

### NG ROTARY WASTE STRIPPING MACHINE

# Mod. "NG95"

pneumatically operated

- DECLARATION OF CONFORMITY
- INNSTALLATION
- PREPARATION OF THE CUTTING-& CREASING DIE
- OPERATING INSTRUCTIONS
- MAINTENANCE
- TECHNICAL DATA
- SPARE-PARTS LIST / DRAWING





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### **DECLARATION OF CONFORMITY**

We NOR-GRAPHIC LTD, declare under our sole responsibility that the product:

# NG-Rotary waste stripping machine – Mod. "NG95"

-pneumatically operated

FOR REMOVAL OF DIE-CUT WASTE

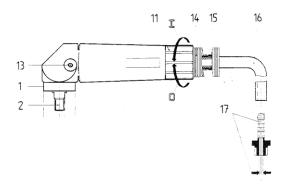
-to which this declarations relates, is in conformity with the previsions of the following EU-directive:

98/37/EEC



Klavestadhaugen, 01.01.2009 **NOR-GRAPHIC LTD**  *Hilde Jelsness-Larsen* Hilde Jelsness-Larsen

### **INSTALLATION**



Pos. 14	Exhaust air hose
Pos. 15	Silencer
Pos. 16	Air supplyhose – Id = 12mm/ ½"
Pos. 17	Coupling with min. Id = 9,5mm 3/8"
Pos. 18	½" Air conditioning unit – including: *Air filter – capacity: 5-8 Micron
	*Water sparator
	*Air pressure governor
	*Oil fog lubricator



The NG-Rotary waste stripping machine is delivered completely assembled with a **10mm stripping wheel** mounted on the Spindle –pos.2, and the air supply hose –pos. 16 as well as the exhaust air hose-pos. 14 connected to the air-motor.

#### CONNECT THE AIR STRIPPER TO THE COMPRESSOR OR THE CENTRAL AIR SUPPLY LINE:

#### Air pressure: -recommended air pressure: 6 bar.

- The air pressure largely determines tool performance.
- The NG-Rotary waste stripping machine is designed to operate at a gauge pressure of 6 bar.
- A lower pressure will reduce the performance for the tool.
- An air pressure above 7 bar may cause damage to the unit.

### Air consumption:

- Full load: 1.3 m3/min.
- No load: 0.6 m3/min.

As a rule of the thumb, each NG-rotary waste stripping machine will require a 10 H.P.

### Coupling –pos. 17 – for connection to air supply source:

It is vitally important that the air supply hose – pos. 16 is connected to the air supply sourch by means of correctly dimensioned coupling.

To allow an adequate air-flow to the air-motor, the coupling – pos. 17 should have a minimum ID of 9.5mm (3/8).

The use of an under-sized coupling will considerable reduce the pulling power of the machine.

### Air supply requirements:

To comply with the ISO/DIS quality requirements the air should meet the following specifications:

- The air must not contain solid particles exceeding 5 microns.
- The air water content should not exceed 6 gr./m<sup>3</sup> provided a pressure dew point of: +3 degrees c.
- The air should contain 5 mg oil/m<sup>3</sup>.

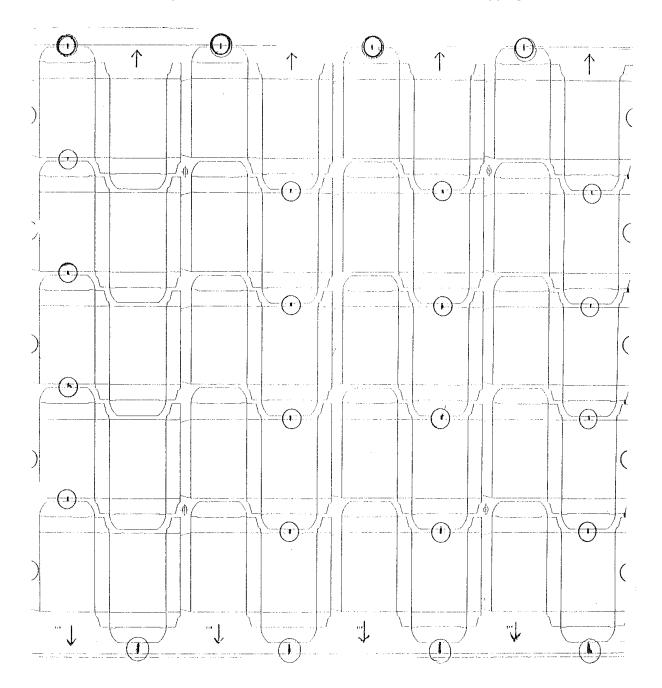
  Operating with dirty and un-lubricated air with a too high water content, will considerable reduce the tool life.

The installation of an  $\frac{1}{2}$ " –air conditioning unit – pos. 18 – with air filter, air pressure governor, water separator and oil fog lubricator is therefore strongly recommended.

### PREPARATION OF THE CUTTING-& CREASING DIE:

Successful operation of the NG-Rotary waste stripping machine is 100% dependant on a proper preparation of the cutting/creasing die.

By the installation of extra cutting rule, or stripping knives the waste-cuts to be stripped are devided into suitable shapes and sizes to ensure smooth and trouble-free stripping action.



The extra stripping knives are in principle installed (located) as shown in the above sketch (circled), i.e.:

#### IN THE NARROWEST PART OF THE WASTE TRIM.

The will allow the stripping wheel to be positioned so as to pull in the deepest part of the waste cut, -as indicated above by the arrows. The stripping wheel has then adequate space to work on, and stripping machine has not to be guided with undue accuracy to prevent damage to the carton blanks.

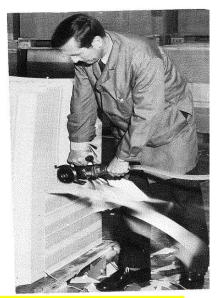
### **OPERATING INSTRUCTIONS**

#### **WORKING POSITION OF OPERATOR:**

The operator should work in a position exactly as shown in the photo below. By holding the NG95 correctly as shown, the ideal working position becomes natural. The operator will then be close to the load, and will be able to see exactly where to position the stripping heel and guide it steadily down the load.

The operator will now also be out of the way for the waste cuts flying off the load.

- The rear part of the Stripper must be held slightly higher than the stripping wheel.
- This position will allow the waste to pass freely underneath the stripping wheel guard.
- If the rear part of the stripper is lowered, the end-plate of the wheel guard will prevent the waste from passing freely, and jam-up's are inevitable.
- Holding the Stripper correctly is vitally important for successful stripping action.
- Both the operator's working position and the working angle of the Stripper should therefore be exactly as shown in the photo.



#### Start the Rotary waste stripping machine by operating the "safety lever throttle":

Move the Lever down with the finger tips in the direction of the arrow shown on the Lever, and press it against the Air Motor Housing.

- When starting the stripping action from the top of the load, position the stripping wheel at the "deepest" part of the waste cut.
  - Thus the stripping wheel will have adequate space to work on, and the stripping machine will not have to be guided with undue accuracy to avoid damage to the finished carton blanks.
- If the waste trim is very heavily "nicked", the top sheets if the load may easily be pulled out of order by the stripping wheel.
  - To avoid this, the stripping wheel should be pressed quickly and firmly down against the first few top sheets. With a quick and sudden pulling action, the waste will be stripped out without pulling the top sheets out of order.
- As the stripping tool is guided down the stack, use the curved front part of the wheel guard as
  a guide against the finished carton blanks, thus preventing the stripping wheel from damaging
  the cartons.
- The choice of correct stripping wheel for the individual job is important. Stripping wheels are available in the widths of 5mm and 10mm. In principle the stripping wheel must be wide enough to provide adequate friction and "pulling-action" for the waste cut to be removed. A too narrow stripping wheel will tend to cut into the board rather than pulling of the waste.

#### **CHANGE OF STRIPPING WHEEL:**

- 1) Remove the transparent wheel guard cover (2 screws)
- 2) Lock the working spindle pos.88 –drawing no. 78753/A by depressing clamping bolt pos. 103.
- 3) Unscrew clamping nut pos. 89 and remove the old stripping wheel.
- 4) Mount the new stripping wheel on the working spindle.
- 5) Fix the stripping wheel by mean of clamping nut pos. 89 use Jaw spanner SW-19

## **MAINTENANCE**

#### **LUBRICATION:**

The air-motor need frequent lubrication. Ideal lubrication is achieved through the installation of an oil-fob lubrication.

Use a light spindle oil, eg. Mobil oil no. 1, Shell spindle oil no. 60, or equivalent types.

The use of thicker types of oil may reduce the tool performance and cause malfunctioning.

If an Oil-fob lubricator is not installed, it is necessary to supply 4-5 drops of the air-inlet of the unit every 3-4 hours operation.

#### **GREASING:**

Bearings should be greased every 3 months with high quality grease like Shell Alvania no. 2, Retinax AM, Mobilplex2, or equivalent.

The Bevel gear –pos. 7 and 21 should be more or less continuous operation be greased every month.

Recommended type of grease: Multi-duty Litheum grease, Heavy, No. 763 (supplier: Sønnaco)

Should other makes be used, a grease with high molybdenum content should be preferred.

NB: Over-greasing ill cause heating and deduced operational speed.

Even if the tool is running satisfactorily, it is recommended to dismantle the motor after 300-400 operating hours (or at least once per year).

Vanes: (4 pcs. – pos. 16): The 4 vanes should be checked for wear after 300-400 operating hours. Minimum width: 9mm. In assembled condition of vanes should not be recessed more than 3mm.

# TECHNICAL DATA At a 6 bar operation pressure:

Power:	900 watt				
i ower.	300 Watt				
Torque:	4.2 Nm				
Air consumption: -full load:	1.3 m3/min.				
Air consumption: -no load:	0.6 m3/min				
Idling speed:	6.000 r.p.m.				
Sound pressure level:	81 dB (A) -according to CEN/TC 255 N				
Vibration:	<2.5 m/s2 –according to ISO/DIS 8662-4				
Recommended air quality:	4/ 4/ 4 – according to ISO/DIS 8573-1				
Air hose inner diameter (id):	12mm (1/2")				
Spindle thread:	12Mx 1.5mm				
Suitable tools:	Stripping wheels (80x12)mm – width: 5 and 10mm				

# SPARE PARTS LIST - Drawing no. 78753/A

Qty.	Description:	Pos:	Art.no:	Qty.	Descrition	Pos:	Art.no:
1	Silencer –compl	180	5286601	1	Lever	49	5203601
1	Protection plug	119	5220102	1	Insulator	48	5202301
1	Exhaust hose	118	5206101	1	Valve charge	47	5202401
1	Supply hose	117	5206201	1	Adaptor	46	5202201
1	Hose clip	116	2789207	1	Valve body	45	5200901
1	Plastic housing	112	5201901	2		34	5253301
1	Clamping bolt	103	5786901	2	Cyl. Pin	33	2783136
1	Clamping bolt spring	102	5787301	1	Spring	32	5204101
1	Handle	101	4888401	2	-	31	5202901
1	Bevel gear	100	5206801	1	-	30	5202501
1	Pinion	99	5206901	1	Stub	22	5201001
1	Working spindle	98	7875501	1	Nipple	21	5201201
1	Threaded pin	97	2759016	1	Cyl. Pin	20	2801522
1	Needle sleeve	96	2765108	4	Spring washer	19	2788208
1	Dished spring	94	2799304	1	Ball bearing	18	2769721
Х	Shim disc	93	5208705	2	Ball bearing	17	2766903
Х	Shim disc	92	5208704	4	Vane	16	5203501
1	Spacer ring	91	5205001	1	Distributor	15	5200801
1	Clamping nut	90	2755440	1	Front washer	14	5202101
1	Clamping nut	89	2823010	1	Rear washer	13	5202001
1	Working spindle	88	7875401	1	Cylinder	12	5201301
1	Flange seal	86	5207001	1	Piston	11	5202701
1	Angle head	85	5205101	1	Motor housing	10	5201501
1	Liner	58	5702801	1	Stripping wheel	5	
1	O-ring	57	2783088	1	Jaw spanner sw19		2785612
1	O-ring	56	2783089	1	Wheel guard	-	
1	O-ring	55	2783090	1	Wheel guard cover	-	
1	Slotted pin	54	5205201				
1	Cyl. pin	53	2801527				
1	Valve ball	52	2768524				
1	Valve spring	51	5204001				
1	Valve spring	50	5203901				

