

# Arch Sheet Roof Building Machine

This arch sheet roof building machine is designed for constructing arched roofs on-site. It forms and curves metal sheets into arched shapes, allowing for rapid and efficient roof construction.



## ADDITIONAL IMAGES



## Overview

### Mobile Arch Roof Production System

This arch sheet roof building machine is a self-contained, mobile solution designed for the on-site construction of large-span arched roofs. It eliminates the need for traditional trusses by forming and seaming metal sheets into self-supporting structures, making it ideal for warehouses and agricultural facilities. The system is mounted on a trailer for easy transportation and features a professional-grade control system for precise, automated operation.

## Performance Metrics

### Operational Speeds

**15 m/min**  
Forming Speed

**13 m/min**  
Bending Speed

**16 m/min**  
Seaming Speed

## Technical Specifications



Fully mobile system mounted on a trailer with support legs for stable on-site operation.

### Power Requirements

Component	Power Output
Total Motor Power	15.2 KW
Roll Forming Motor	5.5 KW
Cutting Power	3.0 KW
Bending Power	3.0 KW + 1.5 KW
Seaming Power	1.1 KW + 1.1 KW

Machine Dimensions	8900mm x 2100mm x 2300mm (With Single Axle 4 Tires)
Total Weight	10 Ton

## Material Processing

### Material Capabilities

Parameter	Specification
Feeding Width	600 mm
Effective Width	305 mm
Coil Thickness	0.5 - 1.6 mm
Using Rate	50.8%

## Construction Quality



The robust forming station uses high-quality steel rollers to shape metal sheets into consistent arched profiles.

### Component Materials

- Roller: 45# High-Quality Steel (Quenched HRC 55-65, Hard Chrome Plated)
- Shaft: 45# High-Quality Steel (Galvanized)
- Cutting Blade: 12CrMov Material (Heat Treated)
- Bending Leaf: 10mm Thickness (CNC Processed)

## Operational Features

### Cutting Method

Mechanical Cutting • Length-Set Cutting

### Molding Steps

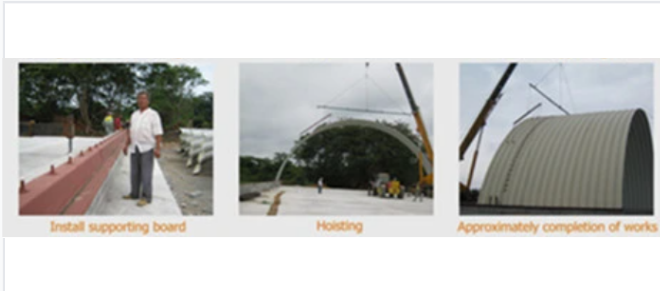
13 + 1 Steps

## Service & Support

### Support Services

Overseas Technical Guidance, Custom Design Engineering, In-house Accessory Manufacturing, After-sales Follow-up, Safety Export Standard Compliant

## Workflow



Visual guide of the installation process including hoisting and final assembly of the arched roof.



Detailed workflow showing the transition from straight sheet to finished arched sections and the sewing process.

### Construction Workflow

- Feeding sheet metal
- Processing into straight sheets
- Forming into arched profiles
- Sewing multiple arch sheets together
- Hoisting and installation on pre-embedded supports