

ARX Motor Graders - G3200, G2100

ARX
Mining & Construction
Equipment Pvt. Ltd.

**SIMPLER,
SMARTER
TECHNOLOGY**



Value that works

Finely tuned, state-of-the-art driveline with enhanced torque and speed balancing for productivity and fuel efficiency

Ergonomically designed cabin with excellent all-around visibility and features

Load sensing hydraulic systems for precision and fuel efficiency designed with low noise emission and exceptional working life expectancy

Heavy-duty, box-construction boom design, reinforced gooseneck for heavy field usage

Wide range of optional attachments available to match various applications

Rear canopy designed for good service access

Planetary, tandem, all geared bogey axle with optimised ground clearance, diff lock/no-spin differential for enhanced stability

Robust, heavy-duty box construction rear frame to withstand fatigue and shock loads

Moldboards available in 12', 14', 16' and 18' sizes

Durable tyres with optimized rating and tread depth



MAXIMISE PRODUCTIVITY

- Automatic powershift transmission with lock-up clutch and torque convertor
- Rear tandem bogie axle with diff-lock / no-Spin system for easier operations and to prevent damage to gears
- Integrated torque convertor and lock up clutch to enable 15 to 20% fuel efficiency
- A superior cooling system and variable demand fan drive system for reduction in noise and fuel consumption
- Oil actuated, wet, fully enclosed (for low maintenance), multiple disc brakes to prevent the machine from slewing around while braking





MAXIMISE RELIABILITY

MAXIMISE PRECISION

An advanced hydraulic system, durable and robust structures

- Robust, heavy-duty, steel box construction of all structures to withstand heavy duty cycles
- Low noise emission hydraulic system with exceptional life expectancy to power hydraulic operations
- Axial piston variable volume pumps with electronic controller and control valves for superior control and precision in hydraulic operations
- Electro-hydraulically actuated float combined with the counterbalance function to either lock the blade at a particular position or trail on the ground for final finish
- A full-fledged slewing ring that eliminates shoes. The internal gear with induction hardened teeth and roller bearing made with high precision steel are low maintenance and parts available as part of the service kits
- Electro-hydraulic lock differential that can be operated from the cabin by a foot pedal

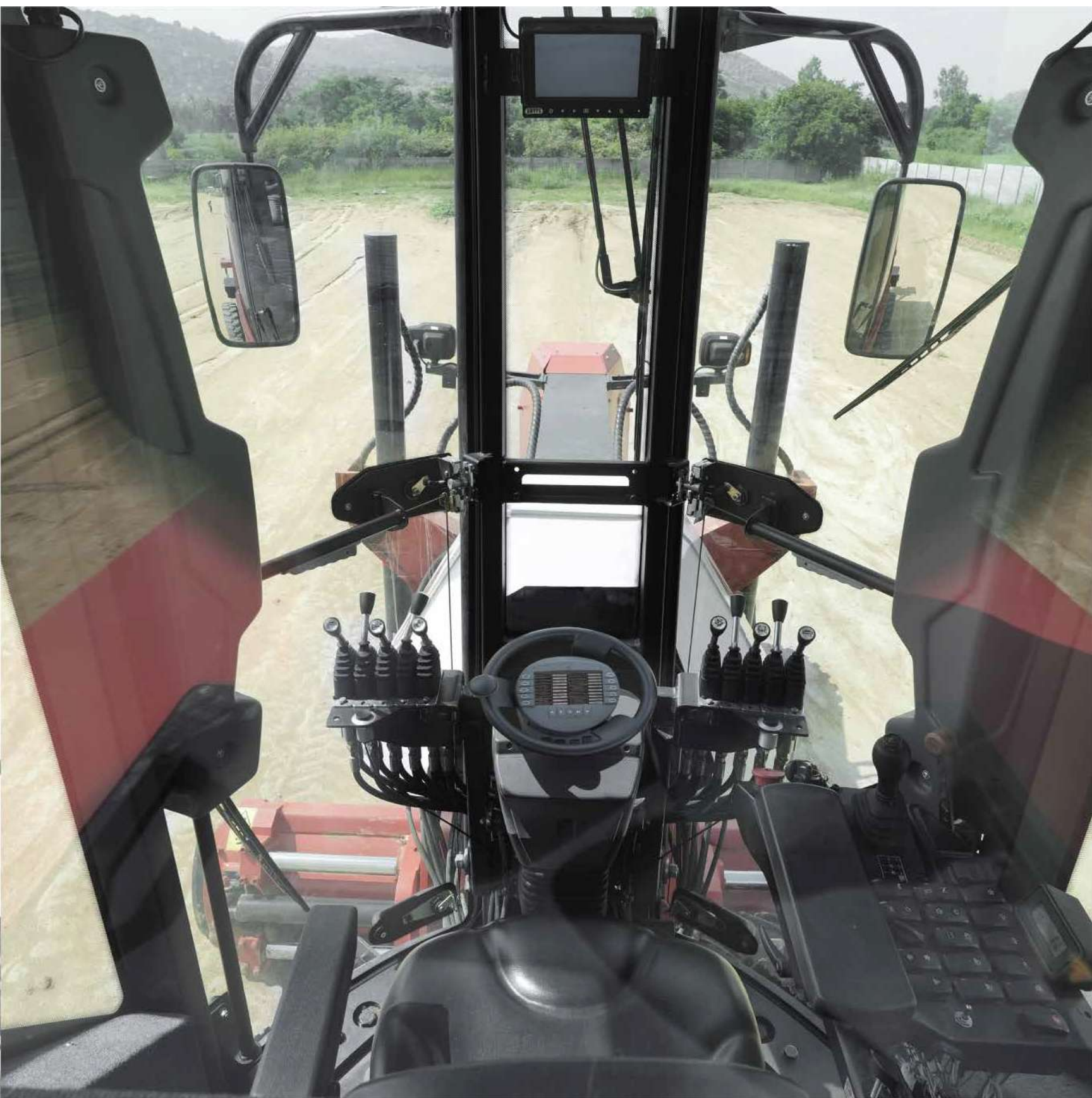
MAXIMISE CONVENIENCE

MAXIMISE CONTROL

Designed for exceptional all-round visibility, the operator cabin is designed to reduce fatigue and offer a comfortable place for the operator to easily spend a productive day with all controls and levers placed within convenient reach.

- Comfortable operator seat with pneumatic/ mechanical suspension and adjustment
- Foldable and tiltable, ergonomically-designed RHS armrest housing all LED-backlit rocker switches, dual-USB mobile charging outlet, hour-run meter, emergency stop button, and anti- restart ignition key switch
- Joystick controls for main grader functions with adjustable-locking gas springs for the operator to adjust as per his convenience
- A tilt and telescopic steering column with a built-in, 7", colour, LCD display with different pages/screens for all machine parameters and troubleshooting parameters
- Steering column with hydraulic power steering for effortless control of the grader
- ROPS & FOPS certified operator cabin
- HVAC (Heating Ventilating & Air-Conditioning) system for operator comfort
- Wipers and washers on the front, rear of the cabin and cabin doors
- Green-tinted safety glass to reduce the glare of the sun





TECHNICAL SPECIFICATIONS

Heading	UOM	Specifications	
		G3200	G2100
PRIME MOVER			
Manufacturer & Model		Cummins QSL 9	Cummins QSB 6.7
Emission Norms		Non-emission CEV / BS IV / BS V	CEV, BS IV / BS V
Type		Water cooled, 4-stroke, direct-injection Diesel engine	
Aspiration		Turbo-charged with external charge-air cooler	
Engine RPM	rpm / min	2100	2200
Gross Horsepower	hp / kw	310 / 231	225 / 168
Displacement	litre / In³	8.9 / 542	6.7 / 409
Bore	mm / inches	114 / 4 ^{1/2}	107 / 4 ^¼
Stroke	mm / inches	145 / 5 ^¾	124 / 4 ^{7/8}
Maximum Torque	Nm @ rpm / ft lb @ rpm	1526 @ 1400	1000 @ 1300
Number Of Cylinders	Nos	6	6
Derating Altitude	m / feet	2400 / 7872	2000 / 6561
VARIABLE FAN DRIVE			
Standard Ambient Capability	Degree Celsius	55	
Recommended Engine Oil		SAE 15W40, CI4+	SAE 15W40, CK4
Air Cleaner	Type	2-stage, dry type with pre-cleaner and restriction indicator through main display, automatic dust ejector	
POWERTRAIN			
Transmission	Type	Fully automatic Powershift with electronic controls, with lock-up clutch, stator free wheel	
Number Of Speeds - Forward	No.	6	
Number Of Speeds - Reverse	No.	3	
Top Speed - Forward	kmph	40	40
Top Speed - Reverse	kmph	30	32
BRAKES			
Service Brake	Type	Oil actuated, wet, multiple disc brakes on 4 rear wheels. Dual brake circuit with emergency ground drive pump and accumulators which store energy for braking in case of engine/pump failure	
Parking	Type	SAHR (Spring-Applied, Hydraulic-Release) on the transmission	
Heading	UOM	Specifications	
		G3200	G2100
HYDRAULIC SYSTEM			
Type		Load sensing, pressure compensated, closed center system with electronic controller	Load-sensing, pressure-compensated, closed-centre system.
Pump Type		2 Variable piston + 2 gear pumps (Casappa)	2 variable-piston + 2 gear pumps (Casappa)
Main Pump Flow	L/min	530 (Combined output @ 2100 rpm)	402 @ 2200 rpm
Maximum System Pressure	Bar	230	
Pump Model	bar	Casappa	



Heading	UOM	Specifications	
		G3200	G2100
SERVICE REFILLS			
Fuel Tank	litre	500	385
DEF Tank	litre	48	48
Hydraulic Tank	litre	150	125
Engine Oil	litre	38	24.5
Cooling System	litre	23.7	20.3
Transmission	litre	38	27
Axle Differential	litre	32	9.5
Axle Final Drive Hub (each)	litre	31	7
Axle Tandem Housing (each)	litre	44.5	35
FRAME			
CIRCLE			
Diameter	mm	1830	1250
FRONT AXLE			
Front Axle	Type	Reverse Eliot type with hydraulic leaning	
Height To Center	mm / inches	680 / 26.77	656 / 25.8
Wheel Lean	Degree	15° Left / 15° Right	
Ground Clearance At Pivot	mm / inches	702 / 27.63	643 / 25.3
REAR AXLE			
Rear Axle	Type	Planetary tandem all geared bogey axle with electrohydraulic foot pedal actuated diff lock	Planetary, tandem, bogey axle with no-spin differential
TANDEM			
Height	mm / inches	600 / 23.62	534 / 21
Width	mm / inches	227 / 8.9	194 / 7.63
TANDEM OSCILLATION			
Front Up	Degree	20	
Front Down	Degree	20	
Steering			
Type		Hydraulic power steering with emergency steering accumulator	
Minimum Turning Radius (Without Articulation)	m	12.16	10.5
Minimum turning radius (With Articulation And Wheel Lean)	m	9.3	7.2
Steering Range – Left/Right	Degrees	51	
Articulation Angle – Left /Right	Degrees	20	



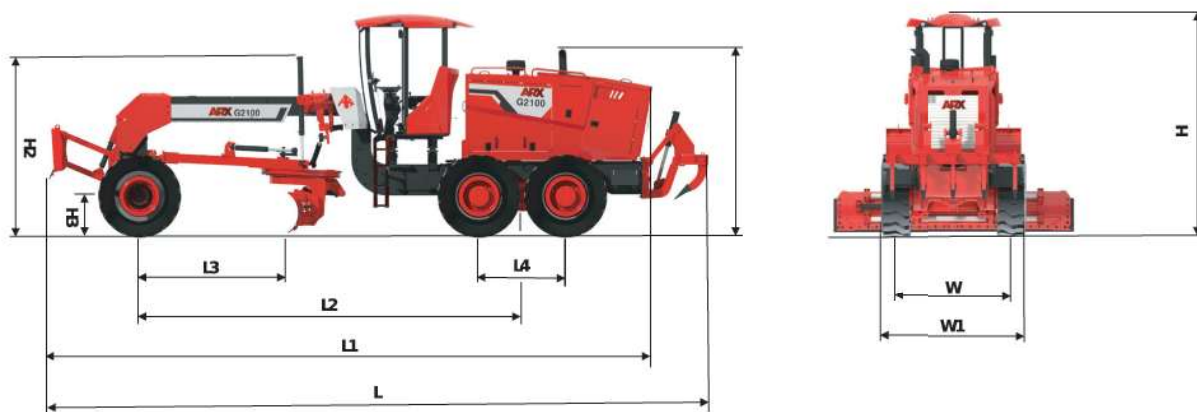
Heading	UOM	Specifications	
		G3200	G2100
WHEELS			
Front & Rear Tyre	Type	23.5 R25, Radial, VJT (Bridgestone)	20.5R25, Radial, Tubeless tyres (Bridgestone/ Yokohama)
Rims	Inches	19.5 (3-piece)	17.5 / 1.7-25 (3-piece)
OPERATOR ENVIRONMENT			
Cabin		Ergonomically designed, fully enclosed cabin with HVAC system	
Seat		Air suspension seat	
Display		7-inch, colour display in-built into the steering column	
Lights		2 Front headlight for driving	
		2 LED combination tail lights	
		13 nos. LED work lights	
		2 amber STROBE/BEACON lights on cabin roof	
ELECTRICALS			
DC	Volts	24 V dc, system with negative ground	
Alternator	Volts / Ampere	24 V dc / 120	24 V dc / 100 Amp
Batteries		Two, 12-Volt dc, Sealed, Lead-acid type, maintenance-free batteries, 100 Ah each, CCA of 1150 Amps	
Starter		Electric, 24V dc, 7.5kW with Jump-Start protection	
Wiring Protection		Two main fuses and other blade-type, auto fuses for all circuits	
MOLDBOARD			
Width	m / feet	4.87 / 16 (Standard) 5.48 / 18 (Optional)	4.26 / 14 (Standard) / 3.66 / 12 (Optional)
Height	mm / inches	800 / 31.49	720 / 28.5
Thickness	mm / inches	25 / 0.98	16 / 0.62
Arc Radius	mm / inches	414 / 16.29	
Throat Clearance	mm / inches	170 / 6.69	
Cutting Edge			
Width	mm / inches	203 / 8	
Thickness	mm / inches	25 / 1	19 / 0.75
End Bit / side edges			
Width	mm / inches	152 / 5.98	
Thickness	mm / inches	19 / 0.74	16 / 0.62
Drawbar Pull			
Base (0.65)	Base (0.65) kgf	12,900	11,948
Max (0.9)	Max (0.9) kgf	16,543	14,768
Down Force (max)	kgf	17,860	9,900
BLADE RANGE			
Circle Centershift	Feet	16	14
Right	mm / inches	755 / 29.72	762 / 30
Left	mm / inches	746 / 29.37	941 / 37
Moldboard Side-shift			
Right	mm / inches	850 / 33.46	700 / 27.5
Left	mm / inches	850 / 33.46	700 / 27.5



Heading	UOM	Specifications	
		G3200	G2100
Blade Tip Range			
Forward	Degree	40	
Backward	Degree	5	
Maximum Shoulder Reach Outside Of Tires			
Right	mm / inches	2545 / 100.19	2285 / 89.96
Left	mm / inches	2536 / 99.84	2463 / 96.96
Maximum Lift Above Ground	mm / inches	395 / 15.55	438
Maximum Depth of Cut	mm / inches	686 / 27.00	632
Maximum Blade Position Angle / Maximum Blade Angle, Left Or Right	Degree	90	
WEIGHTS			
Gross Vehicle Weight - Base (Fully Fuelled, No Attachments)			
Total	kg / lb	29900 / 65918	18382 / 40513
Front Axle	kg / lb	10250 / 22597	6117 / 13504
Rear Axle	kg / lb	19650 / 43320	12254 / 27009
Gross Vehicle Weight – Fully Equipped (Rear Ripper, Front Dozer, Fully Fuelled)			
Total	kg / lb	33430 / 73700	20700 / 45622
Front Axle	kg / lb	10710 / 23611	6900 / 15207
Rear Axle	kg / lb	22720 / 50089	13800 / 30415



G3200 / G2100 MACHINE DIMENSIONS



PARAMETERS	UOM		DIMENSIONS	
			G3200	G2100
Length – Pushblock To Rear Ripper	mm	L	12529	11786
Length – Front Tire To Rear Of Machine	mm	L1	10875	9841
Wheelbase / Length	mm	L2	7520	6793.5
Blade Base / Length	mm	L3	2902	2622
Length – Between Tandem Axles	mm	L4	1771	1540
Height – Top Of Cab	mm	H	4350	3693
Height To Exhaust Stack	mm	H1	3371	3344
Height To Top Of Cylinders	mm	H2	3394	3218
Height – Front Axle Center	mm	H3	732	736.5
Ground Clearance At Rear Axle	mm		457	375
Ground Clearance At Centre Front Axle	mm		602	455
Ground Clearance At Transmission Case	mm		491	463
Width – Rear Tire Center Lines	mm	W1	2470	1753
Width – Outside Rear Tires	mm	W	3085	2586
Width – Front Tire Center Lines	mm		2388	2027.5
Width – Outside Front Tires	mm		3003	2560.5

*All Dimensions Are Approximate, Based On Standard Machine Configuration With Standard Tyres.



Customer Support and Service Philosophy



Product Quality

All components used in Arx products are next-gen. Our manufacturing infrastructure is the latest and finest in the industry, thanks to our tie-ups with globally proven component suppliers.



Direct Access

Arx provides every customer with a single-point of contact for all queries related to the product, spares and service. We also offer you direct access to the top management for executive level support.



Genuine Spares

Arx offers genuine spares that are tested for reliability and life. We have set up an efficient logistics and delivery mechanism for quick and reliable availability of spares.



Training

We offer all customers hands-on training by a team of experts for machine familiarity, operations & service for effective troubleshooting and optimising equipment performance. On-site training is provided with each machine.



Preventive Maintenance

Regular and systematic monitoring of the Arx equipment is done through on-site inspection and remote monitoring to enable timely identification and resolution of issues.



Transparent Warranty

A transparent and simple warranty administration system to minimise downtime and conflict.

ABOUT ARX

At Arx, we believe in demanding more. More from ourselves and our machines.

Our collaboration with global technology leaders in fields such as Hydraulics, Driveline, Electronics and Fabrication enable us to create products that exceed expectations. With these international collaborations we bring overseas technology together with local expertise to give you the best of both worlds. The Partners we work with are all committed to setting up in India in the short/medium term.

The Arx brand includes a complete range of motor graders, blast hole drill rigs and dust suppression systems that are built to meet any requirement.

The Indital branded products include forklifts, empty container handlers, loaded and empty reach stackers, aircraft towing trucks and pick/carry cranes. Indital is a 34 year old brand leader in cargo handling equipment in India.

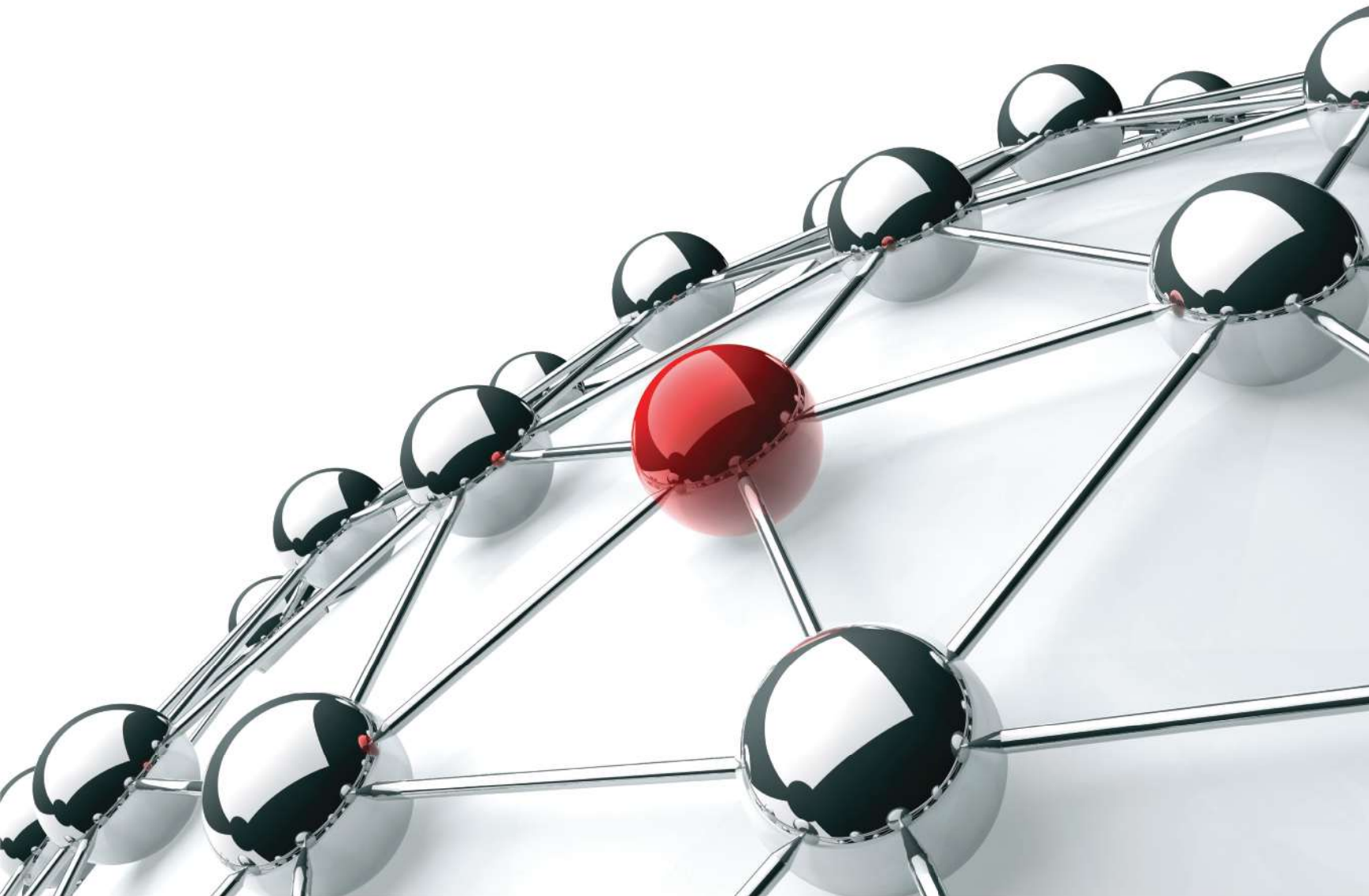
At Arx the primary objective is to bring end-to-end services from application mapping, design and prototyping to produce state of the art products while optimizing the time-to-market.

In addition to all this, Arx is also an authorized dealer for sales and service for HIAB products in India.

The company has a manufacturing unit in Naraspura, Kolar that is certified under ISO 9001:2015.



Embracing the 'Make in India' initiative, our company takes pride in contributing to the nation's growth by locally manufacturing heavy machinery. Aligned with the government's vision, we've established a robust ecosystem fostering innovation, generating employment, and fortifying the domestic manufacturing sector. Our commitment to 'Make in India' is more than rhetoric; it's a cornerstone of our philosophy. Every grader, forklift, reachstacker, drill rig, and dust suppression system we produce adheres to stringent international standards, with globally proven aggregates, crafted with precision and expertise within our country. This approach not only supports local communities and businesses but also showcases the inherent capabilities of Indian manufacturing on a global stage. We dedicate ourselves to not just building machinery but to building a future where **India stands tall** as a hub for high-quality heavy equipment production.





Mining & Construction
Equipment Pvt. Ltd.

Arx Mining and Construction Equipment Private Limited.

Plot No 3 (Part 1) KIADB Narasapura Industrial Area, Kolar, 563133. Karnataka, India.

email: sales@arxmc.com | www.arxmc.com

Published by Arx Mining and Construction Equipment Private Limited , © Arx 2023.

Indital and Arx are registered trademarks in India and certain other jurisdictions.

All rights reserved. No part of this publication may be copied or reproduced without permission of the copyright owner. Illustration and images in the brochure are indicative and may show optional attachments and features. We reserve the right to make changes to the specifications and design without prior notice.