بناء BENA للصناعات الحديدية STEEL INDUSTRIES

COMPANY PROFILE

Where Quality Makes a Difference

COIL PROCESSING · METAL FORMING · HOLLOW SECTIONS
STRUCTURAL FABRICATION · PRESS SHOP · CNC CENTRE · MACHINING



AN ALBAWARDI GROUP COMPANY

STEEL PROCESSING AND FABRICATION SINCE 1993

Bena Steel Industries began operating in 1993 as a coil service centre. Over three decades it has added metal forming, hollow-section manufacturing, structural steel fabrication, pressing, CNC cutting and machining, so customers can source processed steel and finished components from one supplier.

Bena is an Albawardi Group company and operates from three industrial sites in Dammam.

1993
Founded as a coil service centre

2012
First ERW tube mill commissioned

3
Industrial sites in Dammam

3
Sales offices: Dammam, Jeddah and Riyadh



SECTORS SERVED

CONSTRUCTION	OIL & GAS	HVAC	ELECTRICAL
MILITARY	RENEWABLE ENERGY	ENTERTAINMENT	TECHNOLOGY

PART OF ALBAWARDI GROUP

Bena Steel Industries (BSI) is part of Albawardi Group (ABG), a diversified Saudi enterprise founded in Dammam in 1957. With interests spanning trading, industry, investment, real estate, logistics, services and food, the Group's reach extends across Saudi Arabia and the GCC. BSI draws on nearly seven decades of business experience, established regional relationships and the stability of a group with deep roots in the Saudi economy.

VISION, MISSION AND VALUES

VISION

To be pioneers and leaders in providing materials, innovative services and solutions for all the industries and projects that require iron & steel in GCC and MENA.

MISSION

Our dedicated commitment to maintain our customers' satisfaction and provide them with quality manufacturing services in an environment of continuous improvement that participates in their growth and exceeding their expectations. This has put us in a continuous race to adopt the highest standards of professionalism. In addition to our commitment to follow the latest means of tech through investing in modern technology and state-of-art machinery.

OUR VALUES

01 WORK ETHIC

We attract and retain competent people, expect high standards of them, and support them in developing their professional and technical skills.

02 OUR PEOPLE

Every employee has equal opportunity in a workplace built on trust, involvement and communication.

03 CUSTOMERS

Service, quality, delivery and support are all directed at meeting or exceeding the expectations of our internal and external customers.

04 ACCOUNTABILITY

Every individual and every team is accountable to the organisation and to our customers for actions and results.

05 INTEGRITY

No compromise on quality, service or commitment.

06 CONTINUOUS IMPROVEMENT

We continually improve the quality, cost and timeliness of our products and services.

07 EQUAL OPPORTUNITY

Employment is offered on an equal basis, regardless of age, race, sex, religion, national origin, disability or other circumstances.

08 HEALTH, SAFETY & ENVIRONMENT

We maintain and continually improve HSE programmes and a management system designed to prevent harm to people, property, processes and the environment.

FROM COIL TO COMPONENT, ONE SUPPLIER

Bena's capabilities are organised into four core divisions. Each topic is listed with the page where it is described.



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COIL SERVICE CENTRE
Slitting, cut-to-length and corrugation

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HOLLOW SECTIONS
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FOUR SITES IN DAMMAM AND RIYADH

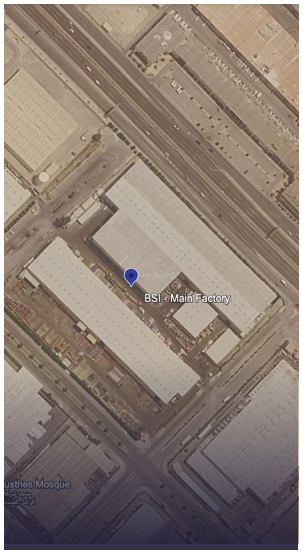
Bena's manufacturing and processing operations are based at three sites in Dammam's First and Second Industrial Cities, in the Eastern Province. A fourth site, in Riyadh, is under development.

Sales offices in Dammam, Jeddah and Riyadh serve customers across the Kingdom.

68,000 m²
Operational site area, Dammam

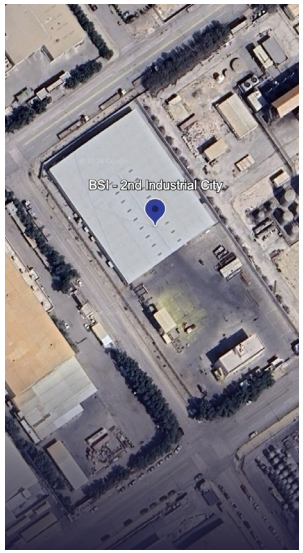
3
Sales offices

19,000 m²
Under development, Riyadh



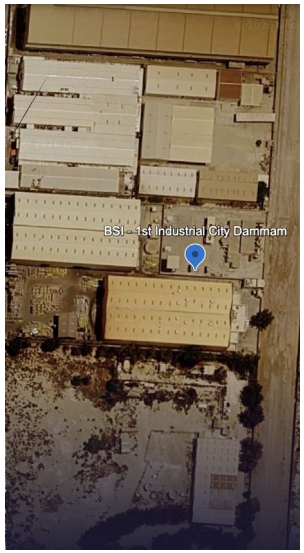
SITE 1 · MAIN FACTORY

40,000 m²
First Industrial City, Dammam



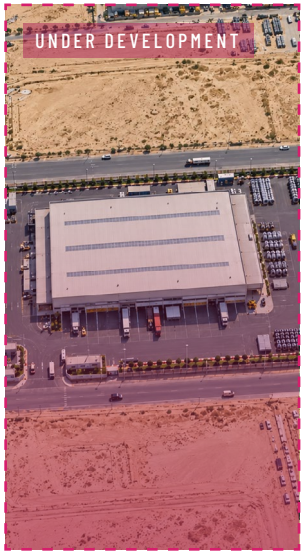
SITE 2

12,000 m²
Second Industrial City, Dammam



SITE 3

16,000 m²
First Industrial City, Dammam



SITE 4

19,000 m²
Industrial City, Riyadh

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SALES OFFICES

DAMMAM

JEDDAH

RIYADH

SLITTING AND CUT-TO-LENGTH SINCE 1993

Coil processing is where Bena began, and it remains central to the business. Automated slitting, cut-to-length and corrugation lines process hot-rolled, cold-rolled, coated, stainless and aluminium coils.

Coils are converted into sheets, plates, slit coils and skelp, cut to the sizes each customer specifies.

3
Cut-to-length lines

2
Slitting lines

16 mm
Maximum cut-to-length thickness

30 t
Maximum coil weight



CUT-TO-LENGTH LINES

LINE	SHEAR TYPE	MAX. WIDTH	THICKNESS	CUT LENGTH	COIL ID	COIL OD	COIL WT.
CTL 1	Mechanical	1,300	0.50–3.00	1,000–8,000	508/610/710	1,500	15
CTL 2	Mechanical	2,000	2.00–16.00	1,200–18,000	508/610/710	2,000	30
CTL 3	Rotary	1,600	0.30–2.80	550–5,800	508/610	1,800	20

Dimensions in mm; coil weight in tonnes. Slitting and corrugation lines are listed overleaf.

SLITTING AND CORRUGATION

Two slitting lines produce slit coils and skelp for tube making and further processing. A dedicated line produces corrugated sheet from pre-painted, galvanised and aluminium coil.

SLITTING LINES

LINE	THICKNESS	SLIT WIDTH RANGE	COIL ID	COIL OD	COIL WT.
Slitter 1	0.23–1.20	100–1,010	508/610	1,300	10
Slitter 2	0.40–3.50	100–1,550	508/610/720/750	1,800	22
Slitter 3	1.50–8.00	100–1,990	508/610	2,000	30

CORRUGATION LINE

LINE	MAX. WIDTH	THICKNESS	SHEET LENGTH	COIL ID	COIL OD	COIL WT.
Line 1	1,220	0.30–0.70	500–12,000	508–610	1,500	7

Materials: pre-painted (PPGI), aluminium and galvanised (GI) coil.

MATERIALS PROCESSED ON CUT-TO-LENGTH AND SLITTING LINES

HR	Hot-rolled	**GI**	Galvanised	**PPGI**	Pre-painted galvanised
HRC	Hot-rolled chequered	**AZ**	Aluzinc	**ALUM**	Aluminium
CR	Cold-rolled	**SS**	Stainless steel	**ETP**	Electrolytic tinplate

All dimensions in mm; coil weight in tonnes.



ERW TUBES, ROUND, SQUARE AND RECTANGULAR

Bena commissioned its first ERW tube mill in 2012, building on its coil-processing base.

In the electric resistance welding (ERW) process, steel strip is roll-formed into a round section. The strip edges are heated by electrical resistance and pressed together by rollers to form a pressure weld, and the external weld bead is trimmed immediately after welding.

Square and rectangular sections are produced by passing the round tube through shaping rolls.

2012
First ERW tube mill

26.9–114.3 mm
Round section outside diameter

20–100 mm
Square section sizes

1.0–4.5 mm
Wall thickness range



SIZE AND WALL THICKNESS

Wall thicknesses available for each section size. Other sizes and thicknesses may be available on request.

ROUND SECTIONS

NOMINAL SIZE	OD	WALL THICKNESS
3/4"	26.90	1.00–3.00
1"	33.80	1.00–3.00
1 1/4"	42.50	1.20–4.50
1 1/2"	48.40	1.20–4.50
2"	63.30	1.20–4.50
2 1/2"	76.00	1.20–4.50
3"	88.80	1.20–4.50
4"	114.30	1.20–4.50

SQUARE SECTIONS

SIZE	WALL THICKNESS
20 × 20	1.20–2.00
25 × 25	1.00–3.00
30 × 30	1.00–3.00
40 × 40	1.00–4.00
50 × 50	1.00–4.00
60 × 60	1.00–4.00
75 × 75	1.00–4.00
80 × 80	1.20–4.00
100 × 100	1.20–4.00

RECTANGULAR SECTIONS

SIZE	WALL THICKNESS
30 × 15	1.00–4.00
40 × 20	1.00–4.00
50 × 25	1.00–4.00
60 × 30	1.00–4.00
80 × 40	1.00–4.00
100 × 50	1.00–4.00
120 × 60	1.00–4.00

All dimensions in mm.

FABRICATION FOR INDUSTRIAL AND COMMERCIAL PROJECTS

Structural steel fabrication was the third stage of Bena's development. The fabrication centre handles a wide range of work, from oil and gas installations to commercial buildings.

The centre has completed projects for Saudi Aramco and other major companies.



FABRICATED PRODUCTS

Beams and girders	Pipe racks	Stair treads
Columns	Sleepers	Caged ladders
Bracings	Base plates	Fabricated gratings
Rafters	Compression and bearing plates	Fabricated tread plates
Purlins	Anchor bolts	Brackets
Truss members	Handrails	Sign boards
Monorail beams	Stair stringers	Built-up beams

FROM APPROVED DRAWING TO PRODUCTION

01
DETAILING
Shapes, sizes and grades are agreed at quotation and estimating stage, in line with the contract or the customer's key plan.

02
SHOP DRAWINGS
Detailed shop drawings and bills of materials are produced and checked, legible for the customer or third-party checker.

03
APPROVAL
Drawings are submitted for approval and returned marked "ready for construction". Any discrepancy raised by the checker is corrected.

04
RELEASE
Engineering releases approved drawings to the shop floor stamped "Approved for production".

05
REVISION CONTROL
Customer revisions are applied to the affected parts, and superseded drawings are replaced with the changes recorded.

CUTTING, DRILLING & PUNCHING

- Peddinghaus CNC plate processor (punching and plasma cutting)
- Peddinghaus CNC angle line, CNC band saw and CNC beam drill line
- Ficep plate processor, beam coping, beam saw and beam drilling lines
- Amada beam-line cutting machines (H-900)
- ESAB CNC oxy-fuel cutting machine; plasma cutting machines
- Radial drilling up to 45 mm; magnetic portable drills (2)

BENDING & SHEARING

- Darley bending machine and shearing machine, 6 m
- Dong Jin shearing machine, 3 m
- Kingsland ironworker
- CNC and NC pipe-bending machines

WELDING & HANDLING

- SMAW welding machines (20) and FCAW welding machines (16)
- Lincoln Electric submerged-arc welding
- Stierli beam positioner
- Overhead cranes: 10 t (5) and 5 t (2)
- Forklifts 5 t and 7 t; side loader 5 t

BLASTING, PAINTING AND COATING

Fabricated steel is blasted, painted and cured in-house before dispatch. The facility combines automatic continuous blasting, manual painting and automatic oven curing.

Bena also produces pre-painted corrugated steel sheet and operates a powder-coating and painting facility.





EQUIPMENT

Continuous automatic blasting line	Graco Xtreme 70 airless sprayers (3)
BCE shot-blasting machine	Graco Xtreme 56.1 airless sprayer
Manual painting with automatic oven curing	Ingersoll Rand compressor
Powder-coating and painting facility	Keen electrode drying oven

ROLL-FORMED PURLINS AND FAN RINGS

Metal forming has been part of Bena since its early years. The division roll-forms C- and Z-purlins and U-channels for structural and industrial applications, and rolls large fan rings for the oil sector.

Profiles and sizes can be adjusted to suit each customer's design.

1.5–3 mm
Thickness

1–12 m
Length

20 t/day
Purlin production capacity



STANDARD PROFILE RANGE

PROFILE		WEB	FLANGE	LIP
C-section		80–350	40–90	10–25
Z-section		120–350	40–90	10–25
U-channel		80–350	10–50	–

NOTES

All dimensions in mm.
U-channels are formed without a lip.

STAMPED AND FORMED COMPONENTS, 50 TO 600 TONNES

The Press Shop produces stamped and fabricated sheet-metal components in volume, with consistent accuracy from part to part.

Mechanical, pneumatic and hydraulic presses cover the range from 50 to 600 tonnes, so components of very different sizes and complexity can be made in-house. Alongside its own product range, the Press Shop takes on pressings to customer drawings.

50–600 t
Press capacity range

0.6–6 mm
Material thickness



PRESS TYPES

MECHANICAL | **PNEUMATIC** | **HYDRAULIC**

PRODUCT RANGE

1. Wheelbarrows
2. Building hardware
3. Cable trays
4. Metal cabinets and enclosures
5. AC outdoor-unit brackets
6. LCD/LED TV brackets
7. HVAC duct corners
8. Inline circular ventilation fans
9. VCD handles and quadrants
10. Kitchen hoods
11. Custom sheet-metal products to client requirements

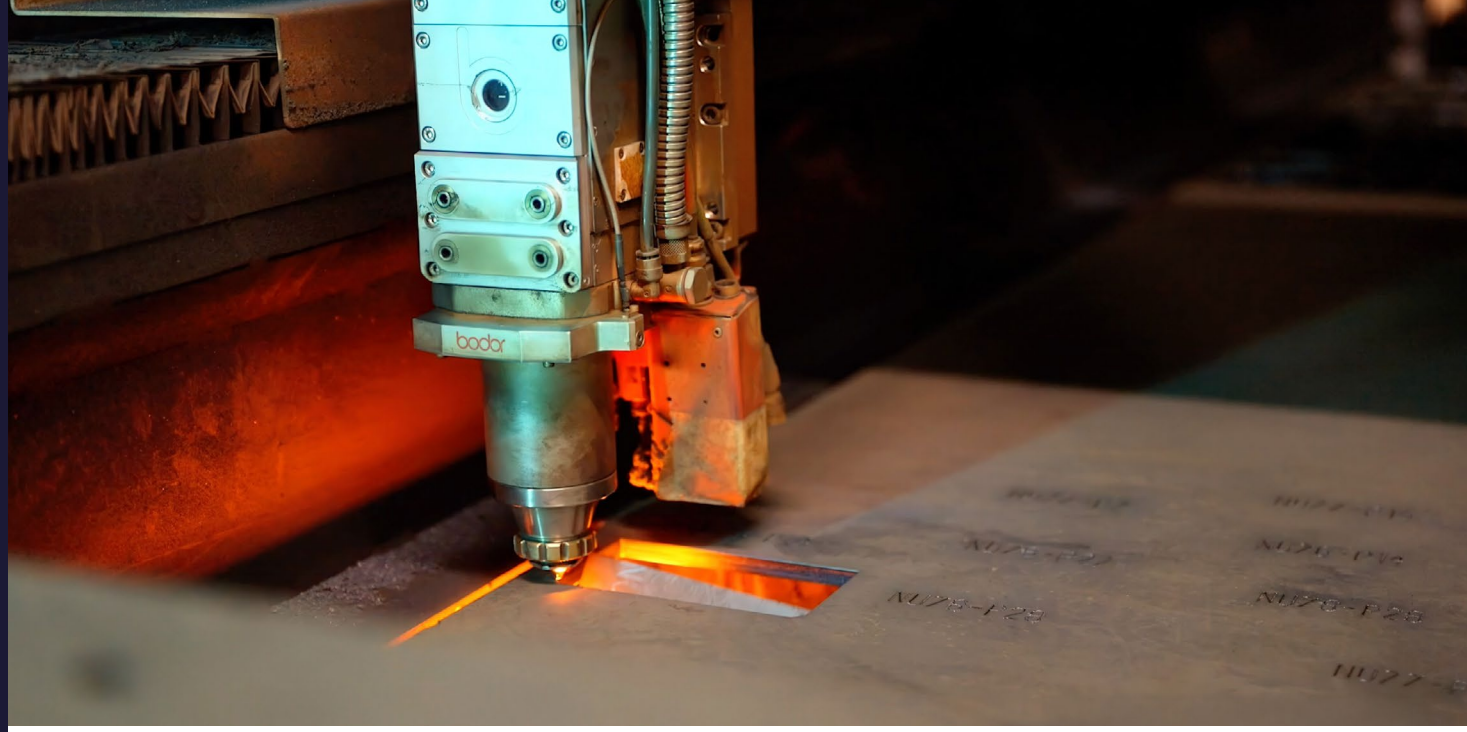
PRECISION CUTTING, BENDING AND SHEARING

The CNC Centre cuts, bends and shears sheet and plate to customer drawings with high accuracy and repeatability.

A heavy-duty laser cutting machine handles sheets up to 1,500 × 6,000 mm. CNC press brakes and hydraulic NC shearing machines complete the sheet-metal cutting and bending process.

12 mm
Maximum laser cutting thickness (carbon steel)

6 m
Maximum bending and shearing length



CAPABILITIES

PROCESS	CAPACITY
CNC laser cutting	Sheet size up to 1,500 × 6,000 mm; thickness 0.6–12 mm (carbon steel)
CNC press-brake bending	Length up to 6 m; thickness up to 6 mm; up to 12 mm for lengths up to 3 m
Hydraulic NC shearing	Thickness up to 12 mm; length up to 6 m

MACHINING, MAINTENANCE AND REFURBISHMENT

A fully equipped machine shop provides precision machining, maintenance and refurbishment of industrial components.

It serves Bena's own production departments and external clients, with fast turnaround and accurate results.



FACILITIES

1	Horizontal surface grinding
2	Vertical surface grinding
3	Cylindrical grinding
4	Light and heavy-duty lathes
5	Complete machining of tools, spare parts and accessories

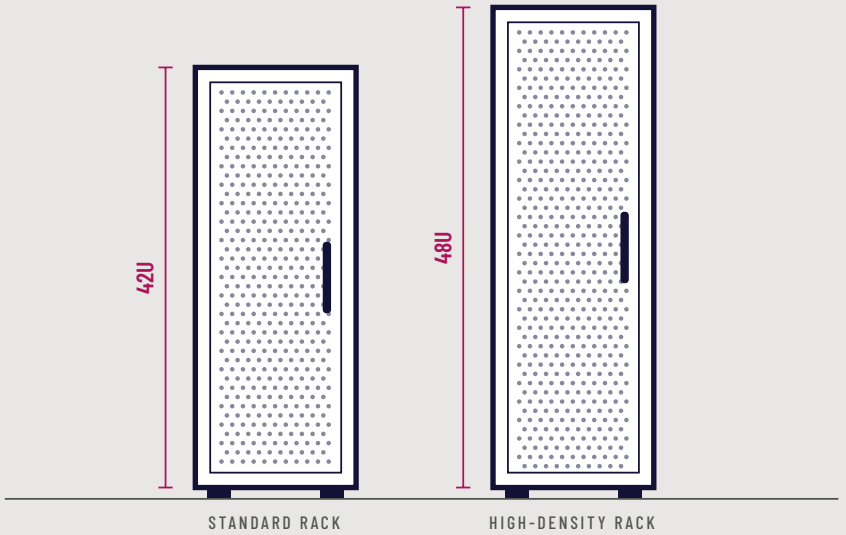
RACKS AND ENCLOSURES FOR DATA INFRASTRUCTURE

Bena is developing a range of data server cabinets and racks for data centres and edge installations.

Designs are suited to Saudi Arabia's operating conditions, with airflow features for stable operation under high thermal loads, and custom engineering options are available.

42U
Standard racks

48U
High-density racks



ILLUSTRATION

RACK AND ENCLOSURE TYPES
42U standard racks
48U high-density racks
Fully enclosed cabinets
Wall-mount racks for edge computing

DESIGN FEATURES
Copper and fibre cable management
Scalable power distribution
Cooling-ready design; doors up to 80% perforated
Hot-aisle / cold-aisle compatible

QUALITY CHECKED AT EVERY STAGE

A dedicated QA/QC team inspects work from receipt of material to dispatch, covering receiving, in-process, dimensional, welding and coating inspection, with document control.

Shop drawings are approved by the customer before production, and revisions are controlled through to the shop floor.

Health, safety and environmental programmes are maintained and continually improved to prevent harm to people, property, processes and the environment.



INSPECTION

- Receiving inspection
- Material inspection
- In-process inspection
- Dimensional inspection
- Welding inspection
- Coating inspection

CERTIFICATION AND APPROVALS

BSI is certified to ISO 9001, ISO 14001 and ISO/IEC 27001, and is an authorised ConXtech steel fabricator.

ISO 9001	ISO 14001	ISO/IEC 27001	CONXTECH
QUALITY	ENVIRONMENT	INFORMATION SECURITY	AUTHORISED FABRICATOR

INDUSTRY APPROVALS

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