

Ashot Ashkelon Industries Ltd.

Equipment & Machinery List

Updated: January 2011

GEAR MANUFACTURING

QTY	Manufacturer	Description
-----	--------------	-------------

HOBBING:

1	Gleason- Pfauter (CNC) P600/800 (May 2009)	
1	Pfauter (CNC) P.E.800	
1	Pfauter (CNC) P.350	
2	Pfauter P.900	
2	Pfauter P.403	
1	Pfauter P.400	
1	Pfauter P.160H	

GEAR SHAPING:

1	Gleason- Pfauter (CNC) PSA 300	
1	Lorenz (CNC) LS424 CNC	
2	Fellows 36-6	
1	Fellows 36-8	
2	Lorenz SN8	
1	Lorenz SN4	

SPIRAL BEVEL:

1	Gleason 116	
2	Gleason 118	
1	Gleason 610	
1	Gleason 16	
1	Gleason 520 Lapper	
1	Gleason 514 Tester	

STRAIGHT BEVEL:

4	Gleason 14 Coniflex	
3	Gleason 6 Tester	
1	Gleason 512 Tester	

DEBURRING:

3	Hey Gear Chamfering	
---	---------------------	--

GEAR GRINDING:

1	Gleason- Pfauter (CNC) P600/800G (Jan 2009)	
1	Samputensili (CNC) S 375G	

BROACHING:

- 1 Arthur Kling Vertical Broach
- 1 Lapoint Horizontal Broaching

VARIOUS:

- 1 Fischer Center Grinder
- 2 Center Lapping

THREAD GRINDING:

- 1 Reishauer (CNC) UL 900

GRINDING, LAPPING, HONING

- 4 Studer CNC 40S O.D.- I.D. Grinding 3 wheels
- 1 Studer O.D. Grinding
- 1 Studer O.D. - I.D. Grinding
- 1 Cincinnati Model 2 EF CNC Internal Grinder
- 1 ELB Rotary Surface Grinder with magnetic table
- 1 Gehring Model p350 Honing Machine
- 1 Sunnen 1802 C Honing MDC
- 1 Speedfam Lapping Machine
- 1 Blanchard No. 20-36 Surface Grinding
- 2 V.E.B SFW 200X600 Surface Grinding
- 1 Cincinnati 237 Universal Grinding
- 1 Buderus-Lindner SJ 7 Internal Grinding
- 5 Various Cylindrical Grinding
- 2 Internal Grinding
- 3 Various Centerless

TURNING

- 1 Daewoo (Doosan) PUMA 600 CNC Lathe
- 1 Dainichi F45 CNC Lathe
- 1 Danobat CNC Lathe dia 500X2100mm
- 1 Okuma LC 20 CNC Lathe
- 1 Okuma LC 30 CNC Lathe
- 6 Nakamura CNC Lathe
- 1 Cincinnati Milacron Model 18C CNC Lathe
- 1 Cincinnati Milacron Model 15C CNC Lathe
- 2 Cincinnati Milacron Model 8C CNC Lathe
- 1 Cincinnati Milacron 12/12U CNC Lathe Model
- 2 Hitachi Seiki Model 40S CNC Lathe
- 2 Hitachi Seiki TF 25/1100 CNC Lathe
- 1 Mazak CNC Lathe
- 1 Ashot CNC Tracer Lathe
- 1 Schiess CNC Vertical Turret Lathe
- 1 Gray CNC Vertical Turning
- 1 Cazeneuve HB 575
- 1 Cazeneuve HB 360
- 37 Various Universal Center & Turret Lathe

DRILLING

- 1 TBT Tiefbohrtechnik M500-1-3000 NC Deep Hole Drilling
Max 2100mm Length Max1130mm dia.
- 1 Tacchi FT 35/350 x 2500, Deep Hole Drilling & Boring Machine
- 1 Maflan 1500 mm Deep Hole Drilling Machine
- 3 Various Radial drilling machine
- 13 Various Drilling Machine

MILLING

- 1 Doosan- HM800 Horizontal Milling
- 2 Okuma- MA600 HB Horizontal Milling (Mar. 2008)
- 1 Mazak FH-8800 Horizontal Milling
- 1 Mazak PFH-4800 Horizontal Milling
- 1 Mazak NEXUS 6000 Horizontal Milling
- 2 HAAS VF3 Vertical Machining Center
- 1 Cincinnati Milacron CNC Machining Center 20 HC
- 1 Cincinnati Milacron CNC Machining Center 15 HC
- 2 Cincinnati Milacron CNC Machine With 8 Pallets Model T10/8
- 1 Cincinnati Milacron CNC Machine With 2 Pallets Model T10/2
- 1 Scharmann CNC Machining Center D-4050
- 1 Hitachi Seiki - HG 630 CNC Machine with 2 Pallets
- 2 Hitachi Seiki -HG 500 CNC Machine with 2 Pallets
- 2 Hitachi Seiki - HG CNC Machine with 2 Pallets
- 1 Hitachi Seiki VK 40 CNC Vert. Milling Twin Spindle
- 1 Hitachi Seiki VK 55 CNC Vert. Milling Twin Spindle
- 1 Mazak AJV 35/60 Vertical Milling
- 1 Mazak H-400N Horizontal Milling
- 1 Deckel FP3A CNC Boring/Milling
- 1 Scharmann CNC Boring/Milling
- 1 SIP 600 N.C. Jig Boring
- 1 Deckel FP 3 LV Boring/Milling
- 1 Maho 1000 CNC Boring/Milling
- 1 Maho 700 CNC Milling
- 1 Maho 500 CNC Milling
- 1 Dixi 60 Jig Boring
- 1 Ingersoll HD- 3 Spindle Milling
- 1 Various Vertical Milling
- 10 Various Universal Milling

WELDING

- 6 Various Welding machine, MIG & Tig (Controlled atmosphere, atomic welders, hydrogenor argon)

HEAT TREATMENT FURNACES & EQUIPMENT

- 1 Surface Internal quench furnace including endothermic generator
 1 Lindberg Internal quench furnace including endothermic generator
 1 Aichelin Nitride pit type furnace Pit type tempering furnace
 1 Nitrex Nitride pit type furnace
 1 Wild Barfield Rotary Furnace
 1 Lindberg Rotary Furnace
 1 Electroterm Normalizing pit furnace
 1 Electroterm Tempering pit furnace
 1 Electroterm Box type tempering furnace
 1 Electroterm Vacuum Tempering, Pit type
 1 Electroterm Aging (Aluminum)
 1 Electroterm Solution Treatment (Aluminum)
 2 Blue M Dip Freezing & Tempering device
 2 Gleason Quenching presses
 1 Induction Heating equipment medium frequency + Low Frequency
 3 Induction heating equipment high frequency
 - Various Salt bath furnace
 - Various Auxiliary equipment for washing, sand blasting, shot peening, shot blasting, metal coating (Copper,Cadium and Phosphates)

METALLURGICAL & LABORATORY EQUIPMENT

- 1 Perkin Atomic Absorption Spectrophotometer Model 5000 P.E.
 1 Bausch & Lomb UV Visible Spectronic 2000
 1 WSP Spectromobile
 1 C. Reichert Universal Camera Microscope MF F2
 2 Tinius Olsen Universal Testing Machine Super L + MTS 8800 U.T.M
 5 Hardness Machine Rockwell, Brinell, Vickers Hardness Testing Machines
 1 Leco Carbon Determinator Leco IK -12
 1 Leco Oxygen Determinator Leco RO-17
 1 Leco Carbon Sulphur Determinator CS-244
 1 Unimet Microscope
 3 Sartorius Scales, Analytical, Semi-Analytical and others
 Sartorium 3804 M.D.
 1 Wab Instruments Particle Size Turbidometer
 1 Ardocks Magnetic Particle Inspection System
 1 Penetrant Inspection system for Non-Ferrous

GENERAL AND GEAR TESTING EQUIPMENT

1	Klingelnberg CNC gear testing machine
3	LK CMM Microvector G80, C90
2	DEA CMM
1	ZEISS PRISMO 5 CMM
1	TESA SCAN 130 Optiline measuring machine
1	Hommel Verke Optical measuring machine
2	Start Optical comparators
1	Hommel Verke Surface finish measuring device
1	Torque keys calibration system
1	Schenk Vertical Balancing machine
1	ASHOT Test system for dynamic testing of parts back-to- back principal for automatic vehicle transmission and final drives up to 240,000 NM
1	Hofler Gear measuring machine ZW630 Rolling
2	Nikon Optical comparators - U-20
2	Mitutoyo Optical comparator
12	Trimos Horizontal universal measuring machine for calibration
2	Trimos Vertical measuring machine
1	Reicherter Hardness testing on gear tooth
1	Reicherter Hardness measuring on internal diameter

New Machinery 2010-2011

1	MU 400VA Milling
2	LB 2000 EX Turning Milling
2	LT 300 M Turning Milling
1	DOOSAN PUMA 240 Index
1	LORENZ SN 4 Gear Shaper
1	SL 40 HAAS Turning Milling
1	SL 25 HAAS Turning
1	SL 30 HAAS Turning Milling