POMMIER
Today's alternative for farmers considering a lighter, stronger and wider boom option.

One of the many benefits of POMMIER aluminium booms over steel is the fact they weigh less which significantly improves field performance.

Aluminium is not as expensive as in the past. It is well proven, reliable and the weight reduction benefits over steel cannot be underestimated.

**Width Without Weight**

Every kilogram of weight reduction on the wings significantly reduces the load and forces transferred to the centre during spraying.

POMMIER is a global leader in aluminium boom innovation, design and manufacture. Their accumulated 30 years’ experience has defined the profiles, the size and wall thickness of the aluminium extrusions they own and use.

POMMIER profiles have an inherent low weight with high capacity to bear loads making their aluminium booms up to 50% lighter and 20% stronger in the field than their steel counterparts.

Weight generates momentum - so reducing weight out on the wings brings huge benefits - and it is this reason why POMMIER booms respond optimally in all field conditions.

POMMIER aluminium booms offer significant longevity and maintenance advantages in terms of corrosion resistance, with surface oxidisation protecting the aluminium. There's no need to paint.
TR4 24 to 30m

The POMMIER TR4 is simply, not like any other boom.

TR4 stands for 4 cords in the main wing – two at the top and two on the bottom. The two bottom cords and the webbing between is actually one continuous aluminium extrusion.

The structural stiffness and strength of the POMMIER aluminium extrusions builds in design flexibility and performance.

Their light weight and ease of fabrication eliminates many of the cost-intensive welding operations that could potentially weaken the material.

The TR4 is a bi-fold boom available in 24, 28 and 30m widths. With the outer wings folded the boom width is reduced to 15m (no breakaway at 15m).

Wing tilts are standard and equipped with nitrogen accumulation for smooth ride and performance.

The breakaways are tri-directional which means they can move back and forth, and up.

Yaw forces are absorbed through the POMMIER patented yaw dampening system (see page 10).

Aluminium’s unique enduring properties guarantee long term performance and minimal maintenance. No need for paint.

TR4 PendEze Centre

Incorporates both a pendulum and trapeze elements in the centre to effectively deal with the pitch, roll and inertia forces created on headlands, cornering and when spraying.

Nozzles

Nozzles are spaced at 50cm, and are protected by the boom.
TR5 - 36.5 to 42.5m
POMMIER’S world-leading designs are incredibly strong and robust and the TR5 is a whole new kind of boom – wider, lighter and stronger for simply better results.

The 36.5, 38.5, 40.5 and 42.5m TR5 bi-fold booms are just half the weight of equivalent steel structures.

Unlike other aluminium booms, the TR5 is constructed using five parallel tube profiles connected by triangulated elements to form a truss with unrivalled strength and performance.

Using their own extruded profiles POMMIER exploits the many benefits of aluminium with built-in design flexibility and performance.

The two bottom cords and webbing between is one continuous aluminium extrusion which eliminates many of the cost-intensive welding operations.

The weight reduction benefits of TR5 booms significantly reduces inertia forces created on headlands while cornering and spraying compared with equivalent steel booms.

POMMIER TR5 is highly resistant to corrosion and ideal for use in an agricultural spraying environment. No need for paint here.

Premium HARDI nozzles are protected, centre plumbed and spaced at 50cm for precise applications and positive results.

Wing tilt and yaw dampening with nitrogen accumulation and tri-directional breakaways are standard.

Choose a TR5 with AutoTerrain and see what really outstanding spraying looks like.

**Yaw damping**
Yaw forces are absorbed through the POMMIER patented nitrogen accumulator ‘Yaw Dampening Plunge Cylinder’ in the end of the fold cylinders.

**Nitrogen Accumulation**
Yaw movement is arrested through nitrogen accumulators which absorbs the energy from the boom when braking, acceleration and steering.

**Bi-Fold wings**
Steel is used in hinge areas, pins, locks, where adjustment is required, and where the duty cycle is high. The wings sections have a mechanical self-lock with a hydraulic unlock.
The POMMIER B3 is a tri-fold boom, specifically designed for trailed sprayers, that gives farmers an incredibly strong and robust alternative to tradition steel booms.

The weight reduction benefits over steel cannot be underestimated. Reducing the load and forces transferred to the centre during spraying significantly improves field performance, application and boom longevity.

POMMIER uses their own aluminium extrusions for structural stiffness and strength while maintaining light weight and ease of fabrication.

The B3 truss boom available in 30, 32, 33 & 36 m is half the weight of equivalent steel structures.

The three RHS profiles running in parallel and separated by triangulated connecting elements, form a very strong truss.

A PendEze boom centre incorporates both a pendulum and trapeze elements to effectively deal with the pitch, roll and inertia forces created on headlands, while cornering and when spraying.

Wing tilts are standard and equipped with nitrogen accumulation for smooth ride and performance.

The breakaways are tri-directional which means they can move back, forth and up.

The 30, 32 and 33 m B3 booms are only available to special order, ex factory.
Folded for transport
Compact tri-fold boom, folds within the length of the chassis.

Yaw damping
Yaw forces absorbed through the POMMIER patented nitrogen-dampened plunge cylinder and fold cylinders.

Nitrogen Accumulation
Yaw movement is arrested through nitrogen accumulators which absorbs the energy from the boom when braking, acceleration and steering.

Fold speed control
Wing fold speed is adjusted and controlled within the cylinder. As the piston nears the end of its stroke the oil flow is reduced to slow the boom as it gets close to the end stop.
B3 Maxi 36.5 to 42.5 left  
B3 Mega 48.5m right

When it comes to wide boom innovation and design POMMIER is the market leader.

Their accumulated 30 years’ experience provides real benefits for farmers considering a lighter, stronger and wider boom option.

The B3 Maxi and Mega range is well proven in field performance and reliability, and the weight reduction benefits over steel cannot be underestimated.

AutoTerrain boom height and stability control is standard and sets a new benchmark in wide boom performance.

AutoTerrain follows the ground like a magnet regardless of the terrain it travels across, maintaining a lower boom height which provides better drift control.

With the B3 boom wings at half the weight of equivalent steel structures and when combined with POMMIER patented Yaw dampening, load and forces transferred to the centre during spraying are significantly reduced.

The B3 Maxi is a tri-fold boom available in 36.5, 38.5, 40.5, 42.5m and the B3 Mega in 48.5m.

Wing tilt with nitrogen accumulation and tri-directional breakaways are standard.

Premium HARDI nozzles are protected, centre plumbed and spaced at 50cm for precise applications and positive results.

Aluminium’s unique enduring properties guarantee long term performance and minimal maintenance. No need to paint.

Wing Fold  
Steel is used on hinge areas, pins, locks, where adjustment is required, and where the duty cycle is high. The boom alignment is easily adjusted at the hinge points.

Lock  
The wing sections have a mechanical self-lock with a hydraulic unlock.

Tri-directional breakaway  
The breakaways are tri-directional which means they can move back, forth and up.
TR4, B3 Major, B3 Maxi and B3 Mega for trailed sprayers

POMMIER - for farmers considering lighter, stronger and wider booms.
TR4, TR5, and B3 Mega for self-propelled sprayers

PRESIDIO 2700
with TR4 24 to 30

ALPHA Evo 4100
with TR5 32.5 to 42.5

SARITOR 5500
with TR5 32.5 to 42.5

SARITOR 5500
B3 Mega 48.5m
PendEze Centre  TR4 right

The smooth riding TR4 and B3 Major boom’s performance can be attributed to the POMMIER PendEze centre.

The PendEze has both pendulum and trapeze elements to permit free movement between the boom and chassis during spraying.

The pendulum isolates the pitch and roll movement from the boom while traversing uneven ground.

The trapeze element deals with inertia forces created when negotiating field obstacles and cornering.

A tie rod is used to level the boom or an optional hydraulic cylinder can be used for slant control.

The PendEze suspension is used with the TR4 24-30m and B3 Major 30 to 36m.

B3 Major PendEze centre

A combination of pendulum and trapeze centre ensures smooth boom performance while spraying and cornering.

Yaw-dampening

Yaw forces are dampened through nitrogen accumulated plunge cylinders in the end of the fold cylinders which absorb the energy from the boom during spraying and cornering.

Centering the boom

Two hydraulic cylinders are activated to centre the boom with the chassis ensuring the boom aligns correctly with the transport brackets when folding.

PendEze

A traditional trapeze suspension combined with a pendulum pivot can be adjusted to level the boom. Hydraulic activation option for slant control is also available.
AutoTerrain Centre
HARDI’s hybrid AutoTerrain centre meets the growing demand for bigger wider boom structures.
It delivers wide boom performance beyond the expectations of most operators’.
Combining the proven HARDI AutoTerrain boom height and stability control system with POMMIER’s patented yaw dampening puts this centre in a class of its own.
A pendulum centre using ultrasonic senses, hydraulic activate roll with built in coil spring dampening and advanced proportional hydraulics combine to position the boom through the centre frame as it traverses the field.
AutoTerrain simultaneously corrects the booms height and relationship to the ground contour by tilting the wings and angling the centre through the pendulum.
Yaw is dampening through the patented nitrogen accumulated plunge cylinders in the end of the fold cylinders absorbing the energy from the boom while spraying and cornering.
The AutoTerrain centre is used with the POMMIER boom’s TRS 36.5 to 42.5m (pictured), B3 Maxi 36.5 to 42.5m and B3 Mega 48.5.

Active roll
The booms position is corrected through the pendulum centre with this ultrasonic sensed and proportional hydraulic controlled active roll cylinder.

Nitrogen Accumulation
Yaw movement is arrested through nitrogen accumulators which absorb the energy from the boom when braking, acceleration and steering.

Yaw-dampening
POMMIER patented nitrogen accumulated plunge cylinder in the end of the fold cylinders absorbs the energy from the boom to arrest yaw movement.
Proportional hydraulics
Controls wing tilts, main lift and active roll simultaneously. A sensor monitors the oil temperature and adjusts the valve timing based on temperature and oil viscosity.

Ultrasonic height control sensor
Emit an ultrasonic signal to detect the booms height from the crop or ground. Sensors are protected by a foam pad and are temperature compensated for changes in sound speed.

Wing tilt
Managed by proportional hydraulics and dampened by nitrogen accumulators the tilt cylinders allow the boom to go above and below horizontal to better cope with undulating terrain.

Control
HC 9500 provides for a factory single screen control solution or an aftermarket option with the UC5 or Pulse screen.
**AutoTerrain**

Height matters

TR5, B3 Maxi and B3 Mega with AutoTerrain sets new standards in wide boom performance.

AutoTerrain maintains a lower boom height and provide better drift control than any other height control system.

AutoTerrain follows the ground like a magnet regardless of the terrain it travels across.

The pre-emptive stability and auto height control system deals with the cause of boom movement. It seamlessly monitors the roll through the centre and the height of the boom off the ground or crop.

When a change is detected AutoTerrain simultaneously corrects the boom’s position relative to the ground contour by angling it through the centre pendulum.

No need for boom wheels. No need to be constantly on the wing tilts.

**AutoTerrain lowers the boom height**

It allows the operator to spray safely, protecting the boom from ground strikes, and prevents incorrect spraying height, while increasing productivity through wide boom performance.

**AutoTerrain benefits**

- Better boom stability
- Constant and uniform boom height
- Lower boom height
- Better drift control
- Minimise risk of boom damage
- Reduced down time due to breakage
- Less dependence on operator control
- Cuts operator fatigue
- Greater productivity
- Less wear and tear

**Making ground strikes history!**

Roll and height sensors monitor the boom’s position relative to the sprayer and height off the ground.

The hydraulic active roll cylinder with built in coil spring damping senses the sprayer’s movement through the centre frame as it moves over the ground. AutoTerrain simultaneously corrects the boom’s height and relationship to the ground contour by tilting the wings and angling the centre through the pendulum.

**Ultrasonic Sensors**

Monitors the boom height 28 times per second and is only activated when the boom moves out of its ideal position. The roll sensor knows in advance that the boom’s position has changed.
Width Without Weight
POMMIER is a global leader in aluminium boom innovation, design and manufacture.
Their accumulated 30 years’ experience has defined the profiles, the size and wall thickness of the aluminium extrusions they own and use.
POMMIER profiles have an inherent low weight with high capacity to bear loads making their aluminium booms up to 50% lighter and 20% stronger in the field than their steel counterparts.
POMMIER aluminium booms offer significant longevity and maintenance advantages in terms of corrosion resistance, due to the surface oxidisation which protects the aluminium and needs no paint.

TR5 cross section
Five parallel running tubes define the TR5 boom structure.

TR5 boom tube
Smart design by increasing the internal surface area of the tube without increasing the outside diameter.

POMMIER extrusions
Their light weight and ease of fabrication eliminates many of the cost-intensive welding operations that could potentially weaken the material.

B3 Mega profile
Aluminium’s unique enduring properties guarantee long term performance and minimal maintenance. No need to paint.
T25 Boom Lines
T25 represents a 30% increase in capacity and provides for wider booms, higher application rates and high forward speeds.
T25 stands for 25mm boom lines.
New external sealing boom plumbing minimises pressure loss by eliminating inline restrictions.
Fittings are easily assembled and secured by hand.
20 new T25 plumbing fittings have been developed, providing for unrestricted flow connection to the boom.
New saddles enable boom tubes and feed tubes to be easily mounted and retained in position. Also provides for back to back mounting and are easily dismounted.
Boom lines and feed tubes are well protected within the boom profile.

Nozzles & Nozzle Filters
HARDI’s own nozzles and nozzle filters.

T25 Non Drip Valve
The non drip diaphragm is extracted with the spring assembly.

T25 Reduces Sedimentation
The slot in the spigot reduces in-line sedimentation traps.

T25 boom fluid system
New T25 boom lines provide for a 30% increase in capacity. Boom fittings seal on the outside of the tube with no internal flow restriction.
Boom sizes and availability

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* Special order

POMMIER aluminium boom advantages are ideally suited to the Australian market:

- Wider – covers more hectares in the same amount of time.
- Lighter – less inertia forces transfer to the centre.
- Stronger – use profiles & construction techniques learned over 30 years.
- Corrosion resistant – no need for paint.
- Aluminum is sustainable material, 100% recyclable.