

8000 Metric Ton Forge Press Line

Section 1 - Introduction

A press line is available for purchase that consists of one (1) 8000 Metric Ton National MaxiPress and One (1) 4000 Kw Inductoheat induction Heater.

This line was originally installed at the facility in 2012. The 8000 Metric Ton MaxiPress was rebuilt at that time. Included was all new electrical and pneumatic controls including an Angstorm tonnage monitoring system.

The total production hours on this line since installation amounts to approximately 2015 hours. The reason for the availability is the product line that it was originally installed for declined to a point that other production lines could absorb the volumes.



The line is presently operational and can be seen by arrangement only.

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Section 3 – Equipment Specifications

Forge Press

Press Manufactured by:	The National Machinery Company Tiffin, Ohio USA 44883
Description:	National 8000 Metric Ton High Press forging Maxi-Press
Eaton Property No:	1066
Parts Catalog:	#P-185B MaxiPress
Friction Clutch:	V-Belt Drive
Total Approximate Press Weight:	1,400,000#
Strokes per Minute:	34
Floor Space F-B x R-L:	19'-11" x 20'-11"
Die Space F-B x R-L:	62" x 72"
Side Windows (Unobstructed):	38"W x 55"H
Height of press above floor:	24'-8"
Height of press below floor:	76"

General Specification Dimensions:

Stroke Length	18"
Shut-height adjustment	55"
Diameter of eccentric bearing	53-1/4"
Width of eccentric bearing	40-3/4"
Diameter of tie rods	24"
Diameter of upper K.O. pin	4"
Diameter of lower K.O. pin	4"
Maximum stroke of upper K.O. pin	4"
Maximum stroke of lower K.O. pin	5"

Weights

Press

Bottom Section Bedframe	238,600 #
Center Section Bedframe	168,500 #
Top Section bedframe	189,600 #
Four Tie Rods with Nuts	51,000 # each
Heading Slide, Pitman and Wrist Pin Assembly	129,600#
Main Gear and Clutch Assembly	6,600 #
Eccentric Shaft	63,000 #
Pinion Shaft	17,200 #
Flywheel Assembly	43,100 #
Main Bearing	20,300 # each

Other

Fixture Total Weight	56,000 #
Induction Heater	55,000 #
Power Cubicle	26,000 #
Press Motor	10,000 #

Motor Data – Forge Press

Reliance 500/125 Hp, 440V/3Ø/60 Cycle

Secondary Fused for 115 V

Slower speed is 720/360 Rpm

Required 3600 Cubic feet/minute of cooling air

Allowed for 0.2" of water static drop in incoming air duct

Intake opening on each side is 24"W x 29"H

Power factor is 95% between motor and motor starter

Capacitance for 500/125 Hp motor is 175 Kvar at High Speed

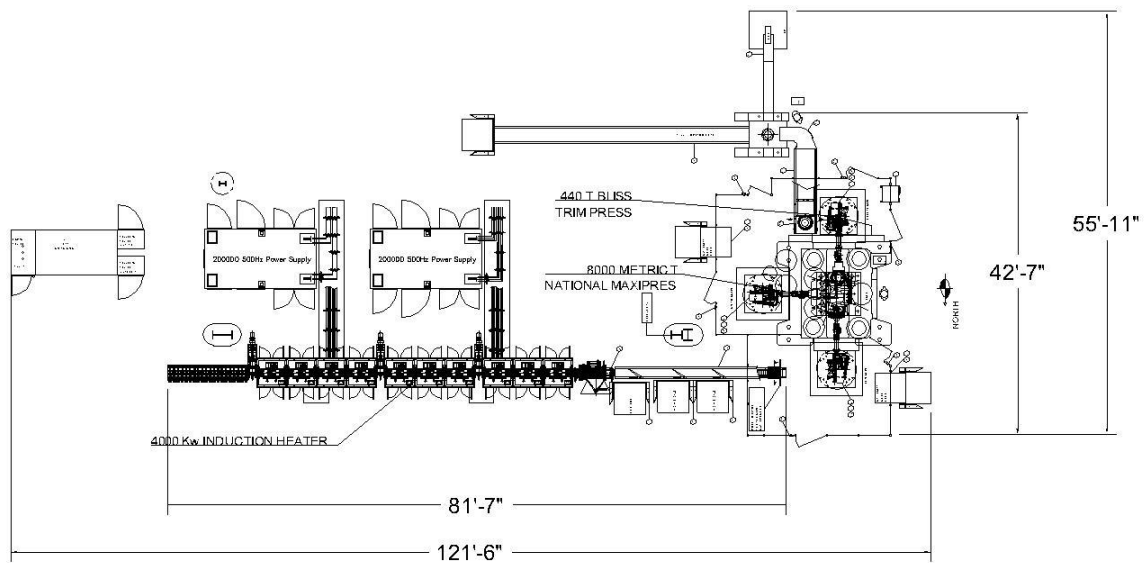
Material Specifications

Crankshaft:	0.30/0.40% Carbon 1.6/2.0% Nickel 0.60/0.90% Chrome 0.05% Max Phosphorus with minimum of 15% elongation 40% reduction of cross section area.
Pitman, Wrist Pin & Pinion Shaft	SAE 4140 Forging
Main Gear	SAE 4141 Steel Casting
Main Pinion	SAE 4360 Forging
Tie Rod	SAE C-1045 Steel Forging
Bed Frame:	ASTM A27-60 Grade 60-30 Steel Casting
Heading Slide (Ram):	ASTM A27-60 Grade 60-30 Steel Casting
Main Journal and Pitman Bearing:	#71 Bronze modified with 3% Nickel (ASTM B143-61 Alloy IB)

Induction Heater

Manufactured by:	Inductoheat Madison Heights, MI
Application:	Induction Heating for Forging.
Material:	Steel
Billet Cross-section:	4.25Ø - 6.00 Rcs
Billet Lengths:	5.625 - 16.563"
Production Rate:	23,150 lbs per hour @ 4000 Kw for a 6"RCS Billet
Temperature Required:	From ambient (70° F to 2282° F with ± 75° F surface to center temperature differential (at coil end).
Specifications:	Two (2) 2000kW, 500Hz Dual Trak 12 Pulse VIP Power Supply, each power supply has frequency, current, voltage and kilowatt meters in the door.

Section 4 - Existing Equipment Layout



8000 METRIC TON NATIONAL MAXIPRES FORGE PRESS LINE
4000 Kw INDUCTION HEATER
440T BLISS TRIM PRESS

Section 5 – Photos

