

MACHINE CAPACITY LIST

Warehouse and Crane Facilities

Takoradi Site

Workshop 1

Hook to floor height of 10.5 meter

- 2 x 30 TON Centre Aisles with Synchronized Tandem Lift capacity of 60 Tons
- 2 x 15 TON Outer Aisles with Synchronized Tandem Lift capacity of 30 Tons
- 1 x 15 TON Outer Aisle

Workshop 2

Hook to floor height of 5.5 meter

- 1 x 15 TON Overhead crane

Workshop 3

Hook to floor height of 5.5 meter

- 1 x 15 TON Overhead crane

Tema Site

All cranes in Tema will be relocated to Takoradi

- 1 x 5 TON Electric Gantry crane (Hydraulic shop) Hook to floor height of 3.5 meter
- 5 x 1 TON JIB cranes Hook to floor height of 3.5 meter
- 2 x 4 TON Overhead "A" Frame cranes Hook to floor height of 5 meter
- 1 x 8 TON Overhead "A" Frame crane Hook to floor height of 5 meter
- 1 x 1 TON Overhead "A" Frame crane Hook to floor height of 3.0 meter
- 2 x Mobile Cranes, 23 Ton capacity
- 2 x Forklifts, 2.5 Ton capacity
- 1 x Forklift, 7 ton capacity

Centre Lathes

- 1 x MEGABORE Oil Field Lathe – 3m between centres x 1200mm swing complete with Auto Cycle Threading and Hydraulic copy attachment with full Digital Readout on X & Y axis. This unit has a 14" (355mm) Spindle bore with double chucks.
- 1 x Centre Lathe – 4m between centres x 1050mm Swing
- 1 x Centre Lathe – 4m between centres x 680mm Swing with Cylindrical attachment for Linishing rods up to 4000mm long
- 1 x Centre Lathe – 3m between centres x 710mm Swing

- 1 x Centre Lathe – 2m between centres x 520mm Swing
- 1 x Centre Lathe – 1.75m between centres x 350mm Swing

CNC (Computerized Numerically Controlled) Equipment

- 1 x C.N.C. Machining Centre 950 x 460 x 550mm
- 1 x C.N.C. Machining Centre 1250 x 450 x 550mm
- 1 x C.N.C. Machining Centre Eikon MV 4 CNC 4- Axis
- 1 x XYZ Protturn SLX 555 x 3000mm CNC Lathe
- 1 x TOP AVM Angelini 350mm x 500mm CNC Lathe
- 1 x TOS TRENCHEN SE820 x 2000mm C.N.C Lathe
- 1 x TOS TRENCHEN SE1020 x 3000mm C.N.C Lathe

Universal Milling Machine

- 1 x Universal Milling Machine 870 x 350 x 427 – 7.5kW Drive

Horizontal Boring Mill

- 1 x Horizontal Boring Machine 1250mm table, 2000mm between posts, 1600mm high, 80mm spindle with Digital Readout
- 1 x Horizontal Boring Machine 1600mm table, 4500mm between posts, 3800mm high, 150mm spindle with Digital Readout

Vertical Boring Mill

- 1 x Vertical Boring Machine 1250mm table, 1000mm Window Height, Multiple spindle with Digital Readout

Radial Drilling Machine

- 2 x Radial Drill Morse 5 Taper x 1600mm Reach
- 1 x SM Drilling Machine – Morse 2 Taper
- 2 x Magnetic Drilling units

Cutting Saws

• Beka-mak -820C

PARAMETER	UNIT	UNIT
Round Cutting Capacity	mm	820
Flat Cutting Capacity	mm	850 x 820
Square Cutting Capacity	mm	820
+45° Round Cutting Capacity	mm	480
+45° Flat Cutting Capacity	mm	480 x 820
+45° Square Cutting Capacity	mm	480

Features

- High Vice
- Second Vice
- Lazer Line Pointer
- Chip conveyor
- Hydraulic Top Clamping
- Turn Table

• Beka-mak -560C

PARAMETER	UNIT	UNIT
Round Cutting Capacity	mm	560

Flat Cutting Capacity	mm	570 x 560
Square Cutting Capacity	mm	560
Cutting Speeds	m/min.	20 -100
Working Height	mm	590

Hydraulic Stripping & Assembly Bench

• HEMS HCS-60-L-CE-EX

Tuxco Model	HCS-60-L
Torque Capacity	60,000 lb-ft (8280 kg-m)
Max. Capacity Cylinder Length (Extended)	34 ft. (10.4 m)
Max. Capacity Cylinder Diameter	20 in./30 in. (508 mm/762 mm)
Nut Runner Torque	5,000 lb-ft (690 kg-m)
Nut Runner Speed	8 RPM
Built-In Spanner Wrench	YES
Torquer Stroke Speed	10 in. STROKE (14.0 sec. / ft.)
Rod Extraction/Installation Speed	48 in. STROKE (4.0 sec. / ft.)
Extraction Force	14,700 lbs. (65.4 kN)

• HEMS HCS-30-CE-EX

Tuxco Model	HCS-30
Torque Capacity	30,000 lb-ft (4140 kg-m)
Max. Capacity Cylinder Length (Extended)	22 ft. (6.7 m)
Max. Capacity Cylinder Diameter	16 in. (406.4 mm)
Nut Runner Torque	5,000 lb-ft (690 kg-m)
Nut Runner Speed	8 RPM

Built-In Spanner Wrench	YES
Torquer Stroke Speed	10 in. STROKE (14 sec. / ft.)
Rod Extraction/Installation Speed	48 in. STROKE (5.2 sec. / ft.)
Extraction Force	14,000 lbs. (62.3 kN)

Hydraulic Test Bench

- Parker Pressure Temperature sensor & monitor
- 1 x Hydraulic Test Bench 350 Bar complete with Thermo Control for testing of:
 - Hydraulic Pumps and Motors
 - Hydraulic Cylinders
 - Hydraulic Control Valves
 - Hydraulic Steering Units & Pneumatic Cylinders and Control Valves
 - 5000 PSI MAX Pressure

Ultra-High & Low Pressure Testing Equipment / Certified Chart Recorders

- 1 x 0-60,000 psi pressure test unit complete with high pressure hoses and assorted autoclave fittings
- 1 x 0-6,000psi Hi-Force hand pump and high pressure hose

12/24 Certified Chart Recorders (Individual Stand Alone)

- Various pressure recorders, 0-500 psi, 0-5,000 psi, 0-15,000 psi, 0-20,000 psi and 0-25,000 psi

Digital Gauge Calibrator for Pressure Gauges

- 1 x Crystal 15,000 psi Nvision digital pressure & temperature chart recorder

Flow Meter

- Webtech Flow meters from 10 bar–600bar pressure and flow rates from 5 LPM – 400 LPM c/w with Pressure/Flow/Temperature readout

Hydraulic Press

- 1 x 50 Ton Enerpac Press with window capacity of 1,000mm

- 1 x 400 Ton Enerpac Press with window capacity of 400mm
- 1 x 100 Ton Enerpac Press with window capacity of 1,000mm
- Large selection of hollow jacks from 30 to 200 Ton and various hand and electric pumps up to 10,000 psi available for rental.

Honing Machine

- 1 x Sunnen Automatic Horizontal Honing Machine 64-533mm (2.5" – 20") Diameter x 4,100mm stroke

Torque Multipliers

- 1 x Enerpac 1½" Drive Hydraulic Torque Wrench up to 15 000Nm
- 1 x Enerpac 1 1/2" Drive Hydraulic Torque Wrench up to 8000 Nm
- 1 x Hyforce 2 1/2" Drive Hydraulic Torque Wrench up to 40, 000Nm
- 10 x From 1/4" - 1.1/2" Drive Various Manual Torque multipliers up to 4300Nm

Profile Cutting

- 1 x Burny 25 CNC ESAB Twin Torch Profile Cutter with Magic Eye HL 90 tracing system 10,000mm x 3000mm
- 1 x Burny 25 CNC ESAB Twin Torch Profile Cutter with Magic Eye HL 90 tracing system 3,000mm x 1500mm
- 1 x YK-150 Portable Profile Cutter c/w 1.5m of track
- 1 x YK-450 Portable Profile Cutter c/w 1.5m of track
- 1 x Yukwang Circular Profile Cutter. 100 to 1000mm per minute

Bore Welders

- 1 x Magnetic ID 25 Eutectic Castolin Internal Welding machine from 50mm – 450mm, External 25mm – 170mm
- 1 x Sir Meccanica Rotary Internal Welding machine from 25mm – 600mm and External 25mm – 250mm

Welding Equipment

- 1 x Lincoln CV400-1 AMP Welding Machine
- 4 x Lincoln Vantage 500 AMP Diesel Driven Welding Machine
- 8 x Lincoln Flex Tec 450 AMP Portable welding unit w/LN25 Pro Wire Feeder
- 5 x Lincoln Flex Tec 500 AMP Portable welding unit w/LN25 Pro Wire Feeder
- 1 x Lincoln Flex Tec 600 AMP Portable welding unit w/LN25 Pro Wire Feeder
- 2 x Lincoln Invertec V270-T Portable welding unit

- 1 x Lincoln SAW Welding Machine
- 1 x SAF-FRO 500A Stick Welding Machine
- 1 x Miller – 273 AMP Mig/Mag/Tig Welding Machine
- 1 x Modweld 300i AMP AC/DC MIG/MAG/TIG Welding Machine.
- 1 x Lincoln DC 600A Arc Welding Machine
- 1 x LN 9 Lincoln Wire Feeder Unit
- 1x K930 TIG Module
- 4 x Lincoln Fume Extraction mobile units
- 1 x Arc Data Logger

Variable Speed Welding Manipulator

- 4 x Pema Positioner Variable Speed (0.5 – 3 R.P.M.) Hydraulic Welding Manipulators
Diameter ranging from 32mm – 700mm; Length of component 0 - 5m.

TEMPERATURE STORAGE AND PRESERVATION ROOM

- 1x Consumable Storage Facility maintained at 40 degrees C 24/7 permanently
- Low Temperature Freezer up to -86°C

Pre-Post Heat Treatment

- 1 x Weldom 82KW Heat Treatment Plant c/w Accessories
- 1 x Weldom Water Cooled Induction Pre-Heat Treatment Plant c/w Accessories
- Temperature Calibrator - 0 - 1200°C

Sir Meccanica Line Boring Machine (The latest equipment available)

• WS1 Plus SERIES W

- Boring diameter: 22-180 mm (0.87 - 7.09")
- Welding diameter: 25-250 mm (0.98 - 9.84")
- Tool holder shaft length: 2380 mm (93.70") 3 connectable bars 1000 + 1000 + 500 mm
- Tool holder shaft diameter: 35 mm (1.38")

• WS3 SERIES W

- Boring diameter: 42-800 mm (1.65 - 31.50")
- Welding diameter: 42-800 mm (1.65 - 31.50")
- Tool holder shaft length: 4400 mm (173.23") 4400 mm (173.23") 3 connectable bars 1500 + 1600 + 1600
- Tool holder shaft diameter: 60 mm (2.36")

On-Site Milling, Facing & Drilling

- Portable Milling Head with variable speed controller up to 250mm diameter x 150mm travel
- FMAX 3000 SERIES FMAX
 - Diameter of facing: 1000-3000 mm (39.37 - 118.11")
 - Welding diameter: 1000-3000 mm (39.37 - 118.11")
 - Drilling diameter: 12-100 mm (0.47 - 3.94")
 - Tapping diameter: 2-36 mm (0.08 - 1.42")
 - Radial stroke: 250 mm (9.84")
 - Axial stroke: 200 mm (7.87")
 - Mod centering fasten & support: 800-3000 mm (31.50 - 118.11")
 - Tool holder arm: 1500 mm (59.06")

Brush Plating Power packs

- 1 x 200 Amp/hour Power Pack
- 1 x 300 Amp/hour Power Pack
- 1 x 500 Amp/hour Power Pack

Borescope

- 1 x 60mm Lens Borescope with 200-foot umbilical. Captures colour stills and video footage
- 1 x 20mm Lens Borescope with 100-foot umbilical. Captures colour stills and video footage

GE USM VISION INSPECTION EQUIPMENT

- USM VISION – Ultrasonic Detector, a total weld inspection solution

UT Gauge

- Cygnus UT Gauge for thickness range of 3 – 150mm

Calibrated Pressure Chart Recorders 4, 12 and 24 Hrs.

- 0-500 psi
- 0-5000 psi
- 0-15000 psi
- 0-25000 psi

Shadowgraph Equipment

- Ph-A14 Horizontal Optical Comparator- Series 172 (Shadowgraph c/with digital readout)

Webtech Flow Meter

- From 10 bar-600 bar pressure and flow rates, from 5 LPM – 400 KOM c/w Pressure/Flow/Temperature readout

Inspection Equipment

- Calibrated granite surface tables 1500mm x 1000mm
- Calibrated granite surface tables 900mm x 600mm
- Digital micrometers (up to 3 digits, i.e. 0.000mm)
- Various sizes outside Micrometers 0 – 1,000mm
- Various sizes inside Micrometers 0 – 1,500mm
- Various sizes Vernier Calipers 0 – 1,000mm
- Various standard height gauges 0 – 600mm
- External/Internal spring calipers
- Internal dial calipers
- Dial Test Indicators
- Slip Gauges and Setting Rods for in-house calibration
- Master Ring Gauges for in-house calibration
- T.C. Shore Hardness Tester for rubber and polymer materials
- Tolerance Guide
- Clamp Meters 0 – 1000Amp
- 100 – 500mm \pm 10m long internal measurement of bores with digital display
- Garant digital surface roughness tester with printer
- Thermal infrared Testo 845 (Temperature Gauges)
- 0 – 10,000 psi Chrystal gauge Cal pressure gauge calibrator
- Crystal Nvision digital pressure & temperature chart recorder
- 2 x Hardness testers
- Oil monitor
- NDE Equipment
- Bosch laser level kit c/w 40m range
- Draper laser level kit
- BREN 626 Series electronic cutter stencil machine
- Panasonic Tough Books
- Internal mic 100-1700mm
- Elcometer thickness gauges
- Adhesion Testers
- Dew point & Salt Point contamination meters

- O-ring gauges

Forklift Centre

- Testing Equipment
 - Heavy duty battery discharge tester 6/12V
 - Batter charger 12V
 - Motometer (engine compression tester)
 - Battery connection pliers 24V
 - Testing plugs equipment