

Pneumatic Angle Grinders

UNIVERSAL APPLICATIONS

Our robust, high-performance angle grinders, model no. PBU are well suited for the manual radial- and lateral surface grinding when used with roughing wheels or fiberglass grinding wheels – flex type.

The maximum diameter and the maximum allowable speed of the grinding wheels and grinding inserts are shown in the technical data of the individual grinder.

These grinders are generally used for the treatment of forgings, dies, and punches.



LARGE SELECTION OF OUR ASSORTMENT

All our power tools excel through their high quality, ergonomic

design, simple and safe operation, low maintenance and a top-of-the-line power to weight ratio. We gladly help you select the most

suitable angle-grinder; please speak with our product specialists and refer to the technical data located in our catalogs.



*Angle Grinder
Model GA 818-230 BX*

ANGLE GRINDERS

Models GA, PBP

Our angle grinders are well-suited for the manual radial- and lateral grinding when used with fiberglass grinding wheels - Flex type. These grinders may be used with cut-off wheels (cutting). These grinders are generally used for the treatment of forgings, dies, and punches.

The angle-grinders, model no. PBP excel through their high quality, excellent power-to-weight ratio, ergonomic design and temperature insulated housing.

The main advantages of the angle-grinder series GA are: Spindle lock – abrasive change is possible without the use of any tools, reduced vibration because of the integrated ABU (auto-balancing unit), optimal cutting depth, low weight, and adjustable exhaust – left or right.



*Angle Grinder
Model PBP 125A-80 X*



*Angle Grinder
Model GA 818-230 BX*

ANGLE GRINDERS

Model PBU

This series of grinders is mainly used for the heavy grinding of castings, welding and other forgings.

- High power at continued operation
- Low vibration and safe to operated
- Simple to use and to maintain

The Angle Grinders of the series "G" (i.e. Model No. PBU 150G-80x, PBU 230G-80X) have a reduced weight while still achieving full power. This series also allows the installation of a side-handle and the right- or left-adjustment of the exhaust.

To increase environmental parameter, we equipped these grinders with an ABU (auto-balancing unit). These types of grinders are used for the grinding and buffing of metals and plastics, such as the grading of welding-seams or for the surfacing of cast-iron and steel constructional parts.

Due to increased demand from shipyards, rail car manufacturers and other heavy-industry fabricators, an Angle Grinder for pot-wheels (Model No. PBU 125C-45X) was designed.



Characteristics of this machine are:

- simple to use and to maintain
- optimal power-to-weight ratio

Thanks to this table, you can convert the radial speed of the grinding-wheel into the correct machine speed when using a certain grinding-wheel diameter

Grinding Disc-Ø (mm)	Surface Speed (m/sec)													
	10	15	20	25	28	30	33	35	40	45	48	50	60	80
25	7 640	11 460	15 280	19 100	21 390	22 920	25 210	26 740	30 560	34 380	36 670	38 200	45 840	61 120
40	4 770	7 160	9 550	11 930	13 370	14 320	15 750	16 710	19 100	21 480	22 920	23 870	28 650	38 200
50	3 820	5 730	7 640	9 550	10 690	11 460	12 600	13 370	15 280	17 190	18 330	19 100	22 920	30 560
63	3 303	4 540	6 060	7 560	8 480	9 090	10 000	10 610	12 120	13 640	14 550	15 150	18 190	24 250
80	2 380	3 580	4 770	5 960	6 680	7 160	7 870	8 350	9 550	10740	11 460	11930	14 320	19 100
100	1 910	2 860	3 820	4 770	5 340	5 730	6 300	6 680	7 640	8 590	9 160	9 550	11460	15 280
115	1 160	2 490	3 320	4 150	4 650	4 980	5 480	5 810	6 640	7 470	7 970	8 300	9 960	13 400
125	1 520	2 290	3 050	3 820	4 270	4 580	5 040	5 340	6 110	6 870	7 330	7 640	9 160	12 280
150	1 270	1 910	2 540	3 180	3 560	3 820	4 200	4 450	5 090	5 730	6 110	6 360	7 640	10 180
180	1 060	1 590	2 120	2 650	2 970	3 180	3 500	3 710	4 240	4 770	5 090	5 300	6 360	8 480
200	950	1 430	1 910	2 380	2 670	2 860	3 150	3 340	3 820	4 290	4 580	4 770	5 730	7 640
230	830	1 240	1 660	2 070	2 320	2 490	2 740	2 900	3 320	3 730	3 980	4 150	4 980	6 640
250	760	1 140	1 520	1 910	2 130	2 290	2 520	2 670	3 050	3 430	3 660	3 820	4 580	6 110
300	630	950	1 270	1 590	1 780	1 910	2 100	2 220	2 540	2 860	3 050	3 180	3 820	5 090



Pneumatic Angle Grinders

SAFETY SPECIFICATIONS

Observe all safety regulations, which is an inseparable component of the delivery of each tool DEPRAG INDUSTRIAL. A safe operation of the tool and its correct function is only possible, if the instruction booklet has been read in detail and if the required instructions are observed.



EXAMPLES OF APPLICATIONS



TURBINE GRINDER

Model GAT 812-220 BX

- Oilfree and low-maintenance operation (exchange of vanes not needed)
- Optimal power to weight ratio, low air consumption
- Perfect handling by means of anit vibration handle and ergonomic shape
- High safety in operation
- Keyless adjustability of safety guard
- Spindle locking at the push of a button, keyless grinding disc exchange

Power: 2,2 kW
Speed: 12 200min⁻¹
For Grinding Wheels Ø 125 mm

Double the Power at lower Weight!



*Turbine Grinder
Model GAT 812-220 BX*



■ The side-handle is installed for a right-handed operator at machine delivery. This can be changed to accommodate a left-handed operator – please refer to the instruction booklet!

Correct installation of the air distribution

An accurate air distribution is required to achieve the correct speed of the machine.

Generally, air-tools require little maintenance. Observe the following regulations and your machine will reach its peak durability and safe performance.

- Regularly check the machine's exterior in regards to damage and wear.
- An oil-change needs to be performed after 250 hours of operation.
- Total oil volume: 12 ml, recommended oil: Klüber Summit HYSYN FG46. Too much oil will lead to a temperature increase of the gearing - Danger of Burning!
The procedure for the oil-change is listed in our operating instruction booklet.

The side-handle is installed for a right-handed operator at machine delivery. This can be changed to accommodate a left-handed operator – please refer to the instruction booklet!

(bar)	Power	Speed	Torque-moment
7	113 %	101 %	109 %
6	94 %	99 %	95 %
5	93 %	93 %	79 %
4	85 %	85 %	63 %
3	73 %	73 %	48 %

AIR-TURBINE MOTORS FOR POWER TOOLS

The main advantage of the air-motor is its high performance density, which is only about 1/5th of the mass or 1/3rd of the size of an electric motor with comparable performance. Due to this advantage, an air-motor is better suited as a drive for power tools.

Power Characteristics

The power output performance of the air-motor is virtually constant over broad speed ranges. It can also be operated in a wide field of alternating loads. The power output can be easily adjusted by changing the operating-pressure, and the speed is perpetually variable by the reduction of the air-volume.

Load Capacity

The air-motor can easily be loaded to a full standstill; it even tolerates a negative turn direction if the load is increased. The motor always reaches its full power output and there will be no damage to the motor!

Temperature behavior

Expanding air cools the motor when the load is increased. Only when idling, a rise in temperature may occur. The motor is therefore

temperature insensitive and overheating through over-load is practically impossible.

Exhaust

The noise generated by the exhaust air is reduced by a specialized silencer. Additionally, the exhaust air is directed away from the operator through a coaxial pressure/exhaust-hose.

Vane Motor

All vane motors essentially consist of the rotor, which circulates in an eccentrically offset perforation of the rotor cylinder. Because of this eccentrically offset perforation, the vanes form working chambers, the volume of which increase in the turn direction. Because of the expansion of the compressed supply air, the pressure energy is converted into kinetic energy and therefore results into the rotation of the rotor.

Turbine Motor

Our turbine motors offer the ideal drive solution for high speed ranges. From turbine design and prototype production up to a series manufacturing, a tailor-made motor solution is available for your individual application.

Structure and function of the DEPRAG Turbine:

Conversion of pressure energy to kinetic energy in the jet nozzle. Most of the kinetic energy is transformed within the first rotor disc. The fixed guide wheel alters the air flow. The residual energy is transformed in the second rotor disc. The turbine is a turbo machine which does not need tangential sealing. Turbine operation with oil-free air therefore causes absolutely no wear. Turbo machine use pneumatic energy optimally. Therefore, the air requirements sink to a third in comparison with a standard vane motor. The performance to weight ratio (kg/kW) is only half as large.

