

HEAVY EQUIPMENT

# PNEUMATIC ROLLERS

PNEUMATIC ROLLER SERIES



**Equipment Ltd**

01789 414525 | [sales@aandygroup.com](mailto:sales@aandygroup.com) | [www.aandygroup.com](http://www.aandygroup.com)

**AMMANN**

# READY FOR ANY JOBSITE

## TYRE PRESSURES, WEIGHTS EASILY ADJUSTED.

Ammann Pneumatic Tyred Rollers excel in multiple applications and on varied materials. Their kneading effect compacts stubborn materials and seals surfaces, too. Easy ballasting allows the machines to be adjusted to the ideal weight for particular jobsites, while tyre pressures can be adjusted from the comfort of the cab. Operators of all experience levels are productive because of the rollers' easy-to-operate, intuitive controls. Excellent visibility helps operators avoid obstructions while delivering compaction to surface edges to provide uniform bearing capacity.

### INTRODUCTION

- High productivity and efficiency (mechanical drive)
- Excellent visibility
- Very easy to operate
- Exceptional operator comfort

**"Operators of all experience levels are productive because of the intuitive controls."**

## PROPULSION

No matter what challenges future jobsites may bring, Ammann Pneumatic Tyred Rollers are built to overcome them. Hydronic and hydrostatic versions help the machines match the applications.



HYDRODYNAMIC VERSION



HYDROSTATIC VERSION

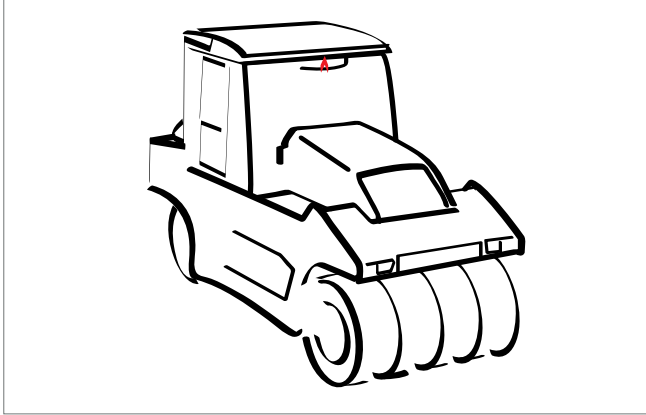


**“Tyre widths and arrangements combine with ballasting options to make these rollers stand out.”**



# YOUR BENEFITS

DESIGNED FOR COMFORT AND PRODUCTIVITY



## DESIGN

Comfort is built into the cabs of Ammann Pneumatic Tyred Roller to improve operator productivity and reduce fatigue. The spacious cabs feature an abundance of glass to optimise visibility to the front, sides and rear. Wide opening of side windows... Control switches are located on the dashboard for convenience and a multifunctional display provides essential engine operating information. Sound levels are low.

## CONVENIENCE

Controls are intuitively located, helping keep operators safe and productive. Tyre pressures can be adjusted from inside the cab through the air-on-run system. All service points can be accessed from the platform. Filling and draining ports for service fluids are centralised for fast exchange. Engine and coolers compartment is accessible under the bonnet.



## FRONT AXLE ISOSTACY AND OSCILLATION

The rigid-framed roller features 4 smooth tyres on each axle. The front, steerable oscillating axle features 2 pairs of wheels that provide the desired kneading effect. The front axle also is isostatic, absorbing bumps and obstacles to enable compaction of uneven surfaces. The rear axle drives the machine. All tyres are strategically arranged to provide thorough coverage.

## ENGINE TYPES

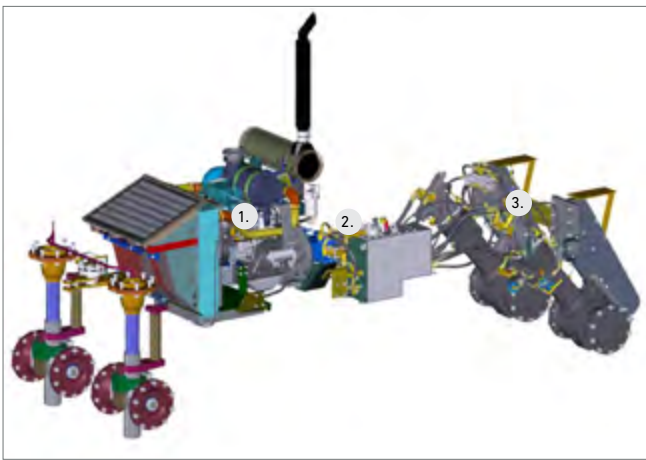
Some Ammann Pneumatic Tyred Roller models feature Tier 4 Final engines for highly regulated countries. Models that meet guidelines in lesser-regulated countries also are available.

## WIDE RANGE OF OPTIONS

Easy-to-add thermal aprons transform a machine from a soil roller to an asphalt compactor. Ammann Traction Control (ATC) helps the roller remain productive in difficult underfoot conditions or steep terrain. Air conditioning, warning beacons, emulsion spray unit and a variety of other options also are available.

## HYDROSTATIC VERSION

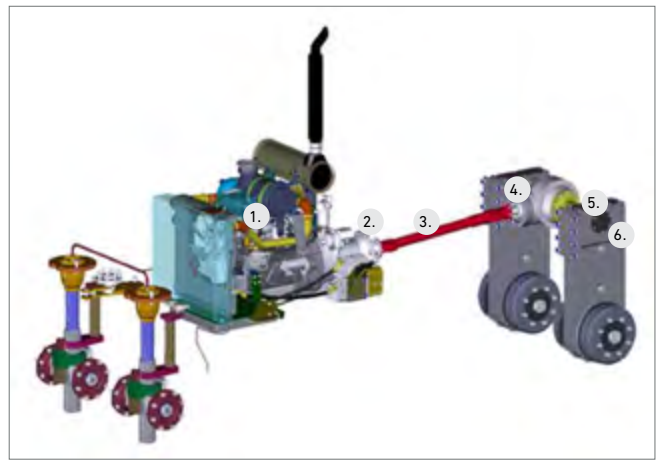
Hydrostatic propulsion systems are the best fit on jobsites where extra traction and propulsion are required. These rollers use pump hydro-motors that control propulsion energy. Traction force can be adjusted electronically, which leads to fuel efficiency. The hydrostatic models enable particularly smooth starts and stops.



- 1. ENGINE
- 2. PUMP
- 3. HYDRO MOTOR

## HYDRODYNAMIC VERSION

Many Ammann rollers feature hydrodynamic propulsion, a method that creates drive energy mechanically. These systems are mechanically straightforward and enable easy maintenance and long life of core components.



- 1. ENGINE
- 2. GEARBOX
- 3. DRIVE SHAFT

- 4. DIFFERENTIAL
- 5. HALF SHAFTS
- 6. REAR AXLE



- 1. BALLAST UP TO 6t.

## EASY BALLASTING

Ballast can be added or removed to ensure the proper static weight. Space for ballast materials is built into the frame as well as from underneath of the machine, making the adjustment convenient and consistent. Ballast materials include concrete and steel.



# BUILT FOR VERSATILITY

## ROLLERS PRODUCTIVE IN VARIED APPLICATIONS

Easy ballast additions and reductions make Ammann Pneumatic Tyred Rollers the optimal weight on varied jobsites. Tyre pressures can be adjusted from the cab to ensure proper pressures in diverse materials.

### RANGES

- Asphalt mixtures up to 120 mm (after compaction)
- Hydraulically consolidated mixtures up to 150 mm
- Loam and clay soils up to 150 mm
- Mixed soils up to 200 mm
- Sand and gravel materials up to 250 mm

### APPLICATIONS

- Medium and large compaction jobsites
- Transportation-related construction – municipal and town roads, motorways, airfields
- Building construction – housing, commercial, industrial



# APPLICATION



## TOP LAYERS

- **Wearing course:** 15–60 mm (0.59–2.36 in)
- **Binder layer:** 40–100 mm (1.57–3.94 in)
- **Asphalt base layer:** 80–150 mm (3.15–5.91 in)

### PRODUCT APPLICATION (recomm. 9-16t)

Recommended weight below 16 ton.

Excellent for first passes – static pre-compaction

Final passes on base and binder - sealing effect.

## SUB-BASES

- **Gravel mixtures:** Recommended maximum lift thickness of 250 mm (9.84 in)
- **Sub-base course:**
  - Hydraulic, consolidated mixtures up to 150 mm (5.91 in)
  - Stabilized soils up to 400 mm (15.75 in)
  - Loam and clay soils up to 150 mm (5.91 in)
  - Mixed soils up to 200 mm (7.87 in)
  - Sand and gravel materials up to 250 mm (9.84 in)
- **Sub-grade:** not recommended

### PRODUCT APPLICATION (recomm. 20-24t)

Recommended weight over 20 ton.

Great compaction effect on stabilized soils.

Very good results on industrial mixtures

One of the required rollers in cold recycling technology



# OPERATOR COMFORT AND CONTROLS

## ABUNDANT SPACE, EASY HANDLING

Operators appreciate comfort, but the business owner benefits, too. Comfort reduces fatigue and helps keep operators focused throughout their shifts. That leads to improved safety and productivity. Convenient controls help operators leverage all the compaction power built into the machine.



### WORK STATIONS

Ammann Pneumatic Tyred Rollers feature 2 working stations, depending on the specific model utilised.

Common to both station configurations is exceptional visibility, important on all jobsites but particularly when working in tight quarters or against obstacles such as curbs.

### AMPLE SPACE

An abundance of space gives operators room for movement and comfort. The space permits the use of more glass to improve visibility and also provides ample room for 2 working stations or a sliding seat, depending on the specific model.



### INTUITIVE CONTROLS

The controls inside the cab are conveniently located and always within the operator's reach. The controls are intuitive, too, helping operators of all experience levels work productively. Operators can adjust tyre pressures from inside the cab through the air-on-run system.

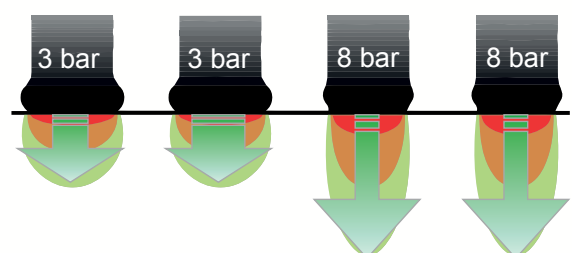
### EASY HANDLING

Operators accelerate and decelerate via pedals like those in passenger vehicles. A multifunctional display is prominent and enables easy monitoring of key engine functions.

### COMPACTION METHOD

Static weight effect of roller

- Pressure effect of tyres
- Increasing of bearing capacity positioned.  
The steering column tilts and is easily adjusted.







## QUALITY CABS

Ammann cabs are designed to reduce noise and limit vibration to the operator, both key fatigue-fighting factors. The cabs also feature optimal visibility out the front, rear and sides.

### HYDRODYNAMIC ROLLER

Hydrodynamic Ammann Pneumatic Tyred Rollers feature 2 identical working stations. Operators simply move to the seat that maximises their visibility. Dashboard controls are easy to access from either seat. A power shift gearbox with easy control enables smooth transitions. Acceleration or deceleration is accomplished through customer-friendly pedals similar to those used on passenger vehicles.

### HYDROSTATIC ROLLER

A rotating and sliding seat helps the operator achieve optimal views to all sides of the rollers. Control switches are placed on the dashboard in front of the operator and are easily reached no matter where the seat is positioned. The steering column tilts and is easily adjusted.



## MACHINE SERVICEABILITY

- Access to all service points from platform
- Filling and draining points for service fluids are centralized for easy and fast fluid exchange
- Easy access to all major filtration elements (Engine oil filter, fuel filter, air filter, etc.)
- Accessible and easy cleanable cooler

## TYRE GROUND PRESSURE

- High tyre pressure - high ground pressure, higher depth effect, pushes material down and out
- Low tyre pressure - low ground pressure, bigger contact area, better for flattering
- Wheel overlap manipulates mat under and between tyres
- Regulation of air pressure via Air By run system
- Air-On-Run is central inflation system for tyres
- Operator can easily adjust tyre pressure to match the jobsite

# OPTIONS

## CUSTOMISE YOUR ROLLER



### BALLASTING

The “easy load” system, with 4 ballasting boxes in a rack beneath the frame, enables simple and safe adjustment of the machine’s weight. The roller can work at the custom weight that is most desirable for the particular application and conditions.



### THERMAL APRONS

These options are easily added when working with asphalt. The thermal makeup of the aprons provides substantial heat retention and helps the tired rollers eliminate asphalt pickup and provide the desired sealing effect when working in paving applications.



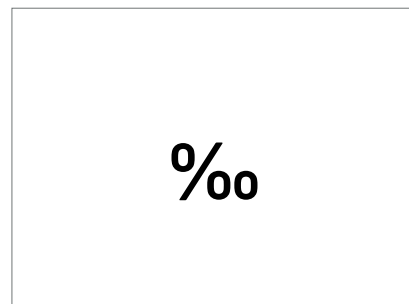
### EDGE CUTTER

Adding an edge cutter to the roller when working in asphalt applications can eliminate the need for an additional machine to enter the compaction process.



### WARNING BEACON

The addition of a warning beacon provides an extra measure of safety, ensuring the roller is spotted by other operators at night and on larger jobsites.



### AMMANN TRACTION CONTROL

Ammann Traction Control (ATC) helps the rollers remain productive in difficult underfoot conditions or steep terrain.

### OTHER OPTIONS

Extra features such as air conditioning, a radio with CD player, Ammann toolkit, thermometer, radial tyres, backup alarm and telematics also are available..

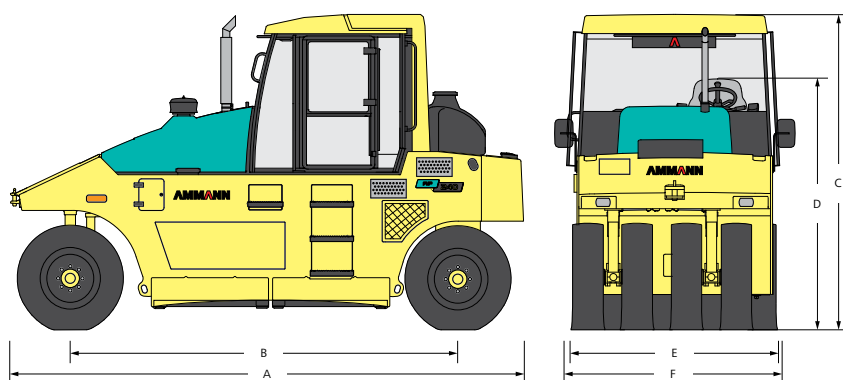


# DIMENSIONS

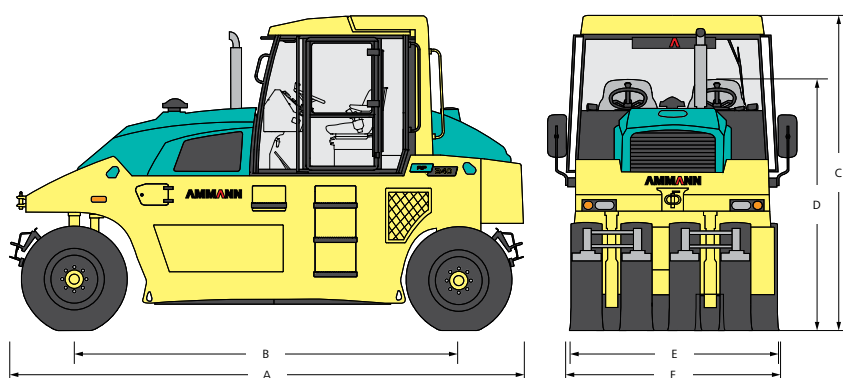
## PNEUMATIC TYRED ROLLERS

### DIMENSIONS

	AP 240 – Tier 2	AP 240 – Tier 3	AP 240 – Tier 4i	AP 240 H – Tier 3	ART 240 – Tier 4f
A MACHINE LENGTH	4775 mm (188 in)	5020 mm (197.7 in)	5030 mm (198.1 in)	5040 mm (198.5 in)	5030 mm (198.1 in)
A MACHINE LENGTH (THERMAL APRONS)	–	5780 mm (227.6 in)	5780 mm (227.6 in)	5630 mm (221.7 in)	5780 mm (227.6 in)
B WHEELBASE	3500 mm (137.8 in)	3800 mm (149.7 in)	3780 mm (148.9 in)	3800 mm (149.7 in)	3780 mm (148.9 in)
C MACHINE HEIGHT	3110 mm (122.5 in)	3110 mm (122.5 in)	3130 mm (123.3 in)	3130 mm (123.3 in)	3130 mm (123.3 in)
D MACHINE HEIGHT (REMOVED ROPS)	2540 mm (100 in)	2450 mm (96.5 in)	2380 mm (93.8 in)	2430 mm (95.7 in)	2380 mm (93.8 in)
E WORKING WIDTH	1986 mm (78.2 in)	1986 mm (78.2 in)	1986 mm (78.2 in)	2040 mm (80.4 in)	1986 mm (78.2 in)
F MACHINE WIDTH	2110 mm (83.1 in)	2100 mm (82.7 in)	2100 mm (82.7 in)	2100 mm (82.7 in)	2100 mm (82.7 in)
F MACHINE WIDTH (THERMAL APRONS)	–	2310 mm (91 in)	2310 mm (91 in)	2310 mm (91 in)	2310 mm (91 in)
H GROUND CLEARANCE	–	–	280 mm (11 in)	–	280 mm (11 in)



AP 240 H – Tier 3



AP 240 – Tier 4i

# SPECIFICATIONS

## PNEUMATIC TYRED ROLLERS

### MACHINES

	AP 240 Tier 2	AP 240 Tier 3	AP 240 Tier 4i	AP 240 H Tier 3	ART 240 Tier 4f
--	---------------	---------------	----------------	-----------------	-----------------

### MISCELLANEOUS

BRAKES OPERATING	Drum	Drum	Drum	Hydrostatic	Drum
BRAKES PARKING	Mechanical disc	Mechanical disc	Mechanical disc	Mechanical multiple-disc	Mechanical disc
BRAKES EMERGENCY	Mechanical disc	Mechanical disc	Mechanical disc	Mechanical multiple-disc	Mechanical disc
TYPE OF DRIVE	Hydrodynamic	Hydrodynamic	Hydrodynamic	Hydrostatic	Hydrodynamic
NUMBER OF DRIVEN WHEELS	4	4	4	4	4
OSCILLATION ANGLE	3°	3°	3°	3°	3°
ANGLE OF STEERING	32°	32°	32°	32°	32°
TYPE OF WATERING	Pressure	Pressure	Pressure	Pressure	Pressure
FUEL TANK CAPACITY	250 l (66 gal)	250 l (66 gal)	250 l (66 gal)	250 l (66 gal)	250 l (66 gal)
WATER FOR TYRE WATERING	285 l (75.3 gal)	460 l (121.5 gal)	390 l (103 gal)	460 l (121.5 gal)	390 l (103 gal)
VOLTAGE	12 V	12 V	24 V	12 V	24 V

### ENGINE

MANUFACTURER	Cummins BT4.5-C99	Cummins QSB3.3-C99	Deutz TCD3.6 L4	Cummins QSB3.3-C99	Deutz TCD3.6
POWER ACCORDING TO ISO 3046-1	74 kW (99 HP)	74 kW (99 HP)	74 kW (99 HP)	74 kW (99 HP)	74,4 kW/2000RPM
MAXIMUM TORQUE	414(305)/1500 Nm (ft lb)/rpm	412(304)/1400 Nm (ft lb)/rpm	414(305)/1600 Nm (ft lb)/rpm	412(304)/1400 Nm (ft lb)/rpm	410Nm /1600RPM
ENGINE COMPLIES WITH EMISSION REGULATIONS	EU Stage II, U.S. EPA Tier 2	EU Stage IIIA, U.S. EPA Tier 3	EU Stage IIIB, U.S. EPA Tier 4 Interim	EU Stage IIIA, U.S. EPA Tier 3	EU Stage IV, U.S. EPA Tier 4f
NUMBER OF CYLINDERS	4	4	4	4	4
COOLING SYSTEM OF ENGINE	Liquid	Liquid	Liquid	Liquid	Liquid

### WEIGHT & DRIVING CHARACTERISTICS

OPERATING WEIGHT	9340 kg (20 590 lb)	9590 kg (21 140 lb)	9700 kg (21 380 lb)	9630 kg (21 230 lb)	9700 kg (21380 lb)
MAXIMUM WEIGHT	24 000 kg (52 910 lb)	24 000 kg (52 910 lb)	24 000 kg (52 910 lb)	24 000 kg (52 910 lb)	24000kg (52910 lb)
MAX. TRANSPORT SPEED	19 km/h (11.8 MPH)	19 km/h (11.8 MPH)	19 km/h (11.8 MPH)	19 km/h (11.8 MPH)	19 km/h (11.8 MPH)
CLIMBING ABILITY	25 %	25 %	25 %	25 %	25 %
TURNING RADIUS INNER (EDGE) LEFT	4670 mm (183.9 in)	6180 mm (243.3 in)	6200 mm (244.1 in)	6180 mm (243.3 in)	6200 mm (244,1 in)
NUMBER OF FRONT WHEELS	4	4	4	4	4
NUMBER OF REAR WHEELS	4	4	4	4	4
SIZE OF TYRES	11.00x20''	11,00x20''	11,00x20''	11.00x20''	11,00x20''