

ACE Group

Qty. 1 Second-hand aluminum extrusion press line

Extrusion press 1600 Ton Billet diameter: 178 mm (7")

Billet buffer, heater and shear, extrusion press, drives and run-out table, cold saw and transport system, age oven, crane, die winches

Technical information

1. Billet buffer, -heating, -shearing:

a. Buffer Supplier: Elhaus

Type: Custom made for S-Ofen LM 200 (Blockoven)

Sections: Transport: 1

Buffers: 1

Billet speed: 10 m/min

Billet length: 6000 mm

Billet diameter: 178 mm (7")

Billet Amount: max. 21 (inclusive biller before oven)

Motor power: 1,1 kW

Dimensions (l*w*h): 6500*2600*1000 (aprox.)

b. Oven Supplier: Elhaus

Type: S-Ofen LM 200 (Blockoven) Direct heated.

Sections: 4

Preheat 4500 mm

Heat (3 zones): 1500mm each

Heating capacity 2,5 Ton/h at 480 °C from 20 °C

Gasconsump./ 2,5 Ton/h: 61,75 m³/h (@7600kCal/Nm³ natural gas)

Gas pressure:

Billetspeed: 10 m/min

Billet Amount: 6,25 billets/h

Max. Billet temp. 550 °C

Norm. Billet temp. 450 to 520 °C

Motor power: Transportsystem: 2,2 kW

Circulation ventilation: 4 kW(low)/16 kW(high) each (Dahlander motor 3 motors)

Combustion air: 4 kW

Dimensions (l*w*h): 9720*1500*2500 mm (aprox.)

Weight (approx) 3 ton

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c. Shear Supplier: Elhaus

Type: 175 FK	Sections: 3	
Pinch roll drive	Number of pair of rollers: 4	Drive speed: 10 m/min
<u>Shear drive:</u>		
Shearing Force:	max. 100 Mp (980,7 MN) at 205 bar	
Shearing stroke:	270 mm	
Shearing speed:	36/75 mm/s (advance/return)	
<u>Discharge drive:</u>		
Push-out force:	2,6 Mp (25498.2 kN) at 100 bar	
Push-out stroke:	256 mm	
Push-out speed:	220/230 mm/s (advance/return)	
<u>Billet clamping force:</u>		
40 Mp (392280 kN) at 600 Bar.		
Opening/closing stroke:	2*3 mm	
<u>Billet dimensions:</u>		
Billet diameter:	178 mm (+0/ -2,0 mm)	
Billet length sheared:	250 to 700 mm	
Bow of logs:	max 3 mm/m	
Hydraulic power station:	Max. pressure: 350 Bar	
Operating pressure :	250 Bar	
Capacity:	105 and 34,4 l/min.	
<u>Motor power:</u>		
Transportsystem:	2*2,2 kW	
Hydraulic power station	18,5 and 7,5 kW	
Dimensions (l*w*h):	2050*1500*2220	
Weight	(aprox) 4 ton	
Control system:	Relay controlled , with separate temperature controllers	

2. Extrusion press:

a. Supplier: Sutton Engineering / Breda Fucine

b. Press capacity forward:

- i. Main Ram@ 210 bar: 1483 MT
- ii. Diameter: 945 mm
- iii. Effective area: 7030 cm²
- iv. Side cylinders @ 210 bar: 111 MT
- v. Diameter: 184 mm (2 cylinders)
- vi. Effective area 529 mm²
- vii. Speeds:
 - a) Fast advance 0-17100 mm/min
 - b) Slow 0-8640 mm/min
 - c) Extrusion 0-1780 mm/min

viii. Total press capacity: 1483+111= 1594 MT @ 210 bar

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c. Press capacity return:

- i. Main Ram@ 210 bar: n/a
- ii. Diameter: n/a
- iii. Effective area: n/a
- iv. Side cylinders @ 210 bar: 59 MT
- v. Diameter: 184/127mm (outer/rod) (2 cylinders)
- vi. Effective area 277 mm²
- vii. Speeds:
- viii. Return 0-23600 mm/min

d. Container

- i. Length 725 mm
- ii. Bore 180 mm
- iii. Min length 300 mm
- iv. Max length 700 mm
- v. Heating 30 kW
- vi. Cylinders opening:
 - a) Diameter 203 mm/each
 - b) Effective area 645 mm²
 - c) Opening force 136 MT @ 210 bar
 - d) Breakthrough 225 MT @ 345 bar
- vii. Cylinders closing/sealing:
 - a) Diameter 203/114 (outer/rod) mm/each
 - b) Effective area 438 mm²
 - c) Closing 93 MT @210 Bar
 - d) Sealing 145 MT @ 310 bar

e. Die stack tooling 317*330,2 mm (D*thickness)

- i. Cylinder:
 - a) Diameter 127 mm
 - b) Effective area 129 mm² (telescopic)
 - c) Capacity 27 MT @ 210 bar
- ii. Speeds:
 - a) Die slide in: 0-25400 mm/min
 - b) Die slide out: 0-25400 mm/min

f. Billet loading:

- i. Speeds:
 - a) Loader up: 20300 mm/min
 - b) Loader down: 25400 mm/min

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h. Butt shear:

i. Cylinder:

- a) Diameter 175 mm
- b) Effective area 180 mm² (telescopic)
- c) Capacity 51 MT @ 210 bar

ii. Speeds:

- a) Down (shearing) 0-25000 mm/min
- b) Up (return) 0-33000 mm/min

i. Dead cycle (mean): 22 sec.

j. Control system:

- i. Controller: Allen Bradley PLC 2/30
- ii. Prop. Valves Herion controller.

k. Hydraulic power system

i. Main pumps: 2 x Bruenighaus 740CV3000V2100 (3

- a) Capacity 450 l/min
- b) Pressure 210 Bar
- c) Motor 140 kW/1000 rpm

ii. Billet loading: Vickers 45V60

- a) Capacity 190 l/min @ 34 bar
- b) Motor 17,5 kW/1500 rpm

iii. Cooling/ filtering: Vickers 45V60

- a) Capacity 190 l/min @ 7 bar
- b) Motor shares with pilot pressure

iv. Pilot pressure: Denison

- a) Capacity 28 l/min @ 25 bar
- b) Motor 14,5 kW / 1000 rpm

v. Electrical power/peak 475 kVA

l. Utilities:

- i. Tank: 4500 liter
- ii. Cooling water 378l/min @ 20 °C

3. Drive and Run out table

a. Supplier: Clark automation Inc.

c. Length 45,72 m (exclusive hotsawsection)

d. Width: 584 mm

e. Max speed 60 m/min (aprox.)

- i. New frequency controlled AC system in 2003, to replace the DC control unit. 11 kW

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f. Hot saw:

- i. Length section aprox. 8 m
- ii. Diameter blade 500 mm
- iii. Motor power 1,5 kW
- iv. Cooling fans 0,25 kW (20 p.)
- v. Cooling fans 1,1 kW (7p.)
- vi. Cooling total 14,2 kw

g. Collector/cooling table: Walking beam principle

- i. Length 45,72 m
- ii. Width 5.50 m
- iii. Maxload Not available.

h. Stretchers: Manual operated

- i. Max stretchforce 50 Ton
- ii. Max stroke 1240 mm
- iii. Motor 37 kW

i. Control system: Allen Bradley PLC 2/05

j. Powerconsumption total max: 75 kVA

4. Cold Saw and transport system

a. Transport

- i. Supplier: Clark automation Inc.
- iii. Length 50 m (aprox.)
- iv. Motor power 0,5 kW (3 pieces)
- v. Controlled via Run/out PLC

b. Saw:

- i. Supplier: Turla.
- iii. Saw diameter 600 mm
- iv. Saw Motor power 7,5 kW
- v. Hydraulic motor power 3 kW
- vi. Chips aspirator 5,5 kW
- vii. Control unit SLC 500/02

c. Chips aspirator

- i. Supplier: Turla.
- ii. Year of construction: 1985
- iii. Motor power 3 kW
- iv. Type STR 05 (cyclone filter).

5. Age Oven

a. Oven

- i. Supplier: Granco equipment

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- ii. Dimensions (l*w*h) 17200*2800*4800 mm
- iii. Motor circulation air 37 kW
- iv. Combustion Air 1 kW
- v. Door motors (2) 1,5 kW
- vi. Total electrical 50 kVA
- vii. Gas power 620 kW
- viii. Max.consumption: 63,7 m³/h

b. Transport system:

- i. Supplier: Granco equipment/ Glasbeek
- ii. Motor power 2,2 kW (2 pieces)
- iii. Custom design!
- iv. Control system Relay controlled

6. Die Oven - NOT INCLUDED IN THE SCOPE OF SUPPLY!

7. Miscellaneous

a. Crane

- i. Supplier: Jamach
- ii. Capacity 3200 kg @ 5000 mm

b. Die Winches (2):

- i. Supplier: Demag
- ii. Capacity 500 kg on tracks