



SYNC LIFT ENGINEERING

REPLACE LIMITATIONS
WITH INNOVATION

SPECIALISED HYDRAULIC JACKING & BALANCED MACHINES CAPABILITY STATEMENT

Various Bucket Wheels Fabricated & Installed

Multiple Super Structures Adjusted to Achieve Ultimate Concentricity with Slew Bearings

Multiple Rocker & Boom Pivots Upgraded

Various Slew Bearings Replaced

Various Complete LTD Wheel Assembly Upgrades & Replacements

BALANCED / STOCKYARD MACHINES

Sync Lift Engineering is a trusted specialist in the controlled lifting, stabilisation, and realignment of balanced & stockyard machines across mining, port, and bulk materials handling environments. Our experience spans stackers, reclaimers, stacker-reclaimers, ship loaders & unloaders, delivering precision outcomes on some of the industry's most structurally sensitive and operationally critical assets.

Our capability includes slew bearing replacements, bearing to companion flange concentricity alignments, pivot pin & bearing upgrades, bucket wheel fabrication & installation and long-travel drive overhauls – all delivered with strict control of geometry, tolerances, and structural stability. By integrating hydraulic jacking, mechanical alignment, and engineered support systems, we ensure assets are returned to service in correct balance, alignment, and operational condition.

Through repeat engagements with major clients, Sync Lift Engineering has built a reputation for safe, precise, and reliable delivery on balanced machine projects where failure is not an option and accuracy defines success.



REMOVE FROM POINT A
WALKWAY TO NEW DECK
PLATFORM IS REQUIRED

LOAD PAST
THIS POINT

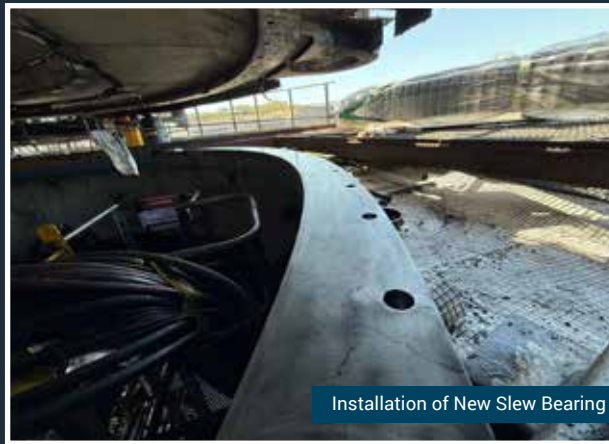
SR4A PARK POSITION
CH1304.300m

EXISTING SLEW BEARING
76-08-6000 (10 061)

6061



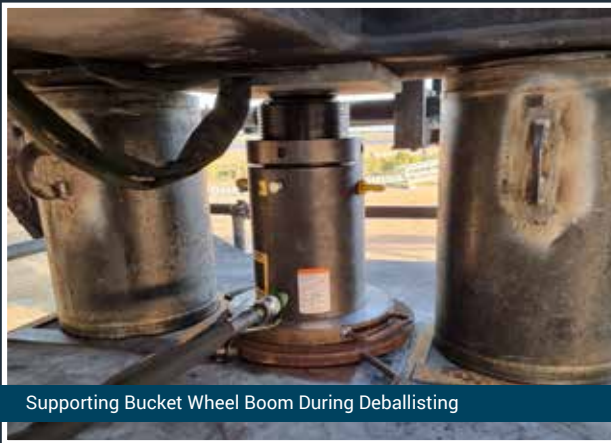
Rocker Pivot Assembly Extraction



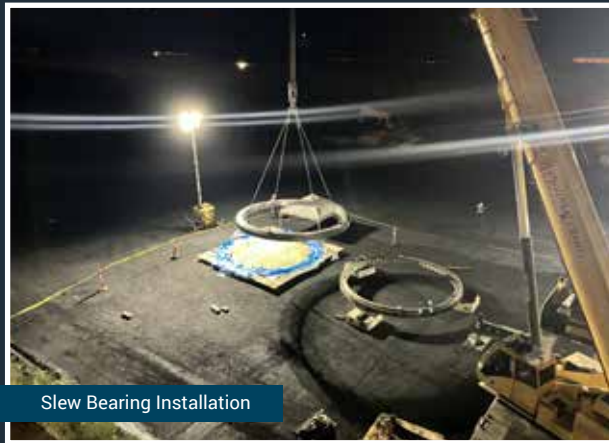
Installation of New Slew Bearing



Installation of New Spherical Bearing for Rocker Pivot Pin Assembly Overhaul



Supporting Bucket Wheel Boom During Deballisting



Slew Bearing Installation



Jacking for Slew Bearing Replacement



Bucket Wheel Fabrication



Bucket Wheel Assembly



Bucket Wheel Installation

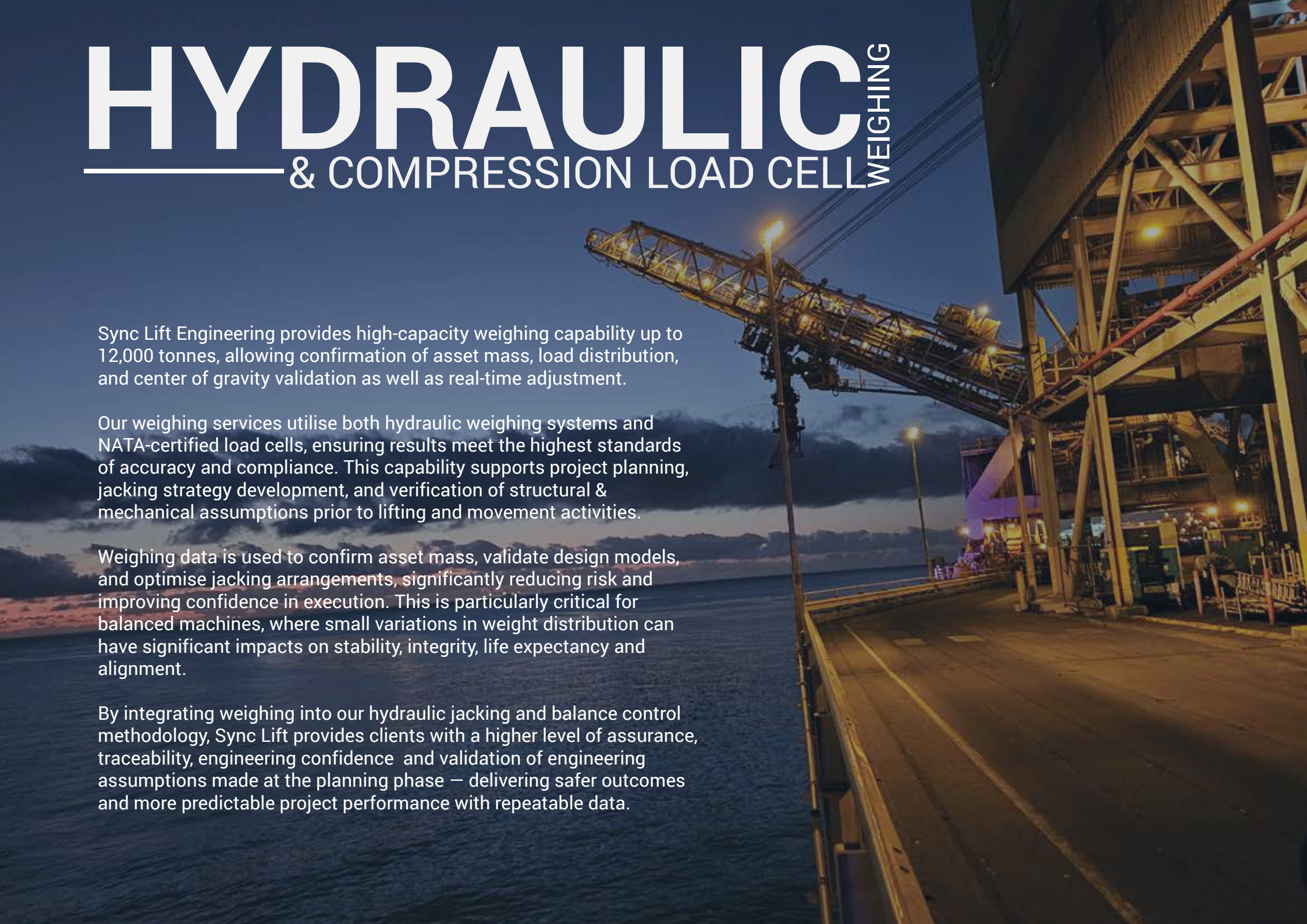
HYDRAULIC WEIGHING & COMPRESSION LOAD CELL

Sync Lift Engineering provides high-capacity weighing capability up to 12,000 tonnes, allowing confirmation of asset mass, load distribution, and center of gravity validation as well as real-time adjustment.

Our weighing services utilise both hydraulic weighing systems and NATA-certified load cells, ensuring results meet the highest standards of accuracy and compliance. This capability supports project planning, jacking strategy development, and verification of structural & mechanical assumptions prior to lifting and movement activities.

Weighing data is used to confirm asset mass, validate design models, and optimise jacking arrangements, significantly reducing risk and improving confidence in execution. This is particularly critical for balanced machines, where small variations in weight distribution can have significant impacts on stability, integrity, life expectancy and alignment.

By integrating weighing into our hydraulic jacking and balance control methodology, Sync Lift provides clients with a higher level of assurance, traceability, engineering confidence and validation of engineering assumptions made at the planning phase — delivering safer outcomes and more predictable project performance with repeatable data.



HYDRAULIC WEIGHING & COMPRESSION LOAD CELL

Completed at all Luffing Angles & Tele Chute Positions

Hydraulic Weighing of Various Ship Loaders

**Across various machines for repeat clients



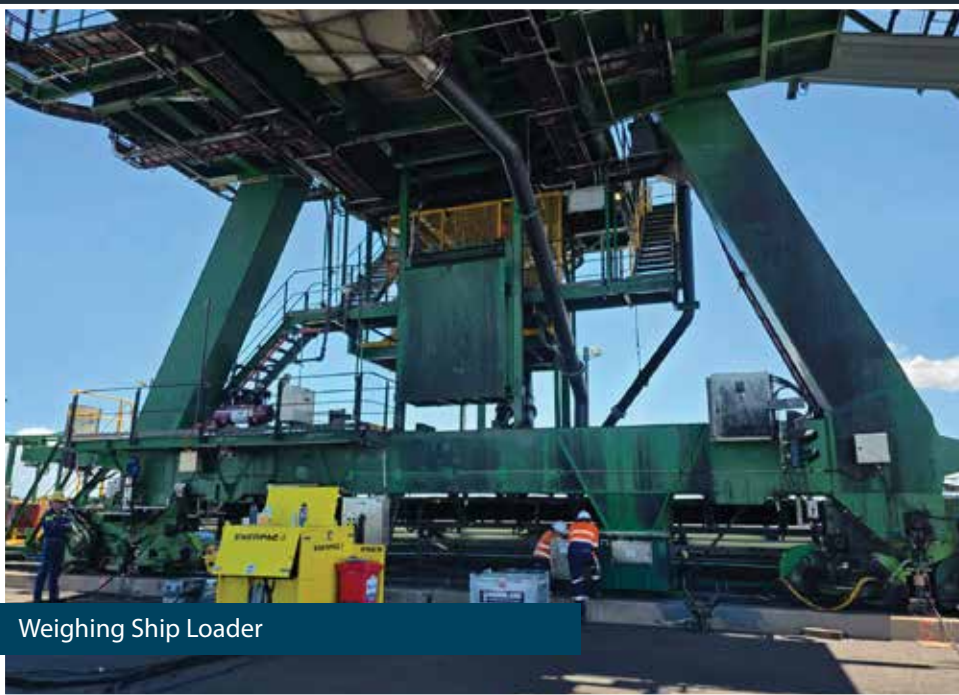
SYNC LIFT
ENGINEERING



Use of Hydraulic Weighing System for Ship Loader



Weighing Using Low Profile 100t Cylinders & 100t Load Cells



Weighing Ship Loader



250t Hydraulic Lock Ring Cylinders & Load Cells

HYDRAULIC WEIGHING & COMPRESSION LOAD CELL



Assets we have weighed for Trimming, COG or Mass Determination purposes...

Rope Shovels

Ship Loaders

Stackers/Reclaimers

Ship Unloaders

Radial Stackers

Draglines

Equipment during deconstruction

Activity: Shiploader 2 Weighing Operations

Item No.	Activity/Task Description	Acceptance Criteria	Verifying Document	Inspection Point	SLE Key	Role Key	Sign & Date	Client Key	Sign & Date
	Process and Designation Verification								
	Design & Engineering Checks Completed on Machine for Jacking & Weighing Operations	GPC approval & acceptance of outcomes of design checks	Aspec Engineering - Design Review Doc: xxxxxx	Once Complete	H	PS		H	
12	Contract in Place with Jacking & Weighing Operations Service Provider	Contract executed & PO issued for works to commence	Contract: CC25000057 Purchase Order #: PO25103893	Once Complete	H	PS		H	
13	Risk Assessment Facilitated for Project	GPC and all stakeholders facilitate risk assessment for Project and Sign off on Acceptance	2025 SL2 Weighing Risk Assessment	Once Complete	W	PS		W	
14	Vendor Data Requirements in Place: (This ITP, ITC, Procedure, SWMS & JSA for task)	Documents approved by Client	SLE-4189-PE-ITP-001_A SLE-4189-PE-ITC-001_A SLE-4189-PE-PRO-001_C GPC Shiploader 2 Weighing Procedure_V1.2 SLE-4189-PE-SWMS-001_A SLE-4189-PE-JSA-001_A	Once Complete	W	PS		W	
15	Inductions & Onboarding Completed	All Crew Inducted and Ready for Mobilisation	Induction Status in Site Training Matrix	Once Complete	W	PS		W	
Procurement									
21	Hydraulics Procured and Suitable for the Project	SLE Project Manager Confirmation	SLE-4189-PE-PRO-001_C GPC Shiploader 2 Weighing Procedure_V1.2	Once Complete	W	PS		W	
22	Load Cells Procured and Suitable for the Project	SLE Project Manager Confirmation	SLE-4189-PE-PRO-001_C GPC Shiploader 2 Weighing Procedure_V1.2	Once Complete	W	PS		W	
23	Packing Arrangements Procured and Suitable for the Project	SLE Project Manager Confirmation	SLE-4189-PE-PRO-001_C GPC Shiploader 2 Weighing Procedure_V1.2	Once Complete	W	PS		W	
24	All Hydraulic Equipment Tested & Tagged	SLE Project Manager Confirmation	SLE-4189-PE-PRO-001_C GPC Shiploader 2 Weighing Procedure_V1.2	Once Complete	W	PS		W	
25	All Electrical Equipment Tested & Tagged	SLE Project Manager Confirmation	SLE-4189-PE-PRO-001_C GPC Shiploader 2 Weighing Procedure_V1.2	Once Complete	W	PS		W	
26	Other Support Resources Arranged from Client - Fit up & Welding of Jacking Haunches and Mechanical Support	GPCL Project Manager Confirmation	This ITP	Once Complete	W	PS		W	
27	Craneage and Forklift Arranged - Client Supplied	GPCL Project Manager Confirmation	This ITP	Once Complete	W	PS		W	
28	CMS Populated & Approved Prior to Mobilisation	SLE Project Manager Confirmation	This ITP	Once Complete	W	PS		W	
Site Preparation & Mobilisation									
31	Check Weather Forecast & Lock in Date for Jacking & Weighing Operations	GPCL Project Manager Confirmation	2025 SL2 Weighing Risk Assessment SLE-4189-PE-PRO-001_C GPC Shiploader 2 Weighing Procedure_V1.2	Once Complete	H	PS		H	

Once Printed this Document is Uncontrolled

**across various machines for repeat clients

Various Draglines Jacked Vertically off Tub for
Rail Replacements

Multiple Draglines Jacked Level for Tub Removals

Machine Stands Ranging from 50t to 1000t

SPECIALISED SERVICES

HYDRAULIC JACKING



Sync Lift Engineering maintains one of the most comprehensive and advanced hydraulic jacking fleets in the industry, purpose-built to support complex lifting, realignment, and asset replacement works across heavy mining and industrial plant.

Our hydraulic systems are driven by dual PLC-controlled hydraulic power units, enabling fully synchronised lifting, controlled load transfer, and precise positioning across multi-point jacking configurations. This technology allows us to manage differential movement, maintain structural stability, and protect asset integrity throughout all stages of lifting operations.

Our cylinder inventory includes a wide range of lock ring and high-tonnage double acting cylinders, from 50-tonne units through to 1000-tonne capacity, allowing us to configure lifting systems specific to each asset's mass, geometry, and load distribution. These systems are supported by engineered stands, frames, and support arrangements designed to suit both temporary and permanent asset support requirements.

This capability enables Sync Lift to execute controlled lifting and lowering of major components, machine car bodies, tubs, booms, bearings, and structural assemblies in environments where conventional lifting methods are impractical or unsafe.

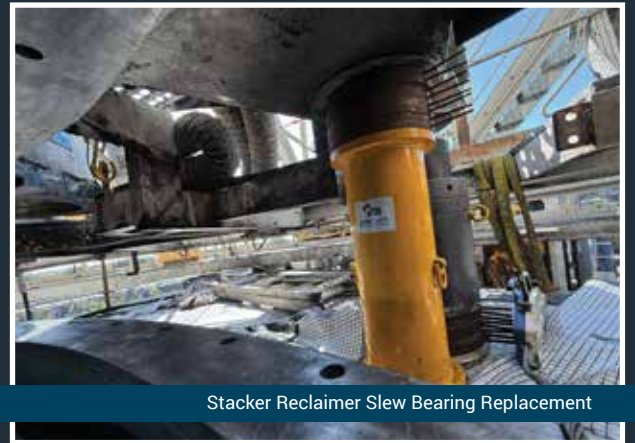
By combining hydraulic precision with engineered methodology, Sync Lift delivers lifting solutions that prioritise safety, accuracy, and repeatability across every project.



Revolving Frame Support Stands



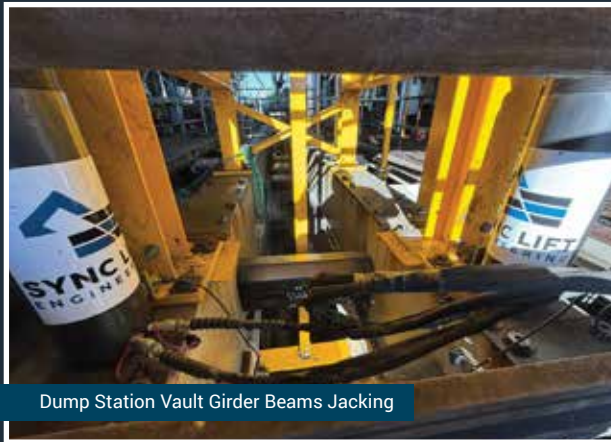
Dragline Upper Rail Replacement



Stacker Reclaimer Slew Bearing Replacement



Dragline Revolving Frame Jacking



Dump Station Vault Girder Beams Jacking



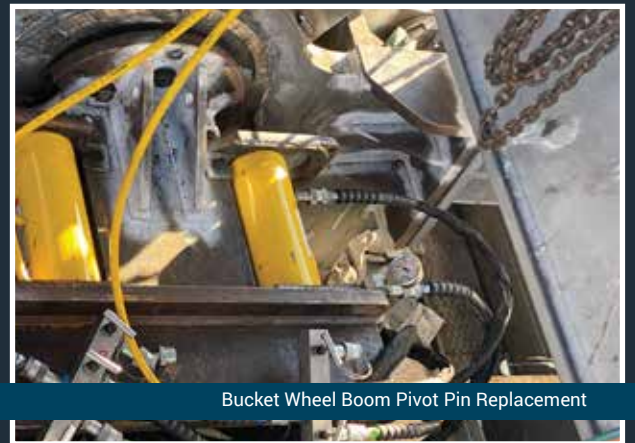
Dragline Revolving Frame - Jacking for Upper Rails Replacement



Dragline Tub Removal & Overhaul



Stacker Reclaimer Slew Bearing Replacement



Bucket Wheel Boom Pivot Pin Replacement

JACKING & SUPPORTING EQUIPMENT

ENERPAC SPLIT FLOW 4-WAY SYNCHRO JACKING SYSTEM

ENERPAC EVO8W SYNCHRONOUS HYDRAULIC POWER UNIT

DURAPAC 8 POINT SYNCHRONOUS HYDRAULIC POWER UNIT

ENERPAC CUSP50 – 50T S/A (10MM STROKE) ULTRA FLAT CYLINDERS C/W HOSING – 4 OF

ENERPAC CUSP100 – 100T S/A (10MM STROKE) ULTRA FLAT CYLINDERS C/W HOSING – 8 OF

ENERPAC HCL 1004 - 100 T S/A (100MM STROKE) LOCK RING CYLINDERS C/W HOSING - 34 OF

EUROPRESS PAC 10016 – 100T D/A (450MM STROKE) LOCK RING CYLINDERS C/W HOSING – 4 OF

ENERPAC HCL 1504 - 150 T S/A (150MM STROKE) LOCK RING CYLINDERS C/W HOSING - 4 OF

ENERPAC HCL 2002 - 200 T S/A (50MM STROKE) LOCK RING CYLINDERS C/W HOSING - 2 OF

ENERPAC HCL 20012 - 200 T S/A (300MM STROKE) LOCK RING CYLINDERS C/W HOSING - 4 OF

ENERPAC HCL 4006 - 400 T S/A (150MM STROKE) LOCK RING CYLINDERS C/W HOSING - 4 OF

ENERPAC HCL 5008 - 500 T S/A (200MM STROKE) LOCK RING CYLINDERS C/W HOSING - 4 OF

ENERPAC RR50018 - 500 T D/A (450MM STROKE) DOUBLE ACTING CYLINDERS C/W HOSING - 14 OF

TECHNOFAST SJC 1000150 – 1000 T D/A (150MM STROKE) LOCK RING CYLINDERS C/W HOSING – 12 OF

1000 T WLL BOW TIE - HYDRAULIC JACK & PACK STANDS C/W HEADSTOCKS - 2 OF

750 T WLL JACKING / SUPPORT BEAMS / STANDS (4100MM L X 1400MM W X 960MM H)- 2 OF

375 T WLL JACKING / SUPPORT BEAMS / STANDS (1400MM L X 1200MM W X 960MM H) - 4 OF

375 T WLL PACKERS (1400MM L X 1200MM W X 200MM H) - 12 OF

600 T WLL MACHINE STANDS (2400MM L X 2400MM W X 1750MM H) - 4 OF

600 T WLL REAR MACHINE STANDS C/W EXTENSIONS - 4 OF

200 T WLL BOOM & CD SUPPORT STANDS C/W JACKING CORBELS - 2400MM H - 16 OF

HARDWOOD TIMBER SLEEPER BOG MAT - 2400MM X 2400MM X 100MM - 150 OF

1000 T WLL STEEL ENCASED CONCRETE BLOCKS (1200MM L X 1200MM W X 400MM H) - 42 OF

150 T WLL SUPPORT STOOLS (430MM DIA. X 500MM H) - 4 OF

150 T WLL SUPPORT STOOLS (430MM DIA. X 350MM H) - 8 OF

150 T WLL SUPPORT STOOLS (330MM DIA. X 460MM H) - 8 OF

150 T WLL SUPPORT STOOL PACKERS (ASSORTED QTY. - 50MM & 150MM) - 24 OF

400 T WLL SUPPORT STOOLS (410MM DIA. X 550MM H) - 4 OF

500 T WLL SUPPORT STOOLS (330MM DIA. X 750MM H) - 4 OF

400 T WLL JACKING / PACKING STANDS (1500MM L X 310MM W X 750MM H) - 6 OF




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ENGINEERING

REPLACE LIMITATIONS
WITH INNOVATION

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 www.synclift.com.au