Parker
PLANT LIMITED



Asphalt Plants

Quality Engineered
Excellence Since 1911

Quality Engineered Excellence

Since 1911

Parker PLANT LIMITED

Since its beginnings in 1911 under a railway arch in Leicester UK, Parker has pioneered engineering innovation leading to a worldwide reputation for product excellence.

Success in global sales has been recognised by winning the prestigious Queen's Award to Industry on no less than three separate occasions. This achievement recognised Parker's position as one of the foremost exporters of reliable and dependable solutions for crushing, screening, asphalt and concrete applications throughout the world.

The addition of Phoenix Transworld's extensive portfolio of highly reliable and quality engineered asphalt plants has significantly enhanced the comprehensive Parker range, offering a choice of configurations with output capacity ranging from 4 to 400 tonnes per hour, and strengthens Parker Plant's standing as a leading name in the market.





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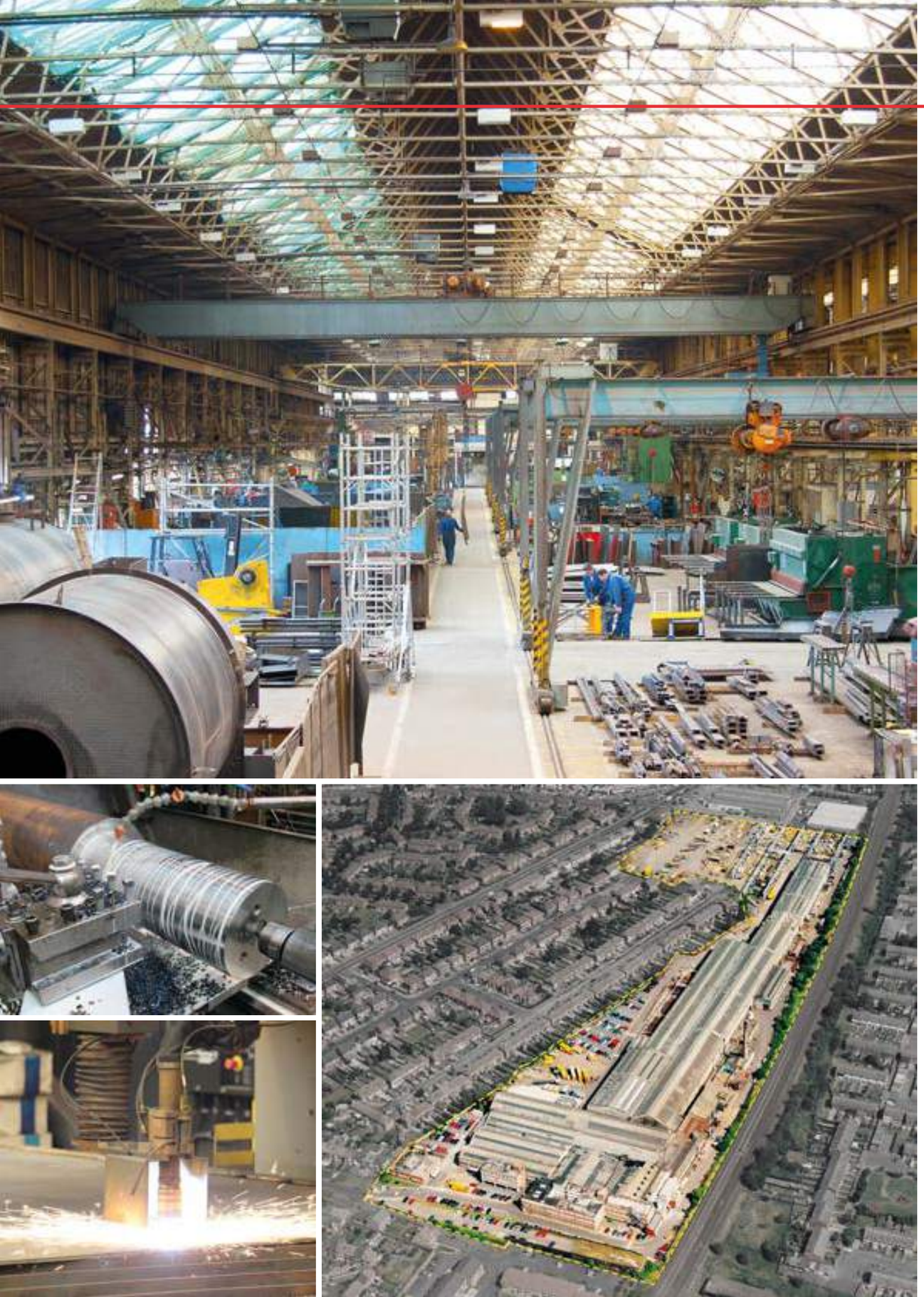


Manufacturing & Assembly

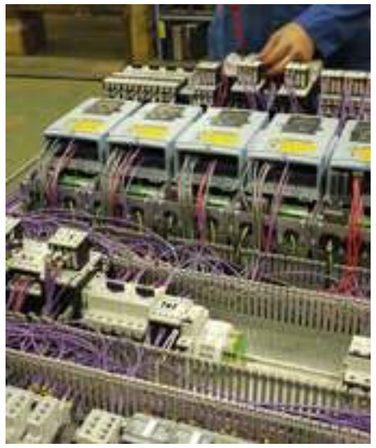
Parker Plant has been operating from the same 18 acre site in Leicester since 1925 and is able to draw upon its extensive facilities, plant & equipment and highly skilled workforce to enable the fabrication, machining and assembly of its full product range.

In addition to this comprehensive machining and fabrication capability, Parker Plant designs and builds all of its own electrical systems. The factory also incorporates heated and filtered paint spray booths and extensive fitting bays where manufactured equipment undergoes full inspection, final testing and packing prior to delivery to the client. Internal management procedures ensure quality control is monitored and maintained throughout all aspects of the manufacturing process, resulting in a reliable and quality product.











Spotmix 600		
Capacity (tph)	Mixer (Kg)	Dryer (m)
18	270	1.1 x 3.7





RoadStar Mini / SpotMix

Mobile Batch Patching Plant

The RoadStar Mini and Spotmix are mobile batch plants which are ideal for road maintenance, patching jobs and small paving contracts. Both units come complete with integrated bitumen decanting systems and have been designed for rapid setup.

Small, compact and easy to set up the RoadStar Mini and Spotmix provide a unique solution to patching jobs and small paving projects. On setup the support legs are lowered to provide stability and the towing arm dropped and removed. The RoadStar Mini is hydraulically driven via a diesel engine and the Spotmix is electronically driven by generator mounted on the unit.

Aggregate is loaded into the feed hopper via hand shovel to the required specification and level. The RoadStar Mini feed hopper is hydraulically pivoted to transfer the aggregate into the dryer prior to mixing whereas the Spotmix is fed by conveyor. Bitumen is decanted from barrels and heated to the process temperature and pumped to a weigh vessel before discharge into the mixer.



RoadStar Mini	
Output Capacities (tph)	
Cold Mix @ 65˚C	7 - 9
Hot Mix @ 110˚C	5 - 7
Hot Mix @ 150˚C	4 - 5





Super-Roadmix Series

Mobile Batch Plant

The original and successful Parker Super-Roadmix series has now been updated having undergone a re-design with many new features. With a new model added to the range, the Super-Roadmix offers three sizes producing 30, 60 and 90 tonnes/h.

Compact and highly mobile, the Super-Roadmix can be supplied on a single chassis incorporating a twin compartment feed hopper, dryer, fully automatic burner, hot stone elevator, inclined vibrating screen, load-cell weighing system, twin-shaft paddle mixer, primary dust cyclones and PLC controls mounted on the chassis to provide a one-piece asphalt plant.

For greater flexibility of operation and environmental benefits, the Super-Roadmix series can be expanded to include separate mobile three or four bin cold feed units, bag filter and air-conditioned control house to accompany the mixing and screening section.











Super Roadmix Range			
Model	Capacity (tph)	Mixer (Kg)	Dryer (m)
SRM30	30	400	1.2
SRM60	60	800	1.4
SRM90	90	1200	1.6





RoadStar 2-Unit Range			
Model	Capacity (tph)	Mixer (Kg)	Dryer (m)
RS500	40	500	1.3
RS1000	80	1000	1.5



RoadStar 500 / 1000

Mobile Batch Plant

The mobile RoadStar 500 / 1000 is unique in its design with all equipment mounted on two chassis i.e. dryer/burner and four bin feed unit mounted on one chassis with screening and mixing tower, hot stone elevator, control house and bag filter mounted on the other chassis.

The RoadStar 500 / 1000 units come pre-wired to the control house and the plant is fully tested prior to leaving the factory, thus rendering a rapid installation time of 1-2 days with minimal site foundations and craneage required. The RoadStar is perfect for asphalt projects that require high mobility, environmental compliance and quality assurance of the final mix.

The RoadStar 500 / 1000 is considered to be the most mobile batch production asphalt plant of its size on the market today and provides the contractor with an asphalt plant that requires minimal foundations, craneage and substantially reduced dismantling and reinstallation costs.









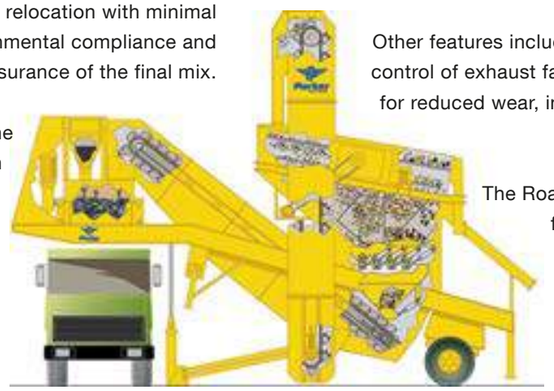
RoadStar 1500 / 2000 / 3000

Mobile Batch Plant

The Parker RoadStar series of mobile asphalt plants supersedes the extremely successful Parker BlackMobile series launched in 1969 and is considered worldwide to be the most mobile batch production asphalt plant on the market today.

The BlackMobile / RoadStar series was designed to satisfy the needs of contractors demanding high mobility, rapid installation and subsequent relocation with minimal foundations and craneage, environmental compliance and quality assurance of the final mix.

Over many decades the BlackMobile gained the reputation as the only fully mobile asphalt plant available in the market. Its unique design with all units towable, resulted in over 1,000 BlackMobiles being sold and gained it the reputation of being a true contractor's plant.



All mobile units are pre-wired with plug and socket connections and are fully tested prior to despatch.

Other features include direct drives, inverter control of exhaust fan, nylon trunnion rollers for reduced wear, insulated dryer drum and multi-fuel burners.

The RoadStar series is favoured for both commercial and military airports due in part to its speed of installation, reliability and ease of operation.













RoadStar 3-Unit Range

Model	Capacity (tph)	Mixer (Kg)	Dryer (m)
RS1500	120	1500	1.8
RS2000	160	2000	2.2
RS3000	240	3000	2.5

Containerised Series

Modular Batch Plant

The containerised series has been designed to fit into standard shipping containers to provide low cost transportation by road, rail or sea to remote locations.

Designed to be modular and compact the series offers three sizes producing 40, 60 and 80 tonnes per hour.

Their modular format enables rapid installation on site and subsequent dismantling. The plant is designed to be free standing thus reducing the need for costly foundations and is ideal for remote low volume markets.

This compact modular batch plant incorporates many of the features found on larger capacity asphalt plants within the range.

On completion of a contract the plant can be reloaded into its containers for security to await transport to the next location.

Containerised Range			
Model	Capacity (tph)	Mixer (Kg)	Dryer (m)
C500	40	500	1.3
C750	60	750	1.4
C1000	80	1000	1.5













TransMix Series

Modular Batch Plant

The TransMix series was originally designed for rail transportation to reduce frieght costs when large overland distances are involved while still providing a high specification asphalt plant.

This modular asphalt plant has been primarily designed for export markets that require high output asphalt plants with ease of transportation. The low-level TransMix has been designed to be free standing to alleviate the need for costly foundations and rapid installation can be achieved with its modular design. The high-level configuration incorporates mixed material storage modules below the mixer to provide storage prior to truck loading, thus providing greater flexibility.











Transmix Range			
Model	Capacity (tph)	Mixer (Kg)	Dryer (m)
TM1500	120	1750	1.8
TM2000	160	2000	2.2
TM2300	180	2250	2.2
TM3000	240	3300	2.5
TM3400	320	4400	2.8







StarBatch Range			
Model	Capacity (tph)	Mixer (Kg)	Dryer (m)
SB1000	80	1250	1.5
SB1500	120	1750	1.8
SB2000	160	2250	2.2
SB2500	200	2750	2.5





StarBatch Series

Modular Batch Plant

The Modular concept of the StarBatch is designed to offer a plant that is easy to transport and install, comprising modular sections which are pre-wired and factory tested prior to dispatch.

The StarBatch series is available with 4, 5 or 6 hot stone bins for increased material gradation options and in low level or high level arrangements.

The low-level StarBatch can be configured to be free standing and can be supplied with independent inclined mixed material storage which once again is modularised for ease of installation.

The high-level StarBatch incorporates an integral mixed material storage system which can be fed directly from the mixer.

Both low and high-level StarBatch plants can be fully sheeted to meet environmental, operational or planning considerations as required with internal walkways throughout the mixing and screening tower.









StarMix Series

Stationary Batch Plant

Modular in concept, the StarMix meets all the criteria necessary for those considering a substantial investment in high volume asphalt production. The Parker StarMix range of stationary low-level and high-level batch production asphalt plants is available in open and fully sheeted enclosed models.

Designed in the 1960's the StarMix range has been upgraded and refined over many decades to meet today's environmental requirements, quality assurance of the final mix and to comply with current health and safety standards.

The StarMix is available in conventional low-level configuration with inclined skip or drag slat fed hot storage systems. The high-level option has been designed with load cell mounted mixed material storage silos situated below the mixer and a horizontal travelling skip which conveys the mixed material to the selected storage silo. Both low and high-level StarMix plants can have the access walkways encapsulated in a pre-sheeted mixing tower to improve visual appearance, noise attenuation, heat retention and serviceability. When sheeted, the remaining high-level StarMix support structure and mixed material storage is also encapsulated.















StarMix Range			
Model	Capacity (tph)	Mixer (Kg)	Dryer (m)
SM2000	160	2250	2.2
SM3000	240	3250	2.5
SM4000	320	4250	2.8
SM5000	400	5250	3.1

The StarMix range incorporates as standard 4, 5 or 6 hot stone storage compartments above the mixer which can be increased to 13 by installing a modular diverter section beneath the screen.

To further enhance all StarMix models, the hot stone bins and screen housing are insulated with high density mineral wool to aid heat retention.

The efficient performance of the StarMix range with its many leading edge features ensures high volume production, quality assurance of the final mix and compliance with environmental regulations. Fully sheeted, colour coordinated designs can be put forward with a view to minimising and overcoming planning issues.

This top of the range asphalt plant is a market leading design featuring the latest control systems with full online diagnostic capabilities. Low-level and high-level asphalt recycling feed systems (RAP) complement the StarMix range with capacities of up to 30% RAP content.











Mixed Material Storage

Parker's range of mobile and stationary inclined track skip storage systems offer capacities from 25 to 320 tonnes.

The Parker mobile mixed material storage system is specifically designed to provide rapid installation with minimal foundations. The single road towable unit incorporates the insulated storage hopper, skip track, distribution skip and drive winch on one chassis for ease of transportation, ideal for contractors requiring an easily re-locatable mixed material storage solution.

The stationary mixed material storage systems are designed in modular format to provide rapid installation on site with up to four storage hoppers. The storage hoppers are fully insulated with high density mineral wool and externally sheeted to further minimise heat loss. Load cell mounted options are available for truck loading via the plant control system.







Satellite Mixed Material Storage

Road construction and repair projects are being increasingly hampered by inner city traffic congestion causing delays in transporting material to site. Parker's innovative solution provides rapid inner city access to on demand asphalt.

The system stores mixed material produced by asphalt plants typically located outside the city conurbation, which is delivered to the facility in the early morning or late at night to avoid daytime congestion. The facility stores the "pre-mixed" material at the correct temperature, providing local inner city councils and contractors instant on-demand access to ready-made asphalt.

The modular storage system features an independent truck fed ground hopper. The system has been designed with regard to thermal efficiency throughout and is available in capacities to meet the customer's requirements. The silos and associated equipment are integrated within a fully sheeted structure, further improving thermal and operational efficiency.









High Efficiency Bitumen Tanks

The Parker range of high efficiency bitumen storage tanks is designed to increase thermal efficiency and subsequently reduce operational costs.

All high efficiency vertical bitumen storage tanks feature an industry leading 300mm of high-density, mineral wool insulation applied in three 100mm layers with staggered joints encased in a thermal foil wrap prior to cladding.

The bitumen tanks can either be covered in a galvanised or plastic coated sheeting to further enhance the thermal qualities.

The bitumen storage tanks have been designed to meet Refined Bitumen Association guidelines whereby the tank is rated by reference to its safe working capacity rather than by reference to its nominal capacity.

The tanks are available with electric or thermal oil heating, traffic light indicator with audible alarm for safe filling operation and optional agitators for PMB storage.





















Control Systems

Parker control systems have been developed in both touchscreen and PC models.

The standard control system comprises a robust touchscreen terminal with an easy to use large daylight readable display. The operator can select from multiple languages, unlimited mix recipes and view an animated plant mimic for live information status.

For asphalt plant installations that require greater reporting and online diagnostics a full PC based system is available featuring:

- Enhanced data logging of production and materials
- Alan Bradley hardware
- Industrial grade fanless PC
- Twin high definition wide screen displays that allow multiple functions to be viewed concurrently
- Software specifically designed in house with multiple options
- Online monitoring and full diagnostic support

A full range of mobile, split level and stationary control houses and motor control centres are available.





E3 RAP-Star Series

Counterflow Drum-mixers

The CMI E3 RAP-STAR range of portable and stationary counterflow drum-mixers, with capacities from 200 to 600 tons per hour, combines high productivity and high RAP capabilities due to its unique early entry RAP design.

The E3 RAP-STAR design features three heat transfer zones: convective, radiant and conductive.

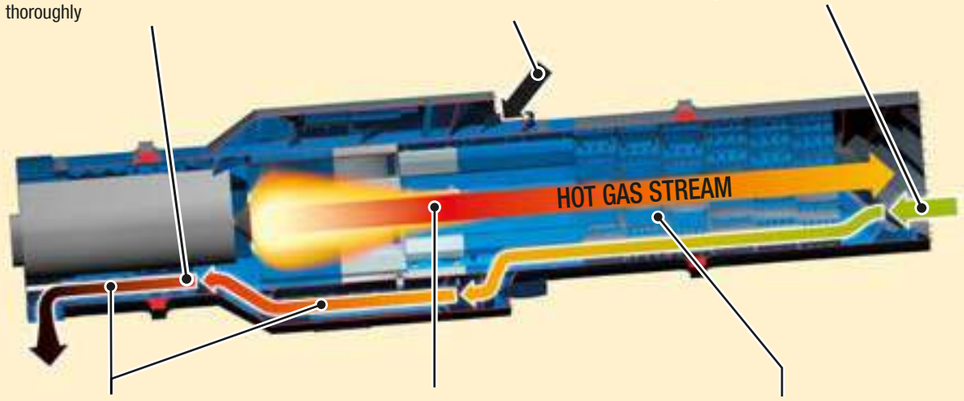
The convective zone is fitted with CMI's saw tooth flights and lifters which are made from high strength abrasion resistant steel and produce an aggregate veil tuned for optimum drying and heating of the virgin aggregate.

The radiant zone is located around the burner combustion area where stainless steel aperture plates and lifters transfer heat to the outer RAP shell at approximately 700°F.

The conductive zone which incorporates the early entry RAP outer shell and final mixing section provides the third form of heat transfer.

As the heated virgin aggregate leaves the convective zone, portals in the inner shell allow a proportion of the virgin aggregate to enter the outer shell where the blending and heating of the RAP begins. The remainder of the virgin aggregate continues its passage through the inner shell via special stainless steel lifters in the combustion area which allows the aggregate to be super-heated prior to entry into the final mixing section and protects the burner flame from the aggregate in transit.





ASPHALT CEMENT & FINE DUST
Asphalt cement (bitumen) and fine dust are introduced and all constituents are mixed thoroughly

RAP ENTRY
RAP and hot coarse dust are introduced into the outer shell

VIRGIN AGGREGATE ENTRY
Cold, wet virgin aggregate enters the drying zone

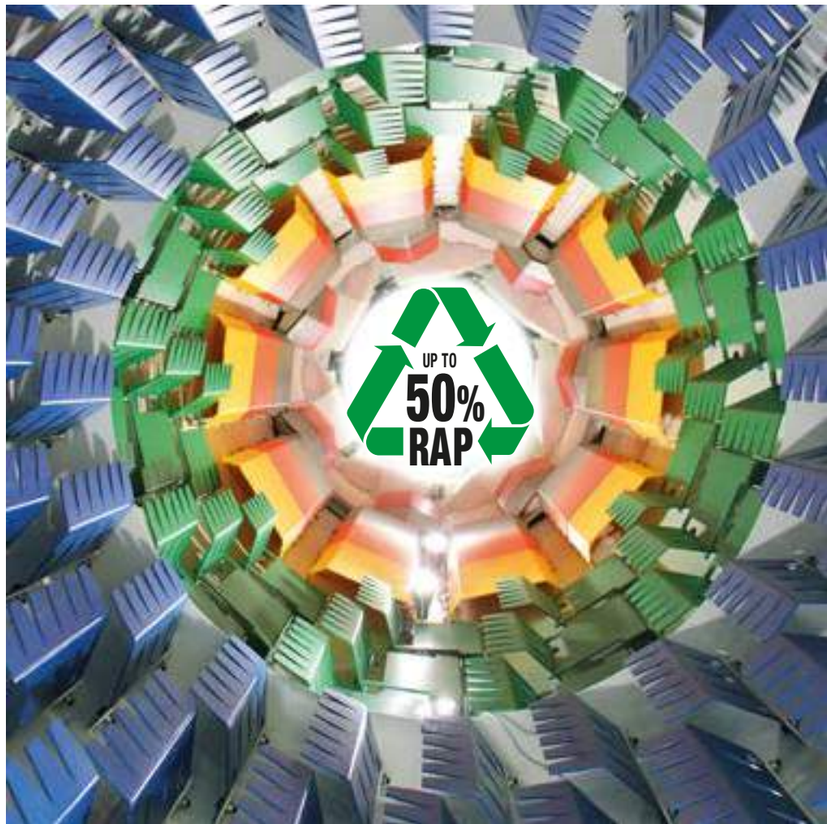
MIXING & BLENDING
E3 RAP-Stars have the industry's longest material blending zone, where RAP and virgin aggregates mix together

EMISSION CONTROL
Unburned hydrocarbons from the mixing zone are drawn into the exhaust gas stream and incinerated

HEAT TRANSFER
The E3 RAP-Star design features three heat transfer methods: convective, radiant and conductive











E3 Series Specification				
Model	Production	Main Drum Diameter	RAP Entry Diameter	Length
E3-200	200 tph	6 ft 4 in	9 ft 4 in	36 ft 0 in
E3-300	300 tph	7 ft 4 in	10 ft 4 in	42 ft 0 in
E3-400	400 tph	8 ft 4 in	11 ft 0 in	47 ft 6 in
E3-500	500 tph	9 ft 3 in	11 ft 10 in	47 ft 6 in
E3-600	600 tph	10 ft 3 in	13 ft 4 in	47 ft 8 in

The E3 RAP-Star's combination of early heating and blending of RAP with pre-heated virgin aggregate in the outer shell and introduction of super-heated aggregate into the final mixing section provides the ultimate in counter-flow drying technology resulting in unrivalled fuel efficiency and positioning the E3 as the industry leader in low emissions.

This CMI early entry RAP design and unique material flow through the industry's longest mixing and blending zone enables the drum to produce premium mix quality with high RAP percentages and substantial fuel savings.







Magnum Series

Counterflow Drum-mixers

The Cedarapids / Standard Havens Magnum series of portable and stationary counterflow drum-mixers was the original counterflow drum-mixer and has been proven over many decades.

The CMI Magnum range is available in capacities from 150 to 600 tons per hour and a recent extensive design review of this legacy product has resulted in many upgrades including new high efficiency drying and mixing flights in the Magnum drum.

The new CMI Magnum “Bullet” Super-Portable series has been designed with an emphasis on substantially reduced installation time to provide a market leading set up time within 2 days when combined with a portable self-erecting hot mix storage system.

The Magnum Bullet 150, 225 and 275 have been redesigned to accommodate the drum travelling on the chassis in its working position and incorporate manual jacks with large base plates to distribute the load with minimal foundation requirements.

As a result of their greater size and output the all new Magnum Bullet 300, 400, 500 & 600 units have hydraulic erect systems which provide unrivalled set up times. In addition, relocation of the axles on the drum chassis aids the positioning of the drum at its working height.





Magnum Series Specification			
Model	Production	Main Drum Diameter	Drum Length
150	150 tph	5 ft 4 in	33 ft 0 in
250	250 tph	7 ft 0 in	39 ft 4 in
300	300 tph	7 ft 4 in	44 ft 0 in
400	400 tph	8 ft 4 in	48 ft 0 in
500	500 tph	9 ft 5 in	52 ft 0 in
600	600 tph	10 ft 6 in	56 ft 0 in



DrumStar Series

Mobile Parallel Flow Drum-Mix

The Parker DrumStar series of parallel flow continuous mix asphalt plants offers economical and highly mobile alternatives to batch and counterflow asphalt mixing plants.

The DrumStar is available in capacities of 75, 100, 150 and 200 tph in both wet and dry configurations, with filter options covering chassis mounted wet scrubber and secondary dust collection.

A drag slat with discharge hopper and fold down head section is mounted on the drum-mix chassis for transportation and ease of installation.

The DrumStar series is highly mobile and freestanding with rapid installation and substantially reduced relocation costs. All units are pre-wired and fully tested prior to leaving the factory.

In addition, the DrumStar 75 and 100 models are designed such that, if required, they can be shipped worldwide in containers to reduce shipping costs.



DrumStar Range		
Model	Capacity (tph)	Dryer (m)
DS75	75	1.4
DS100	100	1.6
DS150	150	1.8
DS200	200	2.0





Parts & Service

Never compromise the reliability and performance of your Parker equipment by fitting non-original spare parts or components.

Our dedicated parts department maintains strict and full control over quality and component integrity to ensure each and every part meets Parker's exacting engineering standards.

Parker's engineering service team provides further after sales support to the customer covering mechanical and electrical operation.

Email, fax or simply call our Parts Department for experienced and professional advice on maximising your productivity and protecting your significant investment in Parker equipment.

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