



KS-1420

**SPECIFICATIONS**

Effective: 03/01/10

**Stud and Track Roll Forming Machine and Accessories**

**Profile Specifications**

- **Profile Sizes:** Studs: Web: 3.625, 6.00, 8.00, 10.00, and 12.00-in  
Flange: 2.00 and 2.50-in  
Lip: up to 0.75-in
- Track: Web: 3.70, 6.08, 8.08, 10.08, and 12.08-in  
Flange: 2.50-in Maximum  
Lip: N/A
- **Profile Dimensions:** Refer to Knudson Engineering Data or Knudson Profile Drawing for details
- **Material Types:** Steel: Galvanized, Painted, Pre-Finished, or Bare
- **Material Thickness:** Steel: 0.027 to 0.078-in/ 20-14ga
- **Material Strength:** Steel: Max Tensile Strength = 52-ksi  
Max Yield Strength = 48-ksi
- **Material Strip Width:** Minimum: 7.38-in  
Maximum: 17.75-in

---

**Machine Specifications**

- **Mechanical Systems**
  - **Dimensions:** Length: 192.00-in (4881-mm)  
Width: 36.00-in (923-mm)  
Height: 50.00-in (1270-mm)  
Weight: 4500-lbs (2048-kg)
  - **Production Speed:** 60-ft/min Nominal Throughput (+/- 2-ft/min)
  - **Roll-Forming:** Twelve (12) Powered Roll-Forming Station
  - **Drive Train:** Power Source: Electric Motor/Hydraulic Pump  
Power Take-Off: Hydraulic Actuators: hydraulic Motor and Cylinder(s)  
Drive/Forming Rollers: Gear/Sprocket/Roller Chain Drive  
Main Drive Speed: 61 rpm @ 3.75-in Drive Diameter
  - **Shear Assembly:** Hydraulic Cylinder Actuated  
Exit-End Mounted
  - **Coil Handling Equip.:** Spool: 13.25-in wide, 20-in ID, and 5,000-lbs max (optional)  
Spool Stand: Traveling – 5,000-lbs max (optional)
  - **Noise Emissions:** Equivalent continuous A-weighted sound pressure level = less than 70 dB (A)



**KS-1420**

**SPECIFICATIONS**

**Effective: 03/01/10**

**Stud and Track Roll Forming Machine and Accessories**

➤ **Electrical Systems**

- **Electrical Power:**
  - Line Voltage = 230 VAC (+/- 10%)
  - Line Current = 40 Amps recommended
  - Line Frequency = 60 Hz (+/- 1%)
  - Line Phase = three phase (3 Ph)
  - Full Load Current = 20.8 Amps (230 VAC)
  - Electrical Drawing = See drawing provided by AMS included with documents

- **Control System:**
  - Digital Batch Controller, Operational Interface
  - Jog Forward, Reverse Selector Switch
  - Shear Manual Pushbutton
  - Punch Manual Pushbutton

- **Safety Features:**
  - E-Stop Switch (2)
  - Safety Circuit
  - Covers: Lids, Sides

➤ **Operational Environment**

- **Ambient Air Temperature:** +41 to +131-degree Fahrenheit (+5 to +55-degree Celsius)  
Up to 24 hours at +122-degrees Fahrenheit (+50-degrees Celsius)
- **Humidity Range:** No Restrictions
- **Altitude Range:** No Restrictions
- **Vibration Shock and Bump:** Minimal vehicular transport on maintained roads  
Off-road transportation not recommended
- **Transportation and Storage:** -13 to +131-degrees Fahrenheit (-25 to +55-degrees Celsius)  
Up to 24 hours at +158-degree Fahrenheit (+70-degree Celsius)
- **Explosive Atmosphere:** Should not be operated in any kind of explosive atmosphere