1241 mm

ALL WHEEL DRIVE

Selectable in addition to the hydrodynamic rear-wheel drive.
Hydrostatic front-wheel drive with E.D.C.V. (Electronic Drive Control Volume). A bi-directional swash plate pump (forward/reverse) drives wheel-hub mounted motors in each of the front wheels. Hydraulic No-Spin differential prevents one-sided wheel spin and proportions torque when cornering. A microprocessor monitors and matches front- and rear-wheel drive forces. A stepless switch allows the operator to adapt front-wheel thrust to existing job conditions. Creep mode as standard: front traction only, for ultra low machine speed.

BRAKES

Hydraulic, dual-circuit accumulator pump braking with 4 oil bath disc brakes acting on tandem-wheels. Parking brake: disc brake acting on transmission.

STEERING

Operated from the adjustable steering and control console.
Front-wheel spindle steering, all hydraulic, volume control.

<table>
<thead>
<tr>
<th>836C</th>
<th>836C AWD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steering wheel lock. left/right</td>
<td>40°</td>
</tr>
<tr>
<td>Articulated frame</td>
<td></td>
</tr>
<tr>
<td>with 2 double-flow steering cylinders:</td>
<td></td>
</tr>
<tr>
<td>Articulation angle</td>
<td>± 28°</td>
</tr>
<tr>
<td>Minimum turning radius:</td>
<td></td>
</tr>
<tr>
<td>across tyres</td>
<td>6600 mm</td>
</tr>
<tr>
<td>across front blade</td>
<td>7300 mm</td>
</tr>
</tbody>
</table>

TYRES

405/70 R20 SPT9 Dunlop
420/75 R20 XMCL TL Michelin
455/70 R20 SPT9 Dunlop
405/70 R24 SPT9 Dunlop

MOLDBOARD CONTROL

“Load Sensing” for maximising functions controllability. Control levers for precision metering of adjustment speed. Pressure compensation in each of the control valve units permits parallel moldboard lifting or simultaneous operation of two other functions, with no disruptive interaction. A pedal allows the operator to switch to max. output for faster functioning (Full Flow Mode). Unlockable check valves maintain lift/cutting angles and wheel lean cylinders constant.
A-FRAME
Robust welded box section A-frame.
L-profile cross section 125x120x8 mm

SLEWING RING
Internal gearing, sealed roller-mounted, backlash-free, self-adjusting
Driven by hydraulic motor and moldboard mechanism
Diameter 1150 mm
Action radius 360°

MOLDBOARD
Multiradius wear-resistant, high-grade steel with hardened rounded guides. Replaceable, split main and side blades.
Width 2440/3050/3355 mm
Blade height/thickness 526/15 mm
Cutting edge height/thickness 152/19 mm
Bolt diameter 16 mm

MOLDBOARD SETTINGS
Shifting:
to the right 491 mm
to the left 708 mm
Reach across tyres w/o articulated steering:
right horizontal 1865 mm
left horizontal 1525 mm
Reach across tyres with articulated steering:
right horizontal 2490 mm
left horizontal 2150 mm
Max. slope angle:
right 117°
left 76°
Max. lift height above ground 394 mm
Max. scraping depth 456 mm
Cutting angle adjustment, hydr 49.5°

HYDRAULIC SYSTEM
“Load Sensing” with variable displacement axial piston pump. Zero oil delivery under no-function conditions and hence power savings.
Closed system with pressurised tank. Pressure relief valve.
Hydraulic pump swash plate, variable displacement
Max delivery 94.5 l/min
Max pressure 200 bar
Pressure relief setting 215 bar

FRAME
Front frame: stiff, welded section from high-strength, fine-grain steel
Cross-section 270 x 270 mm
Wall thickness 12 mm
Rear frame torsion resistant frame
Cross-section 220 x 260 mm

CAB
Low profile Cab option reducing overall grader height by 180 mm.
ROPS according to EEC sample testing ISO 3471
FOPS according to EEC sample testing ISO 3449
Cab noise level 75 dBa
External noise level 100 dBa

ELECTRICAL SYSTEM
Voltage 24 V
Batteries 2 x 100 Ah
Alternator 90 A
Starter 4 kW

CAPACITIES
lubricating oil 12.5
Coolant (including: cooler and heater) 32.0
Transmission (including converter and cooling) 27.0
Axle gear 31.0
Tandem 120.0
Worm gear 2
Hydraulic tank 70.0
Hydraulic oil, total:
836C 170.0
836C AWD 185.0
Fuel tank 278.0
AdBlue tank 54
C-SERIES
MOTOR GRADERS

856C - 856C AWD SPECIFICATIONS

ENGINE TIER 4 FINAL “HI-eSCR”

Maximum Power (ISO 14396/ECE R120)
From 1st to 3rd gear ________________________ 129 kW/173 hp
From 4th to 6th gear ________________________ 142 kW/190 hp
Governed _______________________________ 2100 rpm
Make & model _____________________________ NEF 6 cyl. CR TAA 4V
Aftertreatment system _____________________ SCR only
Donaldson air filter with dust ejector __________ std
Type ________________________________ diesel, common rail, dual power, turbocharged and intercooler
Displacement ____________________________ 6.7 l
Number of cylinders ___________________________ 6
Bore & stroke ___________________________ 104x132 mm
Remote engine oil filter for easy replacement
- 25°C outside temperature start as standard equipment
The engine complies with 97/68/EC standards TIER 4 Final

TORQUE CONVERTER

Single-stage torque converter integrated into shift gearbox
Automatic matching of output torque to changing travel conditions
Converter ratio ___________________________ 1.91:1
Cooling by heat exchanger

TRANSMISSION

Full powershift transmission with 6 forward and 3 reverse gears.
Electric single-lever shift with reverse-lock in ranges 3-6.

<table>
<thead>
<tr>
<th>Gear</th>
<th>Forwards</th>
<th>Reverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>5.0</td>
<td>5.4</td>
</tr>
<tr>
<td>2.</td>
<td>7.7</td>
<td>12.6</td>
</tr>
<tr>
<td>3.</td>
<td>11.8</td>
<td>27.9</td>
</tr>
<tr>
<td>4.</td>
<td>17.9</td>
<td>-</td>
</tr>
<tr>
<td>5.</td>
<td>26.0</td>
<td>-</td>
</tr>
<tr>
<td>6.</td>
<td>38.0</td>
<td>-</td>
</tr>
</tbody>
</table>

Ttractive effort (adeherence coefficient 0.8)
856C ____________________________ 95 kN
856C AWD ________________________ 117 kN

AXLE FRONT

Oscillating axle with wheel spindle steering and hydraulic wheel lean adjustment

<table>
<thead>
<tr>
<th>856C</th>
<th>856C AWD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axle oscillation</td>
<td>± 15°</td>
</tr>
<tr>
<td>Wheel lean</td>
<td>± 20.3°</td>
</tr>
<tr>
<td>Ground clearance</td>
<td>554 mm</td>
</tr>
</tbody>
</table>

AXLE REAR TANDEM

CASE tandem grader axle with automatic No-Spin differential
Oscillating tandem drives with heavy-duty roller chains

Planetary reduction
Oscillation ___________________________ ± 15°
Tandem box dimensions:
Height ________________________________ 590 mm
Width _______________________________ 199 mm
Wall thickness ________________________ 20 mm
Chain pitch __________________________ 50.8 mm
Tandem wheelbase _____________________ 1572.6 mm

ALL WHEEL DRIVE

Selectable in addition to the hydrodynamic rear-wheel drive.
Hydrostatic front-wheel drive with E.D.C.V. (Electronic Drive Control Volume). A bi-directional swash plate pump (forward/reverse) drives wheel-hub mounted motors in each of the front wheels. Hydraulic No-Spin differential prevents one-sided wheel spin and proportions torque when cornering. A microprocessor monitors and matches front- and rear-wheel drive forces. A stepless switch allows the operator to adapt front-wheel thrust to existing job conditions. Creep mode as standard: front traction only, for ultra low machine speed.

BRAKES

Hydraulic dual-circuit accumulator pump braking system with four oil cooled disc brakes. Disc brake acting on transmission.

STEERING

Operated from the adjustable steering and control console. Front-wheel spindle steering, all hydraulic, volume control.

<table>
<thead>
<tr>
<th>856C</th>
<th>856C AWD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steering wheel lock. left/right</td>
<td>42.5°</td>
</tr>
<tr>
<td>Articulated frame with 2 double-flow steering cylinders: Articulation angle</td>
<td>± 28°</td>
</tr>
<tr>
<td>Minimum turning radius: across tyres</td>
<td>7300 mm</td>
</tr>
<tr>
<td>across front blade</td>
<td>8100 mm</td>
</tr>
</tbody>
</table>

TYRES

17.5 R25 XHA MICHELIN (transport width<2500 mm)
17.5 R25 XTLA G2 MICHELIN
17.5 - 25 EM SGL TL GOODYEAR (transport width<2500 mm)

MOLDBOARD CONTROL

“Load Sensing” for maximising functions controllability. Control levers for precision metering of adjustment speed. Pressure compensation in each of the control valve units permits parallel moldboard lifting or simultaneous operation of two other functions, with no disruptive interaction. A pedal allows the operator to switch to max. output for faster functioning (Full Flow Mode). Unlockable check valves maintain lift/cutting angles and wheel lean cylinders constant.
A-FRAME
Robust welded box section A-frame.
L-profile cross section ________________ 140x140x10 mm

SLEWING RING
Internal gearing, sealed roller-mounted, backlash-free, self-adjusting
Driven by hydraulic motor and moldboard mechanism
Diameter ________________ 1350 mm
Action radius ________________ 360°

MOLDBOARD
Multiradius wear-resistant, high-grade steel with hardened rounded guides. Replaceable, split main and side blades.
Width ________________ 3350/3665/3960 mm
Blade height/thickness ________________ 603/20 mm
Cutting edge height/thickness ________________ 152/19 mm
Bolt diameter ________________ 16 mm

MOLDBOARD SETTINGS
Shifting:
to the right ________________ 755 mm
to the left ________________ 645 mm
Reach across tyres w/o articulated steering:
right horizontal ________________ 2375 mm
left horizontal ________________ 1685 mm
Reach across tyres with articulated steering:
right horizontal ________________ 3235 mm
left horizontal ________________ 2545 mm
Max. slope angle:
right ________________ 100°
left ________________ 112°
Max. lift height above ground ________________ 480 mm
Max. scraping depth ________________ 500 mm
Cutting angle adjustment, hydr ________________ 50°

HYDRAULIC SYSTEM
“Load Sensing” with variable displacement axial piston pump. Zero oil delivery under no-function conditions and hence power savings.
Closed system with pressurised tank. Pressure relief valve.
Hydraulic pump ________________ swash plate, variable displacement
Max delivery ________________ 126 l/min
Max pressure ________________ 200 bar
Pressure relief setting ________________ 215 bar

FRAME
Front frame: stiff, welded section from high-strength, fine-grain steel
Cross-section ________________ 300 x 300 mm
Wall thickness ________________ 20 mm
Rear frame ________________ torsion resistant frame
Cross-section ________________ 260 x 90 mm

CAB
Low profile Cab option reducing overall grader height by 180 mm.
ROPS according to EEC sample testing ________________ ISO 3471
FOPS according to EEC sample testing ________________ ISO 3449
Cab noise level ________________ 75 dbA
External noise level ________________ 100 dbA

ELECTRICAL SYSTEM
Voltage ________________ 24 V
Batteries ________________ 2 x 100 Ah
Alternator ________________ 90 A
Starter ________________ 4 kW

CAPACITIES
Lube oil ________________ 12.5 litres
Coolant (Including: cooler and Heater) ________________ 32.0
Transmission (Including converter and cooling) ________________ 27.0
Axle gear ________________ 36.0
Tandem ________________ 128.0
Worm gear ________________ 2.5
Hydraulic tank ________________ 90.0
Hydraulic oil, total:
856C ________________ 185.0
856C AWD ________________ 200.0
Fuel tank ________________ 278.0
AdBlue tank ________________ 54
### C-SERIES
#### MOTOR GRADERS

**GENERAL DIMENSIONS**

![Diagram of a motor grader](image)

**MACHINE WITH:**

<table>
<thead>
<tr>
<th></th>
<th>836C</th>
<th>836C AWD</th>
<th>856C</th>
<th>856C AWD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front &amp; rear counterweight kg</td>
<td>11701</td>
<td>12001</td>
<td>14976</td>
<td>15376</td>
</tr>
<tr>
<td>Front blade &amp; rear c/w kg</td>
<td>11805</td>
<td>12105</td>
<td>15140</td>
<td>15540</td>
</tr>
<tr>
<td>Front c/w &amp; rear ripper kg</td>
<td>12005</td>
<td>12305</td>
<td>15407</td>
<td>15807</td>
</tr>
<tr>
<td>Front blade &amp; rear ripper kg</td>
<td>12109</td>
<td>12409</td>
<td>15571</td>
<td>15971</td>
</tr>
<tr>
<td>Max. operating weight kg</td>
<td>12500</td>
<td>12800</td>
<td>16250</td>
<td>16650</td>
</tr>
</tbody>
</table>

With low Profile Cab the weight is reduced by: 35 kg

#### 836C, 836C AWD EQUIPPED WITH:

<table>
<thead>
<tr>
<th></th>
<th>836C</th>
<th>836C AWD</th>
<th>856C</th>
<th>856C AWD</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Total length mm</td>
<td>7697</td>
<td>8372</td>
<td>8331</td>
<td>8961</td>
</tr>
<tr>
<td>B Wheelbase mm</td>
<td></td>
<td>5351</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C Rear attachment end mm</td>
<td>1605</td>
<td>1605</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D Front attachment end mm</td>
<td>762</td>
<td>1436</td>
<td>762</td>
<td>1436</td>
</tr>
<tr>
<td>E Tandem base mm</td>
<td>1241</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F Standard cab height mm</td>
<td>3240</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F' Low profile cab height mm</td>
<td>3060</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G Max machine height mm</td>
<td>3586</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H Width over tyres mm</td>
<td>2303</td>
<td>2360</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I Blade base mm</td>
<td>1997</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dimensions referred to a machine equipped with 405/70R20 tires. Machine height and width over tires may vary with other tires.

#### 856C, 856C AWD EQUIPPED WITH:

<table>
<thead>
<tr>
<th></th>
<th>856C</th>
<th>856C AWD</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Total length mm</td>
<td>8592</td>
<td>9317</td>
</tr>
<tr>
<td>B Wheelbase mm</td>
<td></td>
<td>6023</td>
</tr>
<tr>
<td>C Rear attachment end mm</td>
<td>1785</td>
<td>2458</td>
</tr>
<tr>
<td>D Front attachment end mm</td>
<td>809</td>
<td>1568</td>
</tr>
<tr>
<td>E Tandem base mm</td>
<td></td>
<td>1572</td>
</tr>
<tr>
<td>F Standard cab height mm</td>
<td>3330</td>
<td></td>
</tr>
<tr>
<td>F' Low profile cab height mm</td>
<td>3150</td>
<td></td>
</tr>
<tr>
<td>G Max machine height mm</td>
<td>3674</td>
<td></td>
</tr>
<tr>
<td>H Width over tyres mm</td>
<td>2549</td>
<td>2555</td>
</tr>
<tr>
<td>I Blade base mm</td>
<td></td>
<td>2504</td>
</tr>
</tbody>
</table>

Dimensions referred to a machine equipped with 17.5R25EM tires. Machine height and width over tires may vary with other tires.
## HYDRAULICALLY CONTROLLED FRONT DOZER BLADE

<table>
<thead>
<tr>
<th>Feature</th>
<th>836C - 836C AWD</th>
<th>856C - 856C AWD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blade width mm</td>
<td>2350</td>
<td>2450</td>
</tr>
<tr>
<td>Blade height mm</td>
<td>765</td>
<td>870</td>
</tr>
<tr>
<td>Penetration depth mm</td>
<td>136</td>
<td>174</td>
</tr>
<tr>
<td>Max. ground clearance mm</td>
<td>509</td>
<td>547</td>
</tr>
</tbody>
</table>

## HYDRAULICALLY CONTROLLED REAR RIPPER FOR HEAVY DUTY APPLICATIONS

<table>
<thead>
<tr>
<th>Feature</th>
<th>836C - 836C AWD</th>
<th>856C - 856C AWD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ripping width mm</td>
<td>2049</td>
<td>2268</td>
</tr>
<tr>
<td>Ripping depth mm</td>
<td>310</td>
<td>371</td>
</tr>
<tr>
<td>Number of shanks n°</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Interval of shanks mm</td>
<td>500</td>
<td>555</td>
</tr>
</tbody>
</table>

## THE MOVABLE MOLDBOARD SCARIFIER CAN BE OPERATED IN BOTH DIRECTIONS

<table>
<thead>
<tr>
<th>Feature</th>
<th>836C - 836C AWD</th>
<th>856C - 856C AWD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of shanks n°</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Scarifying width mm</td>
<td>900</td>
<td>1080</td>
</tr>
</tbody>
</table>

## RIPPING TRACK DISPLACEMENT

<table>
<thead>
<tr>
<th>Feature</th>
<th>836C - 836C AWD</th>
<th>856C - 856C AWD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left mm</td>
<td>420</td>
<td>580</td>
</tr>
<tr>
<td>Right mm</td>
<td>950</td>
<td>1200</td>
</tr>
<tr>
<td>Scarifying depth mm</td>
<td>134</td>
<td>202</td>
</tr>
</tbody>
</table>

## STANDARD EQUIPMENT

- Battery main switch
- Cab equipped with two fully swinging doors for both side access, tinted safety glasses, front and rear sunshield
- Switchable back-up alarm
- Radio
- Rotating beacon
- Caliper disc parking brake operating on transmission
- NEF Tier 4 Final engine with electronic management and “DualPower”
- SCR only exaust gas aftertreatment
- Cold start
- Control levers for precise and simultaneous moldboard operations
- Front counterweight
- Front and rear fenders
- Front wheel spindle steering with adjustable steering column
- Heating system
- High grade steel moldboard with hardened rounded guides
- Hydraulic and dual-circuit accumulator brake system operating on tandem wheels
- Hydraulically adjustable for 90° bank slope
- Hydrostatic front-wheel drive with E.D.C.V. Electronic Drive *
- Control volume and hydraulic differential *
- Internal gearing, sealed, backlash-free and self-adjusting slewing ring operating on 360°
- “Load Sensing” hydraulic system with variable displacement pump
- Moldboard cutting angle hydraulically adjustable
- Oscillating front axle with hydraulic lean adjustment
- Oscillating tandem axle with automatic no-spin differential
- Powershift transmission with 6 forward and 3 reverse speeds, with integrated torque converter
- Rear counterweight
- Road traffic lights
- Rops/Fops suspened cab, mounted on rear frame
- Standard cab
- Heated and air suspended seat
- Creep mode “AWD” version only

* Only on 836C AWD and 856C AWD

## OPTIONS

- Air conditioning
- Biological hydraulic oil
- Floating valve for moldboard
- Front lights on cab
- Fuel refilling pump (50 l/min)
- Left and right moldboard side plates
- Low profile cab
- Overload clutch on moldboard
- Parallel front blade
- Rear lights on cab
- 5 teeth rear ripper with protection device
- Scarifier on moldboard
- Right moldboard extension
- Tow coupling
- CASE “SiteWatch”
- Rear view camera with 7” monitor
- Blade control predisposition (Leica, Topcon, Trimble)
- Front counterweight for 836C and 836C AWD (510 kg)
- Front counterweight for 856C and 856C AWD (763 kg)
- Tool box

Note: standard and optional equipment may vary by country. Consult your CASE dealer for specific details.
NOTE: Standard and optional fittings can vary according to the demands and specific regulations of each country. The illustrations may include optional rather than standard fittings - consult your Case dealer. Furthermore, CNH Industrial reserves the right to modify machine specifications without incurring any obligation relating to such changes. Conforms to directive 2006/42/EC

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