DRA Group

31 Cutler Road

Jandakot, WA 6164

Phone 61-8-9417 2300

HummaCranes.com.au Rev 4

# HUMMA CRANES BY DRA ENGINEERING





Company Presentation



#### **Humma Cranes History**

- 1996 Specification prepared from industry consultation
  - First air-spring suspension
  - First fully powered booms
  - Longest powered boom 20.5M
  - First telescopic fly yielding 25.5M boom length
- 1997 18T (Humma RC18) Prototype manufactured and tested
- 2003 20T (Humma 2025) released
- 2008 25T (Humma 2525) released
- 2010 35T (Humma 3525) released
- 2013 Rigorous field testing with "taxi hire" industry
- 2017 55T release of the largest articulated Pick & Carry crane in the world.
  - First dynamic auto levelling suspension
  - First fully dynamic load charts for maximum SWL
  - Comprehensive digital control system including fully user accessible data logging and crane life information.

In the past twenty plus years DRA has committed many millions of dollars in research and development to a point where Humma are the industry leaders in innovation.





#### **Australian Made**

The Humma range of mobile cranes are the only 100% Australian made and privately owned range of articulated pick and carry cranes.

All fabrication and assembly is completed in our purpose built factory in Perth, Western Australia. Components are sourced through as many local companies as possible.

Humma Cranes are proud members of the Australian Made Campaign.











#### **Robotic Welding Technology**

Humma Cranes are fabricated with the use of a purpose built CLOOS Welding robotic cell.

The cell is one of the largest in Australia with the highest capacity manipulator allowing for large chassis and boom sections to be welded.

This ensures reliability and consistency of welding, and most importantly the highest quality welds.







#### **Australian Owned**

Humma Cranes are part of the DRA Group. DRA is a privately owned and managed business that was established in 1971. Over the last 48 years the group has expanded into a diverse range of industries.

Located in Perth, Western Australia, the DRA facility incorporates 3 main factories spread over 80,000 m<sup>2</sup>.

The DRA Group is comprised of the following divisions:

Humma Cranes Mobile crane manufacturing.

DRA Engineering Design and build engineering.

DRA Tank Fuel and chemical storage tanks

DRA On Site Services Site built tanks and fuel farm installations.

DRA Industries Abrasive blasting and protective coatings.

DRA Fire Services Self supressing fire systems.

DRA Australia Property development and management.





Humma Cranes are built for the highest levels of safety, capacity and comfort, while maintaining low running costs.

Airbag suspension systems are used in millions of commercial vehicles around the world. The benefits of these systems are substantial and is why it is incorporated into the Humma range.

- 1. Extremely smooth and comfortable ride.
- 2. Very low in cabin noise levels (65dbA) as the airbags isolate the crane from road noise.
- 3. Highly stable at all road speeds (tested to 105kmh).
- 4. No vibrations and shock loading transmitted through the chassis. Humma Cranes do not require articulation or boom pivot line boring at any regular interval.
- 5. Excellent off road ability.

The airbags are deflated and the suspension is locked for lifting duties.





The spacious full width cabin on the Humma Cranes are mounted by 4 rubber isolators to further enhance noise and vibration isolation.

#### Other Cabin features include:

- Oversized roof mounted AC designed for up to 45degC ambient operation.
- 2. Separate digital displays for engine controls and LMI.
- 3. Driver and passenger air seats fully adjustable.
- 4. Adjustable steering wheel.
- 5. Variable opening aluminium roof slider blind.
- 6. 4 full colour cameras. (2 x rear left and right, 1 x rear, 1 x winch)
- 7. Extremely quiet cabin with 3<sup>rd</sup> party sound level testing 64-80db(A)
- Digital individual levers for crane control (Humma 55T utilises joystick)
- 9. Cruise control.
- 10. Dual motor variable speed windscreen wipers.
- 11. Wide uninterrupted forward vision with luffing cylinders mounted behind the cabin.
- 12. On screen engine and transmission diagnostics.





The 3B6 LMI system has been customised to provide the operator with class leading technology.

#### Features include:

- 1. Dynamic load charts allowing calculation of SWL for each exact boom angle and length.
- 2. Dynamic de-rating on articulation. SWL calculated for every degree of articulation, not in zones like 0-10,10-42 etc.
- 3. Stationary lifting chart increases capacity by 12.5% when crane is stationary. Automatically applied when operator uses the front wheel holding brake.
- 4. Automatic side slope de-rating can be activated in the system if required.
- 5. Full data logging of overload and motion cut alarms.
- Unit can be recalibrated easily through the on screen interface.
- 7. Digital rope compensation. Allows the rope compensation function to be turned on or off as required.





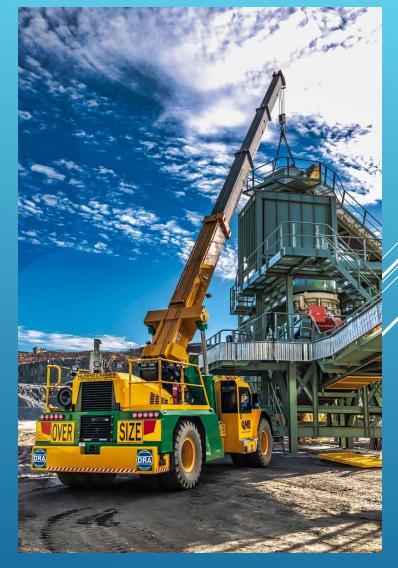
All Humma Cranes are fitted with a fully powered boom. The operator is able to extend his booms from minimum to maximum extension from within the cabin. Humma's have the longest boom in their class and can be extended up to 26M with use of the 5M telescopic fly jib.

The sliding hooks on the underside of boom 2 are able to be telescoped in and out which is invaluable when performing machinery movements or other low clearance lifting. The ability to keep the boom at a low angle provides the operator with high capacity through the full range of articulation.

A high capacity Brevini winch is utilised which is rated for the highest capacity on the outer layer. The winch has a grooved drum and in built tensioner to keep the rope tight.

The 3B6 boom length cable is run inside the boom assembly to keep it well protected from being caught when operating close to hazards like trees.





Humma Cranes are powered by only the best big name components.

Power is provided by Cummins ISC285 Automotive engines. These 285hp, 8.3L 6 cylinder engines have proven themselves to be highly efficient with fuel savings up to 25% over the competition. As standard they come fitted with a Jacobs exhaust brake which provides extra stopping power and reduces wear on brake components, increasing their service life.

An Allison 3000sp transmission provides the drive which is transferred through the ZF VG750 transfer case. This provides selectable 2WD/4WD operation as well as High/Low range. Hardy Spicer driveshafts and Kessler axles finish off the drivetrain.

A Chelsea PTO drives the 149cc Danfoss piston pump to provide hydraulic power to the Danfoss control valve and steering system. With all cooling provided by an Air Radiators cooling package.

Quality components for a quality crane.





#### **Humma UV25-25**

The Humma UV25-25 25T crane is the perfect crane for the operator who needs to be on the road all the time.

Under 12T per axle and at 2.5M wide allows the cranes to avoid running on IAP as required in some states.

No moveable counterweight allows the operator to carry an extra couple of tonnes of rigging gear on the front of the crane.

20.3M of boom with optional 5.5M flyjib allows up to an impressive 25.8M of boom length.

All the standard Humma advantages are also found in this one neat package.





#### **Humma UV35-25**

The Humma UV35-25 35T is the crane for company who wants the benefits of high lifting capacity, yet still functional enough to travel the open roads.

With the removable counterweight installed the Humma is a lifting power house with it's 5T line pull winch allowing 30T off the hook block. 20T capacity is available from the machinery hook and an enormous 35T from under the boom at the sliding hooks.

With the counterweight removed the Humma can travel the roads safely and comfortably easily achieving speeds up to 100 km/h\* (\*depending on your state regulations)

With the different operational modes and its high lifting capacity, the Humma UV35-25 is the most versatile crane

available today.





#### Humma 55-25

The Humma 55-25 55T is the latest in articulated crane design. Built to be used for lifting the highest capacities in the harshest conditions.

Designed for use on sites where there is a requirement for the highest levels of safety. The dynamic levelling suspension will adjust the crane so that it is always be level despite ground conditions. The system can level up to 5 degrees of side slope without any input from the operator.

A state of the art control system is utilised by the twin 12" full colour touch screens. Full logging capability, crane life monitoring and an advanced LMI system are all part of this package and accessible on screen.

User selectable hook blocks 50T or 38T, 30T Machinery Hook and 55T from the sliding hooks gives the operator a range of options.

The Humma 55-25 is the new standard in High Capacity P&C Cranes.







### **Crane Assembly Area**





#### **Crane Service and Rebuild Area**





### **Crane Fabrication**



















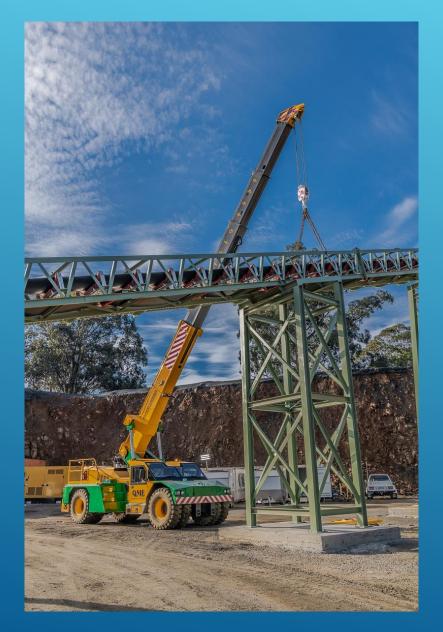


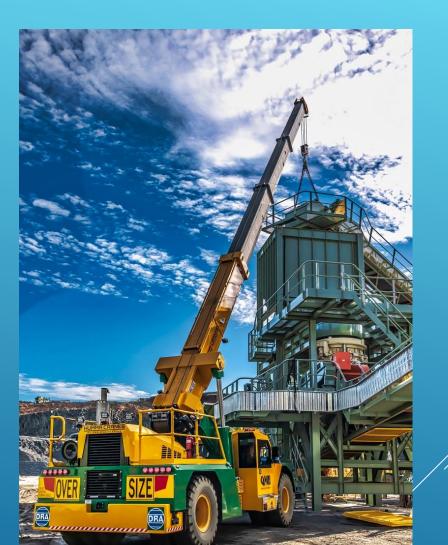








































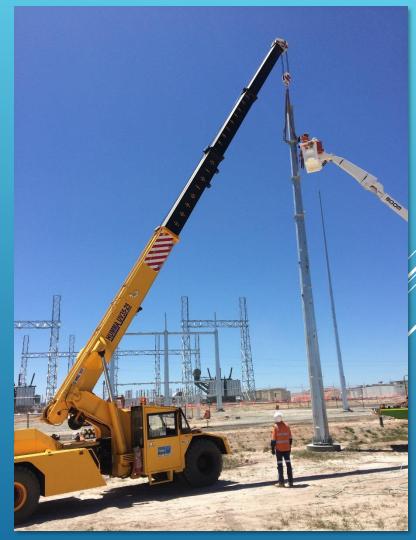
































Lifting water tank with Fly jib for maximum reach



Sliding hook for low boom height



Vehicle recovery





30T Demonstration Lift



22T Rail car lift



27T Wheel Loader



26T Machinery lift

Offset Telescopic Fly Jib to 26M Boom Length



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**Thankyou**