



# CONCRETE MIXER SOLUTIONS

FOR THE CONCRETE, CONSTRUCTION AND ENVIRONMENTAL INDUSTRIES



Offering large outputs from 0.5m³ to 4m³, the Rapid Pan is a high capacity concrete mixer ideally suited to the ready mix industry.

## repid planetary mixer

The Rapid Planetary's mixing action produces quality homogenised mixes and outputs from 0.375m³ to 3m³. It is ideal for smaller applications, precast products and mixing semi-dry coloured concrete.

# repid twin shaft mixer

The Rapid Twin Shaft offers a robust and compact design with thorough mixing of all aggregates. With its large output capabilities from 1.7m³ to 4.5m³ and fast mixing time, the Rapid Twin Shaft is ideal for use in the ready mix industry.



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# HOME OF THE CONCRETE MIXER



### Craigavon Engineering Ltd.



### A HOME GROWN SUCCESS STORY

Established in 1969, Northern Ireland based Rapid International delivers high quality, reliable equipment to the concrete, construction and environmental industries. Today, with a presence in more than twenty countries worldwide via an ever expanding international dealer network, Rapid is a trusted partner to a wide variety of customers ranging from multinational construction groups to small concrete producers.

# INTERNATIONAL LTD

### RAPID IS A GLOBAL LEADER IN THE MANUFACTURING OF:

- Pan, Planetary and Twin Shaft Concrete Mixers
- Mobile Continuous Mixing Plant/Pugmills
- Specialised Mobile Continuous Mixing Plant
- Mobile/Fixed/Bespoke/Compact Batching Plants
- High Pressure Mixer Washout Systems
- Silos
- Spare Parts

Rapid's vast experience over the last four decades ensures the highest quality design and manufacture of all equipment. Quality, reliability, efficiency and technological advancement are the greatest aims of Rapid's workforce, based at its impressive 50,000sq ft production facility and headquarters in County Armagh, Northern Ireland. Always innovating, Rapid's emphasis on product development is driven by the needs of its wide-reaching customer base, and the company's in-house technical team consistently strive to meet the demands of total quality while exceeding customers' expectations.









# A WORLD CLASS PRODUCT RANGE



### **MIXER RANGE**

The heart of any concrete plant, Rapid's quality, durable concrete mixer range includes Pan, Planetary and Twin Shaft options. Built as standard with chill cast tiles, Rapid delivers low maintenance costs across the entire range. Rapid's Planetary option is ideal for the precast industry as well as mixing semi-dry coloured concrete. Planetary outputs range from 0.375m³ to 3m³ per hour.

The Rapid Pan (outputs 0.5m<sup>3</sup> to 4m<sup>3</sup>) is the ultimate mixer for the ready mix industry due to its high outputs and Rapid is the sole UK manufacturer of 4m<sup>3</sup> output Pan mixers.

Rapid's range of Twin Shaft concrete mixers (outputs 1.7m³ to 4.5m³) are ideal for the ready mix industry due to their high outputs, fast mixing time and compact design. Rapid's Twin Shaft mixers have heavy duty extra thick chill cast tiles throughout, offering low maintenance costs.



### MOBILE BATCHING PLANTS

Rapid's fully mobile
Rapidbatch 70 and 120 mobile
batching plant offers super
mobile batching with outputs
from 70m³ to 120m³ per hour.
Fast on-site set up within one
day means less downtime and
increased efficiency for large
construction projects.

Rapid's Transbatch (outputs of 40,60 and 100 m³ per hour) offers a more compact solution for mobile batching in a single load road towable unit, which folds and dismantles for transport. The Transbatch is perfect for remote location projects.



# MOBILE/SPECIALISED CONTINUOUS MIXING PLANTS

Totally mobile and fully self-contained with its own power source and self-erecting system, the Rapidmix mixes up to 400 or 600 tonnes per hour depending on application. Rapidmix is fully operational within 2-3 hours and is typically used for RCC (roller compacted concrete), road sub base and a wide range of environmental applications including contaminated land treatment and soil stabilisation.



### HIGH PRESSURE MIXER WASHOUT SYSTEMS

Proper mixer cleaning and maintenance is critical to prevent build up. The compact Rapid Jetwash high pressure mixer washout system offers powerful concrete mixer cleaning in just 4 minutes using 2,000psi (140 BAR) water pressure, reducing mixer wear and increasing the potential lifespan of the mixer. Available in both 2,3 and 4 pump models.

### **FAST-TRACK SPARES**

Rapid's service doesn't stop the moment your plant is erected: our in-house spares department provides a wide range of spare parts for all mixer types, silos and plant. Rapid offers high inventory levels and a FAST-TRACK service, combined with highly competitive rates.



## rabid bau wixer

### LARGE OUTPUT CAPACITIES

Outputs for Pan Mixer models range from 0.5m³ (0.75yds³) to 4m³ (5yds³).

### **BUILT TO LAST**

Standard equipment includes:

- Durable chill cast wear sleeves and paddles
- Hard wearing chill cast tiles for wall and floor
- Up to 3no pneumatic or hydraulic discharge doors
- Heavy duty discharge door mechanisms

### PRODUCES CONSISTENT TOP QUALITY CONCRETE

Mixing arms ensure that all materials are kept in constant motion in every direction.

#### **INCREASED SAFETY**

Spring-tensioned mixing arms.

### **OVERLOAD PROTECTION**

Spring and shear bolt system for shock overload protection.

### **ACCESSIBILITY**

Easy access for cleaning and maintenance.

### **OPTIONAL EXTRAS**

- Up to three hydraulic/pneumatic discharge doors
- Material inlets can be located virtually anywhere on the pan perimeter
- Mixer starter panels
- Mixer interlock system
- Door proximity switches
- Mixer monitoring protection package
- Mixer valve box
- Jetwash system (high pressure clean-out system for mixers
- Tungsten protected paddles and legs
- Polytex paddles
- Fluid coupling- applicable to 3m³ and 4m³ units
- Filling skip hoist system







# rapid pan mixer

### **APPLICATIONS**

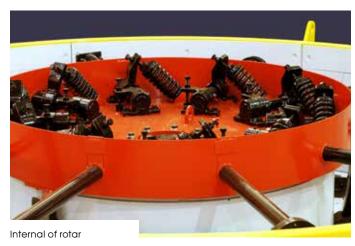
The Rapid Pan although particularly suited to the ready mix industry due to its high output capacity, is also ideal for use in the following applications:

- Concrete blocks, bricks (coloured and multicoloured) and pipes
- Glass and ceramics
- Grouts and screeds
- Interlocking paving
- Precast concrete
- Roof tiles
- Clay bricks
- Mortar

### **FAST-TRACK SPARES**

A full range of Rapid Genuine Spares are available for the Rapid Pan Concrete Mixer. See pages 20 & 21 for more details.



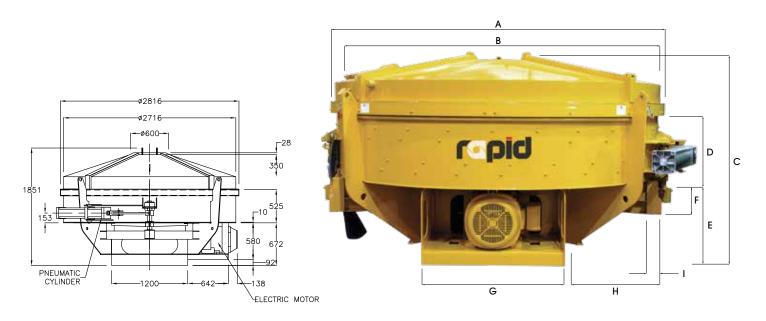








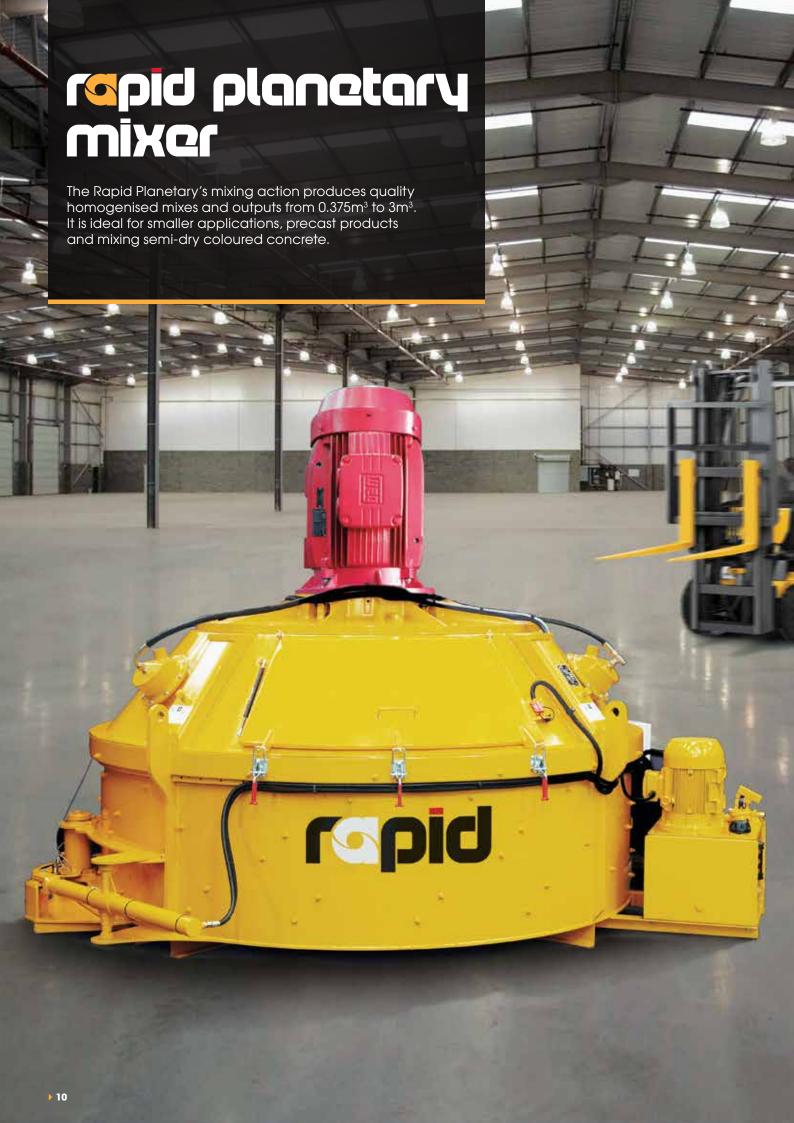




### **MIXER SPECIFICATIONS**

MODEL	INPUT CAPACITY	OUTPUT CAPACITY	OUTPUT/ HOUR m <sup>3</sup>	MOTOR POWER	NO. OF MIXING TOOLS	NET WEIGHT
R500	0.75m³	0.5m³	15	22kW	7	2,875kg
R1000	1.5m³	lm³	30	37kW	9	4,450kg
R1500	2.25m³	1.5m³	45	55kW	10	6,950kg
R2000	3m³	2m³	60	75kW	11	8,750kg
R3000	4.5m³	3m³	90	110kW	11	10,500kg
R4000	6m³	4m³	120	160kW	13	12,500kg

MODEL	A	В	С	D	E	F	G	н	1
R500	2,088mm	1,988mm	1651mm	513mm	610mm	254mm	862mm	540mm	105mm
R1000	2,816mm	2,716mm	1839mm	525mm	660mm	254mm	1,200mm	710mm	105mm
R1500	3,418mm	3,290mm	1905mm	635mm	730mm	254mm	1,372mm	710mm	105mm
R2000	3,840mm	3,712mm	1905mm	635mm	710mm	356mm	1,400mm	900mm	105mm
R3000	3,840mm	3,712mm	2310mm	805mm	852mm	356mm	1,420mm	900mm	105mm
R4000	4,140mm	4,012mm	2240mm	752mm	852mm	356mm	1,420mm	900mm	105mm



## rapid planetary mixer

### LARGE OUTPUT CAPACITIES

Output capacities range from 0.375m<sup>3</sup> (0.5yds<sup>3</sup>) to 3m<sup>3</sup> (4yds<sup>3</sup>).

### **BUILT TO LAST**

Standard equipment includes:

- Durable chill cast wear sleeves and paddles
- Hard wearing chill cast tiles for wall and floor
- Up to 4no pneumatic or hydraulic discharge doors
- Heavy duty discharge door mechanisms

### **EASILY ACCESSIBLE**

Motor and gearbox are located on top of the mixer for easy cleaning and maintenance.

### **COMPACT MIXER DESIGN**

Rapid's mixer design allows for easy integration into all plants.

### **HIGHEST QUALITY CONCRETE**

The Rapid Planetary's star mixing action is excellent for mixing fully homogenised semi-dry coloured concrete.

### **OPTIONAL EXTRAS:**

- Up to four hydraulic (via electrical powerpack)/pneumatic discharge doors
- Mixer starter panels
- Mixer interlock system
- Door proximity switches
- Mixer monitoring protection package
- Mixer valve box
- High pressure mixer washout system







# rapid planetary mixer

### **APPLICATIONS**

Although particularly suitable for production of pre-cast products, the Rapid Planetary is also ideal for the following applications:

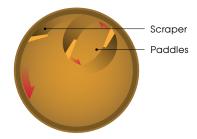
- Specialist architectural precast products
- Bricks (coloured and multicoloured) and pipes
- Glass and ceramics
- Grouts and screeds
- Interlocking paving
- Precast concrete
- Roof tiles
- Clay bricks
- Mortar

### **FAST-TRACK SPARES**

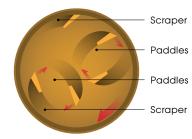
A full range of Rapid Genuine Spares are available for the Rapid Planetary Concrete Mixer. See pages 20 & 21 for more details.



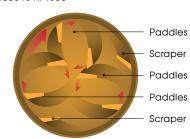
### STAR MIXING ACTION



Single star mixing action. RP375 to RP750



Twin star mixing action. RP1000 to RP1500

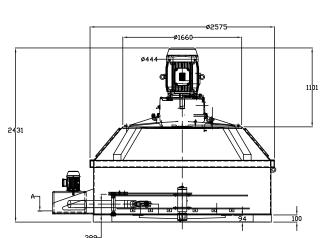


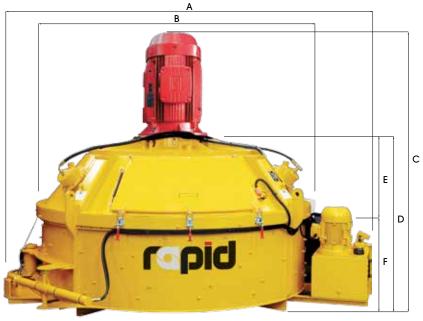
Triple star mixing action. RP2000 to RP3000







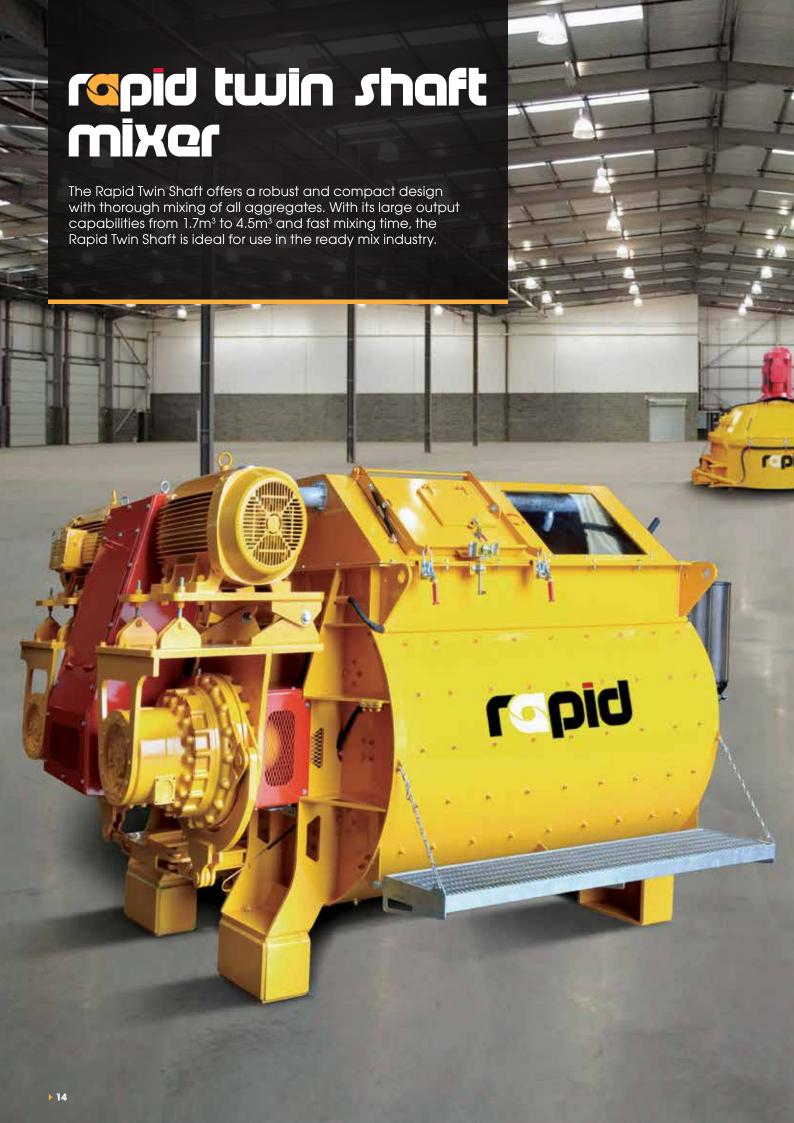




### MIXER SPECIFICATIONS

MODEL	INPUT CAPACITY	OUTPUT CAPACITY	OUTPUT/ HOUR m <sup>3</sup>	MOTOR POWER	NO. OF MIXING TOOLS	NO. OF MIXING STARS	NET WEIGHT
RP375	0.56m³	0.375m³	11	20hp	3	1	1,950kg
RP500	0.75m³	0.5m³	15	40hp	3	1	3,240kg
RP750	1.125m³	0.75m³	23	40hp	3	1	3,240kg
RP1000	1.5m³	lm³	30	50hp	5	2	5,700kg
RP1500	2.25m³	1.5m³	45	75hp	5	2	5,700kg
RP2000	4.5m³	3m³	60	100hp	8	3	9,500kg
RP3000	4.5m³	3m³	90	150hp	8	3	10,500kg

MODEL	A	В	С	D	E	F
RP375	1,741mm	1,641mm	1,721mm	600mm	421mm	1,228mm
RP500	2,108mm	1,988mm	2,096mm	770mm	451mm	1,433mm
RP750	2,108mm	1,988mm	2,096mm	770mm	451mm	1,433mm
RP1000	2,595mm	2,475mm	2,464mm	863mm	467mm	1,739mm
RP1500	2,595mm	2,475mm	2,503mm	863mm	467mm	1,739mm
RP2000	3,440mm	3,290mm	3,116mm	889mm	693mm	2,128mm
RP3000	3,440mm	3,290mm	3,116mm	889mm	693mm	2,128mm



# rapid twin shaft mixer

### LARGE OUTPUT CAPACITIES

Outputs for Twin Shaft Mixer models range from 1.7m³ (4yds³) to 4.5m³ (6yds³). Large hydraulically operated discharge door allows for high outputs.

### **EASY PLANT INTEGRATION**

The Rapid Twin Shaft Mixer's compact design fits easily into mobile plant and is hassle free to transport.

### **EASILY ACCESSIBLE**

Fully integrated access and inspection hatches complete with tight sealing and clamping systems allow for viewing whilst mixing.

### **ROBUST AND DURABLE**

- Fully tiled mixing chamber using heavy duty extra thick 20mm chill cast tiles throughout
- Extra thick ni-hard chill cast paddles
- Hexagonal heavy duty machined shafts
- Rams powered by heavy duty hydraulic power pack
- Reduced wear with aerofoil arm design
- Auto lube, bearing automatic greasing system

### **HEAVY DUTY GEARBOXES**

- Two heavy duty uprated gearboxes mounted directly onto mixing shafts
- Prevents excessive loads on the gearbox bearings
- Maintenance free drive shaft coupling ensures synchronisation of the gearboxes

### THOROUGH MIX FOR ALL AGGREGATES

Unique arm design allows fitment at either 60°/90° and creates an area of high turbulence ensuring a homogeneous mix in a reduced space of time.

### **OPTIONAL EXTRAS**

- Mixer starter panels
- Mixer interlock system
- Door proximity switches
- Mixer monitoring protection package
- Mixer valve box
- Electrical soft start
- Skip hoist for limited spaces
- High pressure mixer washout system







# rapid twin shaft mixer

### **APPLICATIONS**

Although particularly suited to the ready mix industry due to its high output capacity and fast mixing times, the Rapid Twin Shaft Mixer is also ideal for use in the following applications:

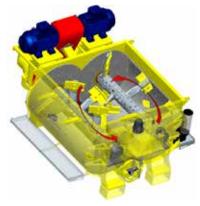
- Concrete blocks, bricks (coloured and multicoloured) and pipes
- Grouts and screeds
- Interlocking paving
- Precast concrete
- Roof tiles
- Clay bricks
- Mortar

### **FAST-TRACK SPARES**

A full range of Rapid Genuine Spares are available for the Rapid Twin Shaft Concrete Mixer. See pages 20 & 21 for more details.



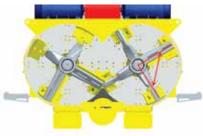
### TWIN SHAFT MIXING ACTION



Twin shaft mixer demonstrating the mixing action



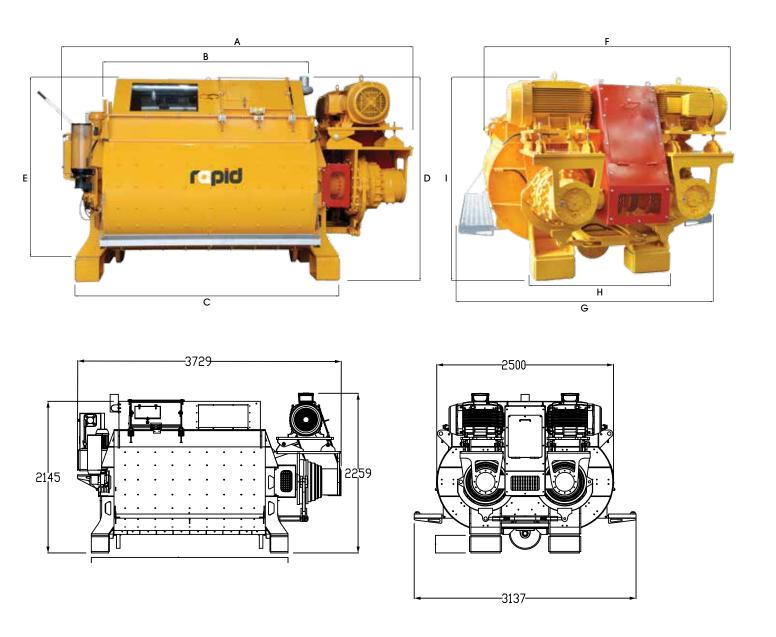
Arm fitment at 60 degrees



Arm fitment at 90 degrees







### MIXER SPECIFICATIONS

MODEL	INPUT CAPACITY	OUTPUT CAPACITY	OUTPUT/ HOUR m <sup>3</sup>	MOTOR POWER	NET WEIGHT
RT1700	2.5m³	1.7m³	60	2 x 30kW	8,500kg
RT3000	4.5m³	3m³	120	2 x 55kW	9,800kg
RT4000	6m³	4m³	160	2 x 75kW	13,000kg
RT4500	6.75m <sup>3</sup>	4.5m³	180	2 x 75kW	15,000kg

MODEL	A	В	С	D	E	F	G	н	ı
RT1700	3,041mm	1,637mm	2,219mm	2,145mm	1,895mm	2,500mm	3,137mm	1,576mm	2,255mm
RT3000	3,729mm	2,140mm	2,782mm	2,145mm	1,895mm	2,500mm	3,137mm	1,576mm	2,255mm
RT4000	4,379mm	2,790mm	3,432mm	2,145mm	1,895mm	2,500mm	3,137mm	1,576mm	2,255mm
RT4500	4,824mm	3,114mm	3,756mm	2,145mm	1,895mm	2,500mm	3,137mm	1,576mm	2,255mm



The Rapid Jetwash is a fully galvanised, self-contained high pressure mixer washout system used for effective clean out of mixers.

### THREE MODELS AVAILABLE

- RJW2 2 PUMP SYSTEM for Twin Shaft Mixers
- RJW3 3 PUMP SYSTEM for Pan and Planetary Mixers
- RJW4 4 PUMP SYSTEM for 4m³- 9m³ Mixers

### STANDARD EQUIPMENT INCLUDES:

- 260/380 litre water tank (dependent on model)
- 2/3/4 No 11kW electric motors (dependent on model)
- Emergency stop
- Wash down lance
- Stainless steel fittings on high pressure hoses

### FAST AND EFFECTIVE RESULTS WITH DECREASED DOWNTIME

- Each cleaning cycle takes just four minutes and one unit can wash up to four mixers
- > Jetwash unit is self-cleaning.

### **INCREASED MIXER LIFESPAN**

High pressure cleaning on a regular basis greatly reduces wear on mixer components.

### **POWERFUL CLEANING ACTION**

- System operates at 2000psi
- High pressure lance included as standard

### **SPACE SAVING FEATURES**

As the machine is compact and selfcontained, it can be easily located on mixer level or ground level.

### **WATER SAVINGS**

- Minimal usage of water
- Integral water tank with 260 & 380 litre (69 & 100 US Gallons) capacity
- 2, 3 or 4 high powered Jetwash heads use 30 litres (8 US Gallons) per minute

### **COST SAVING BENEFITS**

- Two concrete mixers closely located can be cleaned using one Jetwash unit
- The addition of solinoid valves enables switch over from mixer one to mixer two

### **FAST-TRACK SPARES**

A full range of Rapid Genuine Spares are available for the Rapid Jetwash high pressure mixer washout system. See pages 20 & 21 for more details.













### **JETWASH SPECIFICATIONS**

MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT
RJW2	1,632mm	906mm	853mm	450kg
RJW3	1,890mm	1,250mm	1,000mm	770kg
RJW4	1,890mm	1,250mm	1,000mm	845kg

## Labiq Beunjue sbates

### DEDICATED FAST-TRACK SPARE PARTS DEPARTMENT

Rapid's highly experienced parts department is your single destination for all Rapid parts as well as a comprehensive range of spares from a range of other leading manufacturers.

### **SUPERB INVENTORY LEVELS**

Direct delivery from stock of all orders.

#### **FAST-TRACK SERVICE**

Orders processed before 11.30am will be dispatched the same working day.

### **TUNGSTEN COATED**

Available on paddles, scrapers and mixer legs. With full coverage on paddles and scrapers.

### **POLYTEX MXA**

This material (polyurethane) is suited to specialised mixing applications, still maintaining high wear life on paddles, scrapers and wear sleeves.

### **CHILL CAST**

This hard wearing, long life material used in floors, side walls, paddles, scrapers and wear-sleeves is fitted as standard in all mixers.









### **WEAR PARTS**

Rapid offers a full range of wear parts in a variety of composites to suit all applications.

- Paddles
- Scrapers
- Wear sleeves

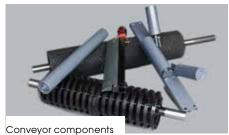
### **REPLACEMENT PARTS**

High stock levels of replacement parts are available for Rapid's entire product range of machines including Mixers,

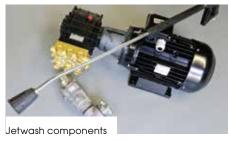
Jetwash, Rapidmix, Rapidbatch and Transbatch. Most of the replacement parts range are manufactured in house which guarantees the highest levels of quality and expertise. Rapid represents various manufacturers in the industry to ensure a full range of replacement parts are available from one source.

Rapid's FAST-TRACK Spare Parts Department is available 5 days per week on +44 (0)28 38 840 671 or via email: spares@rapidinternational.com















### **CASE STUDIES**

Rapid International products have successfully been deployed on numerous different projects around the world, some examples of which are below:

### rapid pan mixer



Readymix concrete E Moorhouse & Sons Ltd Cumbria, UK



Readymix concrete CES Quarry Products Ltd Saintfield, Northern Ireland



Readymix concrete,
Aggregate Industries - Bardon
Glasgow, Scotland

### repid planetary mixer



**Production of pre-cast concrete products**Bullivant Taranto, County Armagh, Northern Ireland

### repid twinshaft mixer



**Oil refinery project** Al Kifah, Saudi Arabia

EXPERIENCE COUNTS. FOUR DECADES IN THE INDUSTRY GUARANTEES THE HIGHEST QUALITY DESIGN AND MANUFACTURE OF ALL OUR EQUIPMENT.



# BENEFITS OF USING RAPID INTERNATIONAL



#### IN HOUSE DESIGN

All Rapid products are designed by our team of highly qualified engineers, using the latest 3d design software.

### **MANUFACTURING FACILITY**

Everything is produced in our 50,000 square foot factory. We take pride in our manufacturing capabilities and have the latest equipment, including:

- Kaltenbach KBS620 DG/T Drill & Saw Line
- ▶ Esab Suprarex SXE-P 3500 Plasma
- Ermaksan HGD3100X13 Guillotine
- LVD PPEB 220 Press
- Excel AHS30/04 Plate Rolls
- Akyapak APK100 Section Rolls
- Colchester Combi K2 Lathe
- Colchester Combi 4000 Lathe
- Richmond VMC1020 Mill

We have recently added a new state of the art painting facility.

We also incorporate lean manufacturing, which starts at the design stage of our products and is implemented throughout the process to reduce waste.

### **SMART SOURCING**

We only use components of the highest quality, all of which are sourced from internationally recognised brands. This not only ensures that we have the highest quality components but we have a strong network of distributors throughout the world reducing lead times and offering superior customer support.

### **SPARE PARTS**

We carry a large stock of all our Rapid genuine spare parts. In order to reduce plant down time Rapid can offer a same day dispatch on most items.



### **AFTER SALES SUPPORT**

With a Service and Support team of highly qualified technical operatives and service engineers, Rapid will ensure that all your after sales requirements are met with total professionalism and quality.

### ENVIRONMENTAL CONSIDERATIONS

We take our environmental responsibility seriously. Our facility is powered by eco electric using our own 500kW wind turbine.





Rapid International Ltd (Headquarters) 96 Mullavilly Road Tandragee
Co. Armagh
Northern Ireland

BT62 2LX

T: +44 (0) 28 3884 0671 E: marketing@rapidinternational.com