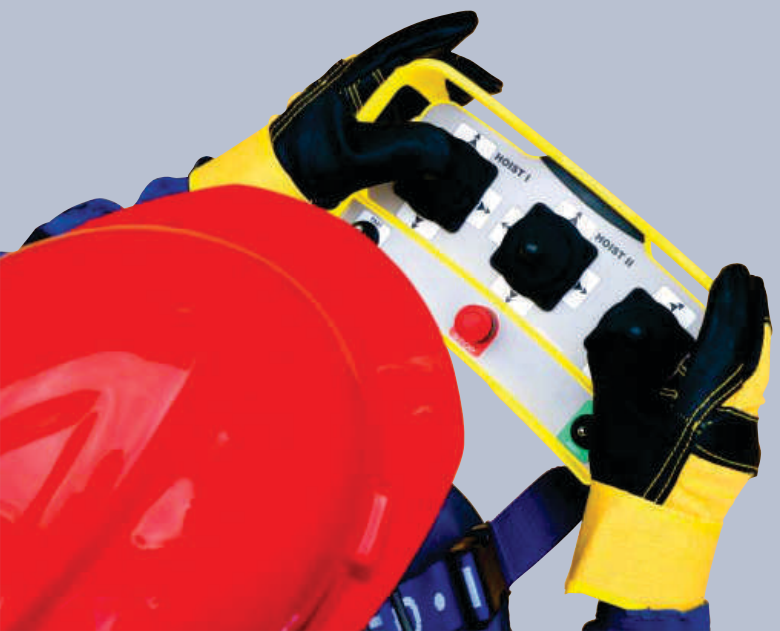
TAKING UP
THE CHALLENGE

SPEED

CONTENTS



SPEED

PERFORMANCE THROUGH EVOLUTION AND INNOVATION

“To achieve the highest possible levels of performance and reliability it is necessary to continuously learn from experience...

...Invest in R&D and pay attention to even the smallest possibility for improvement. Only then can new bench marks for efficient performance and operating reliability be set. Only then can a technology be said to be truly proven.”

SDWH

CRANE KITS AVAILABLE

SINGLE GIRDER TOP RUNNING CRANES

UNMISTAKABLY A PRODUCT OF THE SPEED DESIGN TEAM

All capacities up to 25T

SPEED SDWH single girder cranes truly set the global standard for excellence with an unbeatable combination of safety and operating features. We know our customers seek the very best price/performance ratio and we are confident this technology delivers just that! If you are seeking the highest levels of reliability and performance with significantly lower maintenance costs, SDWH technology will deliver.


SPEED
5t
SPEED


SPEED
12·5t
SPEED
SP

We invite you to compare SDWH Crane technology with any on the globe

SDWH SPECIFICATION

Unique hoist design with braked gearbox which provides significantly enhanced safety, reliability and maintainability compared to braked motor hoists.

- Enhanced load security.
- The hoist brake holds the load even if the hoist motor is removed or if the hoist motor coupling, motor connection or motor shaft were to fail.
- Lower operating temperature in the hoist motor because heat generated by the hoist brake does not soak into the host motor.
- Greatly improved hoist brake accessibility.

No external hoist gears.

- Automotive quality hoist gearbox containing hardened and precision ground helical gears all of which are submerged in oil.
- Longer hoist gear life compared to hoists with external gears.
- Significantly reduced risk of hoist gear lubrication failure.

No external trolley gears.

- Direct drive hoist trolley (single and double girder) with hardened and precision ground helical gears all of which are submerged in oil.
- Longer trolley gear life compared to those with external gears cut into the trolley wheel flange.
- Significantly reduced risk of trolley gear lubrication failure.

Long life guide rollers on single girder trolley eliminate wheel flange wear.

- Guide rollers remove the need for wheel flanges which are a big wear item on competitor hoists.
- Crane beam flange wear is also eliminated.
- The use of guide rollers and flangeless wheels also reduces rolling resistance and improves trolley control and stability.

Reaction roller eliminates the need for a hoist counterweight on single girder cranes.

- Reduces hoist and crane weight.
- Improves traction and control.

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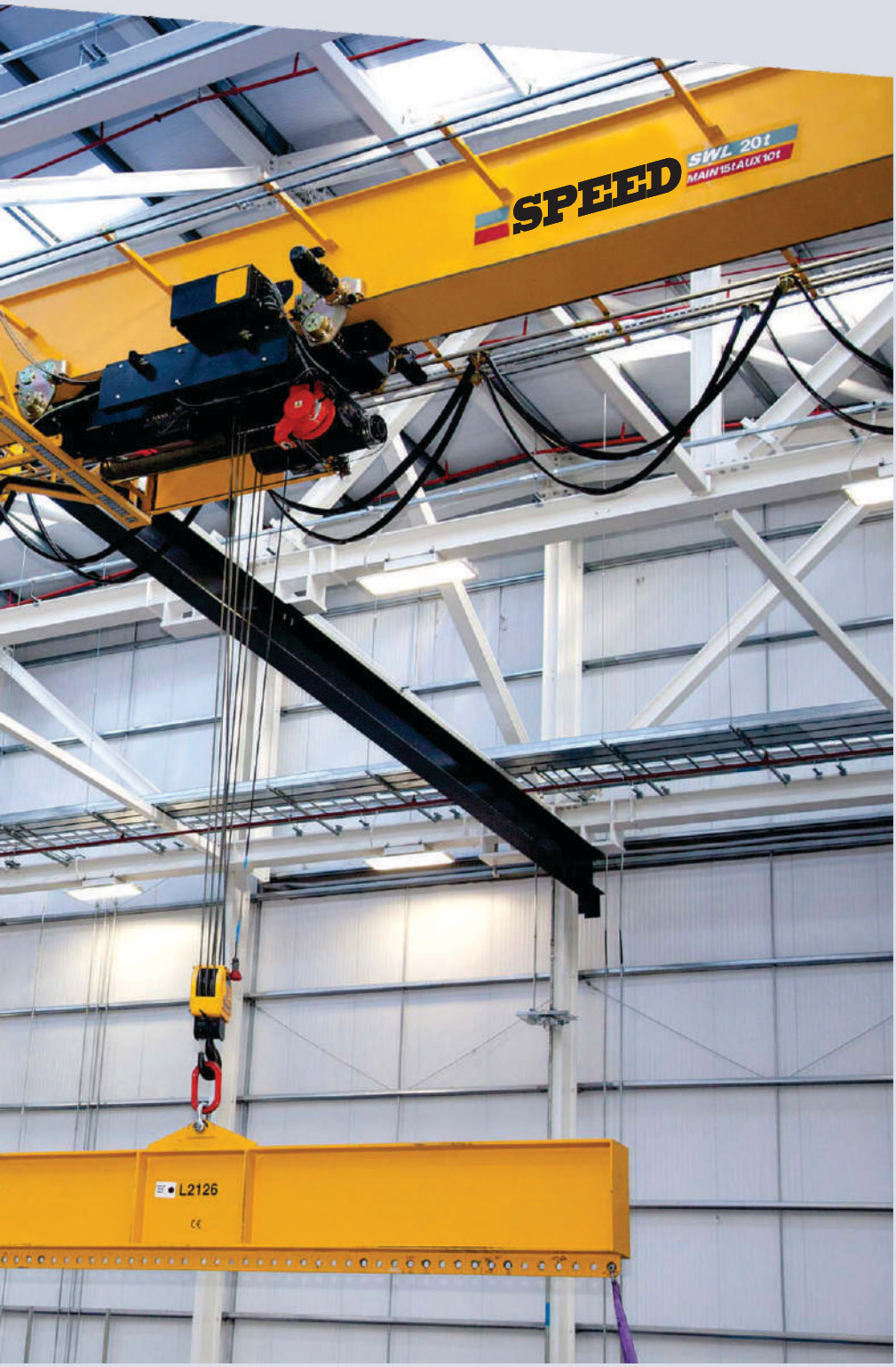
25t monorail hoist

THE APPLICATION OF WORLD CLASS TECHNOLOGY



20t single girder

Helicopter evacuation training

Steel fabrication crane

Remote control multi-crane application

SDWH

CRANE KITS AVAILABLE

UNDERSLUNG CRANES

ADVANCED ENGINEERED SOLUTIONS

All capacities up to 25T

SPEED SDWH underslung cranes are suspension cranes which run on tracks forming part of the roof structure. This design eliminates the need for runway columns hence cranes can be suspended in the centre of large assembly areas without impeding access or work flow on the factory floor. SPEED suspended crane systems can be designed to incorporate cantilevers (lateral overhangs) which allow the hoist and load to travel beyond the runway track line.

SPEED is a world leader in the design and manufacture of multi-span suspension cranes for wide span buildings such as aircraft hangars and aerospace manufacturing facilities. SPEED multi-span suspension cranes can provide full hook coverage for overall building spans greater than 100 metres (300 feet).

SDWH

DOUBLE GIRDER TOP RUNNING CRANES

EXCEPTIONALLY HIGH PERFORMANCE AND RELIABILITY

All capacities up to 80 T

SPEED SDWH double girder cranes provide tailor-made solutions for the advanced load handling requirements of modern industry. In common with all SPEED overhead cranes, a range of different girder constructions are available to optimise the available space in new and existing buildings. In most applications a double girder crane will provide a higher top hook position in a given headroom than can be achieved with a single girder.

In some extreme cases where there is restricted space above the track, a submerged construction hoist trolley design is available. The double girder design is more versatile and options include walkways, auxiliary hoists and a variety of special speed and control systems.


SPEED
16t

We invite you to compare SDWH Crane technology with any on the globe

SDWH SPECIFICATION continued from page 7

Choice of effective control systems on crane travel motions.

- Two speed motor drive with soft starting inertia fly wheels plus auto-timer timer control through slow to fast which gives extremely fine control without the use of electronics.
- SC Smartdrive sensorless current vector control system with LED status diagnostics, condition monitoring and removable memory board. Speeds, acceleration and deceleration are fully programmable.

Heavy duty double band rope guide provides improved reliability.

- Inner band holds the rope tight to the drum to prevent rope back up and damage if the operator causes 'slack rope.'
- Outer band guides the rope perfectly into the drum scroll.

Patented safe load cut-out device prevents over loading.

- The device is situated in the hoist gearbox torque arm and therefore measures all the load the hoist mechanism is transmitting (not just the load in one or two ropes).
- Actuated directly by the load and does not rely on measuring electrical current.

Adjustable DC disc brakes on travel and traverse motions for controlled braking.

- Full range torque adjustment allows stopping distances to be adjusted to suit the application.

Lifetime cost of ownership is the intelligent comparison and SDWH technology is designed to give reduced service and maintenance costs.

- SDWH open plan hoist design reduces the time and costs of maintenance and service tasks because they can be executed without dismantling the hoist.
- External hoist brake, motor and gearbox for easy access.
- Hoist gear inspection cover.
- Motor coupling inspection facility.
- Non-captive proprietary switchgear.

Exceptional electrical protection and monitoring.

- Overheating protection of the hoist motor.
- Hours in service meter.
- Protection against phase failure and incorrect phase sequencing.
- Under voltage and over current protection.


SPEED
20t
10t + 10t
MASTER

Master/slave cranes

TOMORROW'S CRANES TODAY

Main and auxiliary hoist

Low headroom double girder trolley

DOUBLE GIRDER CRANES

WHEN APPLICATIONS GET A LITTLE MORE DEMANDING

All capacities up to 200T

SDWH Cranes epitomize the special quality and performance we can offer to those customers who have particularly exacting requirements. The SPEED SDWH open winch hoist, at the heart of these cranes is of an exceptionally rugged and robust design. Not all crane manufacturers have the pedigree to produceeffi cient and reliable solutions for the most performance-orientated applications but SPEED has six decades of experience designing engineered cranes for heavy industry.

OPERATING AND SAFETY FEATURES

SDWH open winch hoists are designed for applications over and above the capabilities of standard hoists.

- Duty classifications up to M8 (CMAA class F).
- Capacities up to 200T.
- Engineered solutions for process cranes (see pages 30-33)

SDWH open winch hoists are more robust and durable than standard hoists.

- The simple rugged construction is significantly more tolerant of the type of conditions that prevail in some heavy industrial applications.

Unique hoist design with braked gearbox provides significantly enhanced safety, reliability and maintainability compared to braked motor hoists.

- Enhanced load security.
- The hoist brake holds the load even if the hoist motor is removed or if the hoist motor coupling, motor connection or motor shaft were to fail.
- Lower operating temperature in the hoist motor because heat generated by the hoist brake does not soak into the host motor.
- Greatly improved hoist brake accessibility.

72t crane with grab

Magnet lifting steel coils (automatic solutions available)

QUALITY MATERIALS
EXCELLENT WORKMANSHIP

100t / 50t crane with load summation

HEAVY DUTY AND HIGH CAPACITY CRANES

Zero hook drift for precision lifting.

- True vertical lift through the full hook stroke.
- Double scrolled hoist drum and a balanced rope reeve eliminate the need for rope guides which can be troublesome in some heavy industrial environments.

For heavy industrial process cranes the intelligent comparison is lifetime cost of ownership and SDWH design reduces service and maintenance costs.

- Open plan hoist design reduces the time it takes to do maintenance and service tasks because they can be executed without dismantling the hoist.
- External hoist brake, motor and gearbox for easy access.
- Hoist gear inspection cover.
- Motor coupling inspection facility.

100t / 50t Roll handling

120t crane with lifting beam

PORTAL AND SEMI PORTAL CRANES

A GOLIATH RANGE

Single Girder construction all capacities up to 25t
Double Girder construction all capacities up to 200t

This type of crane is sometimes referred to as a "Goliath" crane and they can be big. However SPEED makes little ones too with capacities ranging from 1t through to 200t. The computer optimised and modular structures have been developed by our talented design team using advanced finite element analysis to ensure stability and efficient strength to weight ratio.

Portal cranes are ideal for outdoor applications such as stockyards where they provide lifting and transportation without the cost of a building structure. They also provide the best solutions indoors where existing structures are not suitable for the loads imposed by overhead cranes or where additional supporting steelwork would result in loss of floor area.

COMPUTER OPTIMISED STRUCTURES

Rail-less solution

Spans in excess of 40m (130ft)

RAIL-LESS SEMI-PORTAL CRANES

This innovative SPEED design provides an excellent solution with considerable cost saving for smaller capacity semi-portal cranes (upto 15T depending on span). Special crane wheels with advanced polyurethane tyres run directly on the factory floor and a roller guide system at the high level ensures the crane runs true. This solution saves the cost of rails and fixings at the high and lowlevel of the craneas well as removing a significant trip hazard from the factory floor.

BEAM CANTILEVERS

TRANSPORT THE LOAD BEYOND THE LEG

SPEED portal and semi portal cranes can be designed with cantilevered beams which allow the operator to transport the load between the crane legs. The allowable cantilever is calculated on a case by case basis depending on crane geometry and weight to ensure stability with the load on the cantilever.

TORSION BOX STRUCTURE WITH SIDE-RUNNING HOIST

SPEED torsion box portal and semi-portal cranes are constructed with a single off -set beam and leg construction with a side-running hoist to enable long loads to traverse past the leg. This is achieved by rotating the load around the leg thus allowing a loading bay or more storage space beyond the leg.


SPEED
40t
20t + 20t

SPECIAL CRANES

SIX DECADES OF EXPERIENCE

SPEED Crane is one of a very small number of companies in the world today able to provide successful solutions for the most exacting and unusual industrial lifting requirements. Some mechanical handling problems necessitate genuinely bespoke solutions and SPEED has seven decades of experience designing and engineering cranes and equipment ranging from the special to the truly unique.

Multi span double girder crane with twin hoists on a turntable
Spans over 100m (300ft)

PROCESS INDUSTRY CRANES
A CLASS ABOVE

Waste to energy application control room operation or full automation

Semi-Automated aluminium foil handling

Some of the industries with unique requirements include military, aerospace, metals manufacture, waste to energy and nuclear. SPEED have a track record of providing solutions in special structures, process integration, extreme duty cycles and temperatures, special controls, automation and specially engineered safety equipment and systems. Typical special crane applications include:

- Duty classifications up to M8 (CMAA Class F)
- Automatic cranes
- Multi-span suspended crane systems.
- Cranes with rotating hoists
- Process integrated cranes
- Liquid metal cranes
- Grabbing cranes
- Nuclear application cranes

Hot metal cranes - Emirates Aluminium

87T Power station crane

Scrap handling magnet crane

Hot metal ladle crane

Slewing hoist and cab with clamshell grab

WALL TRAVELLING JIB CRANES

AN INCREASINGLY POPULAR SOLUTION

Wall travellers with wire rope hoists

FLEXIBLE MATERIAL HANDLING

Capacities up to 12.5 T

The SPEED wall travelling jib crane is a unique design concept with a mobile cantilevered jib arm to give hook coverage along the entire length of a production area as opposed to a limited arc of hook coverage associated with a slewing jib crane. Travelling jibs are ideal to run underneath and overlap with cranes covering the full span of a building giving maximum operational flexibility. It is important to appreciate that building structures must be designed for the additional loading such cranes impose.

SJC

CRANE KITS AVAILABLE

SINGLE GIRDER TOP RUNNING CRANES

A VERY ECONOMICAL SOLUTION

All capacities up to 5T

Highly efficient, low maintenance and versatile SPEED technology. SJC Single Girder Cranes provide a surprisingly cost effective and durable solution with maximized utilisation of the production area.

- Lighter crane weights and wheel loads result in reduced cost of building/ supporting structure.
- Better lifting height where headroom is restricted by a low ceiling.
- Rigid I-beam sections or computer optimised box girders.
- Variety of crane constructions which allows the crane to be designed to maximise the building dimensions.
- Compact side hook approaches give optimum hook coverage of the working area.
- True vertical lift (zero hook drift).
- Overload protection by torque limiting clutch.
- Rigid box section end carriages with direct drives.
- Wear resistant self-lubricating SG iron travel wheels.
- Wide range of hoisting speeds and lifting heights.

All motions of the crane are electrically operated from a mobile push-button pendant or remote radio controller. Hoisting is powered by the SPEED electric chain hoist which is designed with very compact dimensions to optimise both hook height and side hook approaches. When headroom is a particular problem an ultra low headroom model is available.

LIGHT CRANE SYSTEMS

BOOST YOUR PRODUCTIVITY WITH DEDICATED WORK STATION CRANES AND MONORAILS

LCS is an advanced modular monorail and crane building program which provides flexible ergonomic solutions for workstation lifting and movement, powered by the SPEED electric chain hoist running in structurally optimised light steel profi le beam sections. Monorails and single beam cranes are available in capacities up to 1.5T and double beam cranes to 2T capacity.

These cost- effective and highly durable workstation cranes are tailor made for the individual application and ideal when handling requirements are localised. LCS cranes may be suspended from the building structure but in cases where the building will not support additional crane loads, monorail and crane systems can be free standing. Curved profiles (1 metres min. radius) and turntables are also available to connect several systems together.

LCS workstation cranes significantly improve productivity even if the workplace is already equipped with a main overhead crane spanning the workshop. Increased efficiency is achieved because individual operations in localised workstations often have the requirement to repeatedly lift lighter loads. In these cases the workers concerned spend a high proportion of their time waiting for the main crane to become free and then they spend even more time away from the work cell bringing the main crane to the lifting point.

Standardised suspension and bolted connections make installation simple and modification or extension extremely easy. The closed profile of LCS protects the trolley equipment and provides an almost effortless manual operation with a rolling resistance of approximately 1% of the suspended load. Motorised hoisting and lowering is standard and motorised travel motions are available for those applications where manual travel is not possible or appropriate.

LCS with electric hoists and push travel

SLEWING JIB CRANES

ECONOMIC WORK STATION CRANES

Capacities up to 20T

SPEED jib cranes are available with the jib arm slewing about an integral floor mounted post or wall mounted directly from a building column. Standard post jib cranes are available to slew through 270° or 360° but the angle of slew can be limited to smaller angles if required. Jibs arms are available either under or over braced to maximise either lift or hoist traverse. We offer a variety of fixing methods including anchor bolts and wall plates. Where the floor slab is of limited depth or jib capacity is high, a foundation block may be required.

Hoisting equipment may be SPEED SJC chain hoist or SDWH wire rope hoist. Hoist traverse and slew can either be manual or powered with the control pendant suspended from the hoist. Where large loads restrict access a mobile pendant on an independent "c-rail" is also optional.

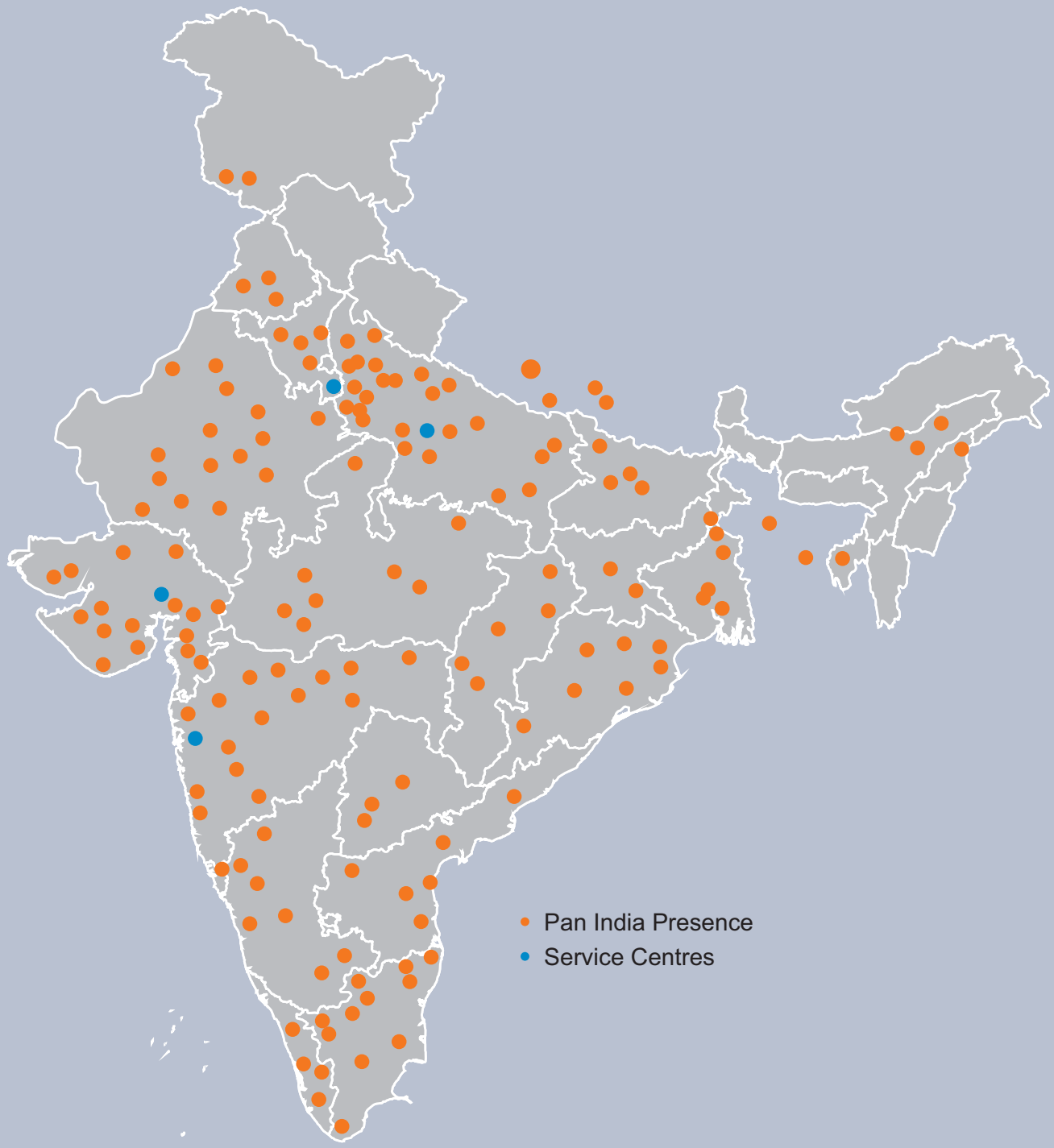
Column mounted slewing jib

PAN-INDIA DISRIBUTION

PAN-INDIA DISTRIBUTION NETWORK:

Over 120 sales and service outlets all over India

SPEED supports a network of sales and service partners all over India
Each is specifically selected for their crane expertise and specialist product knowledge. Our aim is to provide the very best crane and hoist solutions and then after sales care to the highest standards.



PARTS AND SERVICE

We offer efficient and dedicated customer service through Our head office in Mumbai and other approved dealers around India. Our mission is to ensure your cranes and hoists run smoothly and your productivity is assured.

Our service centres offer not only parts, service, inspection and maintenance but also crane modernisation and performance upgrades. Over time your application requirements for cranes and other lifting equipment may change. Your productivity may increase to the point where you need faster hoisting, or you may have older cranes which are obsolete and expensive to maintain as well as causing you serious nottlenecks if they break down. Such problems can be remedied by modernisation.

www.speedrns.com

SPEED

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