

ASRS & Knitting / Warehouse Building – Phase 1 (Design & Build Package)

How Are You Industrial Project – Dhaka–Mymensingh Highway, Mawna, Bangladesh

Project overview. The package covers the design, construction and completion of a new ASRS (Automated Storage & Retrieval System) and Knitting/Warehouse building integrated as one facility, including associated MEP works and coordination with ongoing 24/7 production operations through phased construction planning.

Key concepts / requirements.

- Maintain live-factory interface: production remains operational (24/7) during construction; coordinate access, phasing, and safety.
- ASRS design intent: minimise internal column rows within enclosed storage space to 2 rows; design for high racking point loads.
- Structural loading criteria (ASRS): 7 ton/m² floor loading and 11.5 ton at racking column point (as noted in Employer's Brief).
- Knitting building clear heights: GF Fabric WHSE (12 m clear + 1.5 m services), 1F Yarn WHSE (6 m clear + 1.5 m services), and knitting floors above.

Storey summary (as described).

- Knitting/Warehouse building levels: Ground Floor + 1st Floor + 2nd-4th Floors (total 5 storeys) with Roof level above.
- 11 kV Power Station: Ground Floor + 1st Floor (2 storeys).
- Boiler Room (GF) and Compressor Room (1F) are shown as dedicated facilities in the revised master plan.

Master plan structures and floor areas (as indicated on the revised master plan).

Structure / facility	Floors / level	Floor area
Utility Building - Gas & Diesel Generator (GF)	1 storey (GF)	22,700 sft
11 kV Power Station	GF + 1F	4,220 sft (GF) + 4,220 sft (1F)
Production Building	Main production + support	Production: 194,548 sft; Office: 12,820 sft (GF) + 12,820 sft (1F); Auto Dispensary (Indoor): 16,747 sft; Auto Dispensary (Indoor): 5,230 sft
ETP/WTP	Plant area	45,885 sft
Outside Substation (33 kV)	Outdoor facility	4,305 sft
Water Reservoir - Location 01	Reservoir areas	Area 01: 15,236.5 sft; Area 02: 3,625 sft
Boiler Room	GF	2,325 sft
Compressor Room	1F	2,325 sft
Chemical Store	Single floor	4,000 sft

BoQ-derived floor-area indicator (Excel): Reference quantity for "Concrete Floor FF=40 FL=30" is 33,000 m² (treated floor finish area) and layout/marking reference quantity is 8,360 m² (indicative building footprint). These quantities are taken from the BoQ and may not represent the gross built-up area.