

PALMGREN

**EMBRACE
THE WORK**



**DRILLING AND TAPPING
CATALOG**

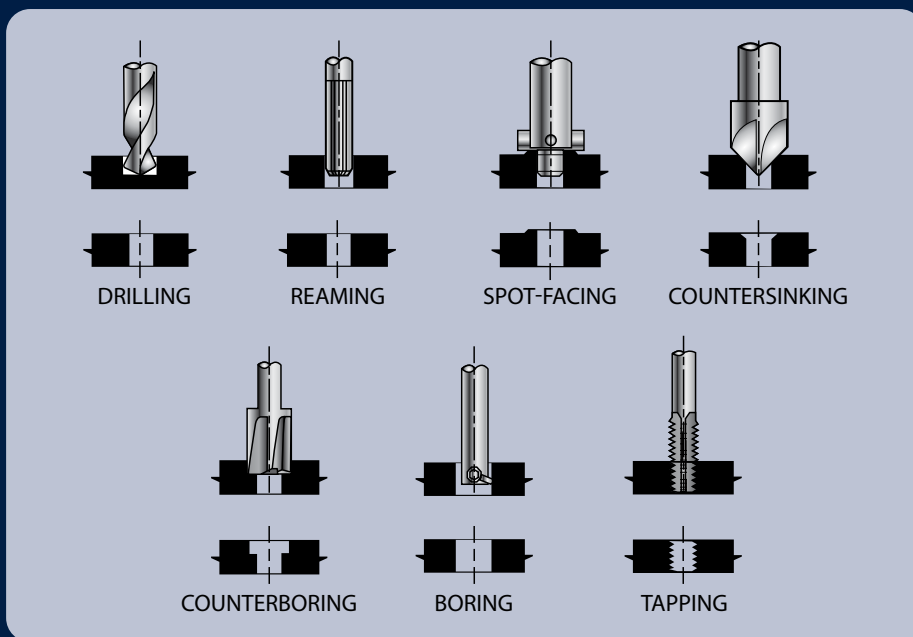
PALMGREN...

YOUR BEST SOURCE FOR ALL YOUR DRILLING NEEDS

Experience better performance and higher efficiency with Palmgren's industry leading drilling machines.

Hole production is unquestionably the most common of all machining processes and drilling is the most widely used technique for producing holes. Machines designed specifically for drilling are available in many different types, sizes and capabilities. These include step pulley, variable speed, all gear drive and radial drilling machines. When it comes to drilling Palmgren's innovative new designs and technology lead the way.

Our drill presses are built to handle the complete family of drill press operations each of which provides special attributes or advantages in the production of certain varieties of holes.



Palmgren has over 40 models and types of drilling machines to choose from. They are engineered and built to produce through holes, blind holes, deep holes as well as interrupted cut holes with diameters from a 1/4" up through 2-3/8" in cast iron.

Palmgren your best source for all your drill press needs.

PALMGREN
3 YEAR
WARRANTY

INDUSTRY LEADING WARRANTY AND SERVICE

Our 3-year warranty on all drilling and tapping machines is the most generous warranty in the industry. We have complete confidence in our products. The length of our warranty is a reflection of our faith in their quality. Naturally, this is manufacturing, stuff happens. Regardless, we hold one constant: if issues should arise, we will be there to make it right with over 25,000 parts in stock and a nationwide service and support network of machine tool repair companies.

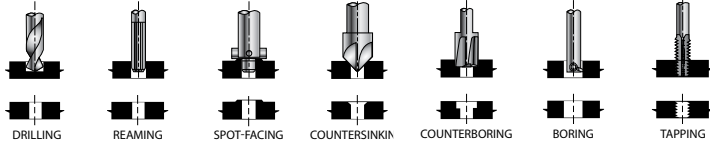
**EMBRACE
THE WORK**

At Palmgren we build tools for those who choose to work. Tools that were made to be used, that flex endless muscle, take a beating and ask for more. Tools that will stand by you on your daily grind. Tools that help you Embrace your Work.



PALMGREN

Selecting the right drilling or tapping machine to meet your requirements requires careful assessment of the performance objectives outlined below. The following chart is a helpful tool to assist you in identifying the model of machine that best fits a specific application. Follow these steps to help select the right machine - list the operations to be performed, list the type of finished holes, list all the diameters of holes to be drilled, determine the horsepower required to produce the largest diameter hole, decide on manual or power feed and then determine your application or use.



MODEL	DESCRIPTION	OPERATIONS								
		Spindle Taper	Drilling	Reaming	Spot-facing	Counter-Sinking	Counter Boring	Boring	Hole Finishing	Tapping
9680148	8" Bench Top Drill Press	JT33	•	•	•	•			•	
9680110	10" Bench Step Pulley Drill Press	JT33	•	•	•	•			•	
9680219	13" Bench Step Pulley Drill Press	MT2	•	•	•	•				
9680150	Heavy Duty 13.25" 16-Speed Bench Drill Press	JT33	•	•	•	•				
9680157	Heavy Duty 15" 16-Speed Bench Drill Press	MT2	•	•	•	•	•		•	
9680201	15" Step Pulley Drill Press	MT2	•	•	•	•	•		•	
9680133	17" Step Pulley Drill Press	MT3	•	•	•	•	•		•	
9680220	20" Step Pulley Drill Press	MT4	•	•	•	•	•		•	
9680158	Heavy Duty 15" 16-Speed Floor Drill Press	MT2	•	•	•	•	•	•	•	
9680177	Heavy Duty 17" 16-Speed Floor Drill Press	MT2	•	•	•	•	•	•	•	
9680178	Heavy Duty 17" 16-Speed Floor Drill Press 3PH	MT2	•	•	•	•	•	•	•	
9680209	Heavy Duty 20" 16-Speed Floor Drill Press	MT3	•	•	•	•	•	•	•	
9680210	Heavy Duty 20" 16-Speed Floor Drill Pre	MT3	•	•	•	•	•	•	•	•
9680214	Premium 16-Speed 16" Floor Drill Press	MT3	•	•	•	•	•	•		
9680216	Premium 18-Speed 22" Floor Drill Press	MT4	•	•	•	•	•	•		
9680221	Premium 7-Speed 13" Bench Drill Press	MT2	•	•	•	•	•	•		
9680215	Premium 16-Speed 16" Bench Drill Press	MT3	•	•	•	•	•	•		
9680129	16" Variable Speed Step Pulley Drill Press With Power Feed	MT3	•	•	•	•	•	•		
9680130	16" 16-Speed Step Pulley Drill Press With Power Feed	MT3	•	•	•	•		•		
9680217	Heavy Duty Variable Speed 16" Floor Drill Press	MT3	•	•	•	•	•	•		
9680224	8-Speed 18" Gear Head Bench Drill Press	MT3	•	•	•	•	•	•		•
9680222	18-Speed 30"Upright Gear Head Dril Press with Power Feed	MT4	•	•	•	•	•	•		•
9680223	8-Speed 20" Gear Head Floor Drill Press	MT3	•	•	•	•	•	•		•
9680212	22" Gear Head Drill Press with Mechanical Clutch Powerfeed	MT4	•	•	•	•	•	•		•
9680225	22" Gear Head Drill Press with Electro-Magnetic Clutch Powerfeed	MT4	•	•	•	•	•	•		•
9680134	20" Gear Head Drill Machine Variable Speed, 230V	MT3	•	•	•	•	•	•		•
9680135	22" Gear Head Drill Machine Variable Speed, 230V	MT4	•	•	•	•	•	•		•
9680136	28" 8-Speed Gear Head Drill Machine, 230V	MT4	•	•	•	•	•	•		•
9680137	32" 16-Speed Gear Head Drill Machine, 230V	MT4	•	•	•	•	•	•		•
9680138	20" Gear Head Drill Machine Variable Speed, 460V	MT3	•	•	•	•	•	•		•
9680139	22" Gear Head Drill Machine Variable Speed, 460V	MT4	•	•	•	•	•	•		•
9680140	28" 8-Speed Gear Head Drill Machine, 46V	MT4	•	•	•	•	•	•		•
9680141	32" 16-Speed Gear Head Drill Machine, 460V	MT4	•	•	•	•	•	•		•
9680341	33" Bench Radial Arm Drill Press	MT2	•	•	•	•				
9680342	33" Floor Radial Arm Drill Press	MT2	•	•	•	•				
9680420	QUICK-TAP Pneumatic Tapping Arm, 400 RPM, 43" Reach			•	•				•	•
9680421	QUICK-TAP Pneumatic Tapping Arm, 700 RPM, 43" Reach			•	•				•	•
9680400	SHOP-TAP Pneumatic Tapping Arm, 400 RPM, 57" Reach			•	•				•	•
9680401	SHOP-TAP Pneumatic Tapping Arm, 700 RPM, 57" Reach			•	•				•	•
9680410	PRODUCTION-TAP Pneumatic Tapping Arm, 400 RPM, 55" Reach			•	•				•	•
9680411	PRODUCTION-TAP Pneumatic Tapping Arm, 700 RPM, 55" Reach			•	•				•	•
9680412	PRODUCTION-TAP Pneumatic Tapping Arm, 300 RPM, 55" Reach			•	•				•	•
9680426	UNIVERSAL-TAP Electric Tapping Arm, 130/400 RPM, 55" Reach			•	•				•	•
9680451	Pneumatic Hand Tapper 150 RPM								•	•

8" BENCH TOP DRILL PRESS

This practical 8" drill press combines performance and economy into one. The powerful 1/3HP motor provides speeds from 760 to 3070 RPM utilizing step pulleys for a variety of operations and materials. Cast iron and steel construction for rigidity and long life.

- Front mounted safety switch with paddle for ON/OFF
- Cast iron table swivels 360° around the column as well as tilts left and right
- JT33 1/2" Chuck and key with key storage on the drill press head
- Center hole in the table for through drilling
- Positive locking drill depth stop for repetitive operations

DIMENSIONS: 17"D X 8"W X 23"H

Item #	Motor	Swing	Spindle Speeds	RPM	Spindle Taper	Spindle Travel	Table Dimensions	Weight
9680148	1/3HP 120V 2.5A	8"	5	760 to 3070	JT33	2"	6-1/4 x 6-1/4"	40 lbs.



10" BENCH DRILL PRESS

This practical light to medium duty drilling machine combines performance and economy into one. It's an ideal choice when working with metal, composite, plastic or wood. Available in a bench model, step pulley, belt driven.

- Durable cast iron head, table and base
- Spindle supported by high quality ball bearings
- Rack and pinion table raiser
- Table tilts 45° to the right & left and swivels 360° around the column
- 1/2" through table & base slots for easy mounting and clamping of workpiece
- Laser alignment
- Spindle depth stop
- Front mounted safety, paddle on/off switch
- Drill chuck & key

DIMENSIONS: 19.25" D x 11.25"W x 27.5"H



Item #	Swing	Motor HP	Volts	Amps AC	Capacity Cast Iron	Spindle Speeds	RPM	Spindle Taper	Spindle Travel	Spindle to Table	Table Work Surface	Table Slots	Weight
9680110	10"	1/3	115	3.2	1/2	5	570-3070	JT33	2-1/2"	10-11/16"	7-13/16" x 7-13/16"	1/2" W x 4-11/16" L	50 lbs.

13" BENCH STEP PULLEY DRILL PRESS

Palmgren's 13" Bench Top Step Pulley Drill Press features the exceptional durability of solid steel and cast-iron construction. With its durable construction this drill press has vibration-free operation essential for all woodworking and metal working applications. The 16 speeds allow the operator to drill large and small holes in a wide range of materials. Designed to be exceptionally easy to use, the table adjusts with rack and pinion gears, features a slotted design, and can rotate a full 360°.

- Easy-Adjust table height
- Table tilts 45° left or right
- Solid cast iron and steel construction

DIMENSIONS: 42"D x 10"W x 23"H

Item #	Swing (in.)	Motor HP	Volts	Amps AC	Spindle Speeds	RPM	Spindle Taper	Spindle Travel	Table Work Surface	Weight
9680219	13	1/3	120	5.0	16	260-4,220	MT2/JT3	3-1/8"	10" x 10"	110 lbs.



13" HEAVY DUTY BENCH STEP PULLEY DRILL PRESS

Palmgren's heavy duty 16-speed drill presses are designed and built for drilling a wide array of materials. They have the weight and rigidity to maintain the built-in tight tolerances required for metalworking applications. The oversized, massive drill heads have widely spaced bearing surfaces that provide full quill support throughout its travel. A wider range of operation speeds for drilling both large and small holes.

- Fully enclosed spindle for accurate drilling operations
- Maximum spindle run out of 0.0005"
- Extended quill/spindle travel ideal for deep hole applications
- LED readout of spindle speed and quill travel
- Rack and pinion table raiser
- Precision ground t-slotted work table with coolant trough
- Table tilts 45° right and left and rotates 360° around the column
- Quick change vertical depth stop for accurate, repeatable feed length
- Heavy cast metal 3 spoke quill feed handle with ergonomic speed feed handle
- Front mounted industrial paddle-type power switch
- Includes chuck with key

DIMENSIONS: 16-1/2"D x 9-3/4"W x 38-7/8"H

Item #	Swing (in.)	Motor HP	Volts	Amps AC	Capacity Cast Iron	Spindle Speeds	RPM	Spindle Taper	Spindle Travel	Spindle to Table	Table Work Surface	Table Slots	Weight
9680150	13.25	1/3	120	6.0	1/2	16	244-3386	JT33	3-1/4"	16-3/4"	8-5/8" x 9-7/16"	1/2"	133 lbs.



15" HEAVY DUTY BENCH STEP PULLEY DRILL PRESS

These Drill Presses have the weight and rigidity to maintain the built-in tight tolerances required for metalworking applications. The oversized, massive drill heads have widely spaced bearing surfaces that provide full quill support throughout its travel. A wider range of operation speeds for drilling both large and small holes.

- Fully enclosed spindle for accurate drilling operations
- Maximum spindle run out of 0.0005"
- Extended quill/spindle travel ideal for deep hole applications
- LED readout of spindle speed
- Rack and pinion table raiser
- Precision ground t-slotted work table with coolant trough
- Table tilts 45° right and left and rotates 360° around the column
- Quick change vertical depth stop for accurate, repeatable feed length
- Heavy cast metal 3 spoke quill feed handle with ergonomic speed feed handle
- Front mounted industrial paddle-type power switch
- Includes chuck with key and arbor

DIMENSIONS: [Item # 9680157](#) - 27"D x 13.5"W x 43"H



Cast metal 3 spoke quill feed handle



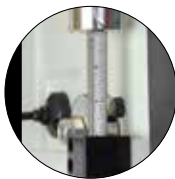
Swing-mount motor and pulley system



Chuck key storage clip



LED Work Light



Quick Change Depth Stop



LED Read Out Industrial Paddle Style Switch

Item #	Swing	Motor HP	Volts	Amps AC	Capacity Cast Iron	Spindle Speeds	RPM	Spindle Taper	Spindle Travel	Spindle to Table	Table Work Surface	Table Slots	Weight
9680157	15"	1/2	120/240	8.6/4.3	5/8"	16	138 - 3476	MT2/JT3	5"	11"	11-1/2" x 11-1/2"	5/8"	162 lbs.

FLOOR STEP PULLEY DRILL PRESSES

The Palmgren step pulley drill presses have the weight and rigidity to maintain the built-in tolerances for metal and woodworking applications. 16 Speeds allow the operator to drill a wide range of large and small holes into a variety of materials. The cast iron table can swivel around the column, tilt L to R up to 45° or rotate 360° (9680201 and 9680133).

- Quick change vertical depth stop for repetitive accurate operations
- Rack and pinion table height adjustment
- Front mounted locking rocker switch to prevent unauthorized use

15" ITEM# 9680201

Dimensions: 18"D x 12"W x 62"H

- 5/8" Chuck and key

17" ITEM# 9680208

Dimensions: 21"D x 14"W x 65"H

- 3/4" Chuck and key

20" ITEM# 9680220

Dimensions: 29-1/2"D x 18-1/2"W x 68"H

- 5/8" Chuck and key



Item #	Motor	Swing	Speeds	RPM	Taper	Spindle Travel	Table Dim.	Weight
9680201	3/4HP 120V 10A 1725 RPM	15"	16	240-3200	MT2/JT3	3.34"	12" x 12"	149 lbs.
9680133	1HP 120V 10A 1725 RPM	17"	16	200-3600	MT3/JT3	3.34"	13" x 13"	161 lbs.
9680220	1.5HP / 120/240V / 13 / 6.5 A / 1PH	20"	12	180-2940	MT4/JT3	5"	18-1/2" x 16-1/2"	286 lbs.

HEAVY DUTY FLOOR STEP PULLEY DRILL PRESSES

Palmgren's step pulley drill presses are substantially constructed to provide a solid base for all your drilling operations, and offer a greater range of spindle speeds than any others in their class. They have the weight and rigidity to maintain the built-in tight tolerances required for metalworking applications.

- Fully enclosed spindle with spaced bearings for maximum spindle support and accurate drilling operations
- Maximum spindle run out of 0.0005"
- Extended quill/spindle travel ideal for deep hole applications
- LED readout for spindle speeds
- Quick change vertical depth stop for accurate, repeatable feed length
- Includes chuck with key and arbor
- Rack and pinion table raiser
- Table tilts 45 degrees right and left and rotates 360 degrees around the column
- Front mounted industrial paddle type power switch
- 17" & 20" models available in 240V, 3PH (9680178 & 9680210)

DIMENSIONS:

Item # 9680158 - 68" H x 15" W x 28" D

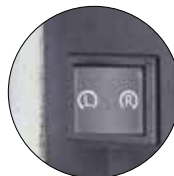
Item # 9680177 and # 9680178 - 68" H x 15-1/2" W x 28" D

Item # 9680209 and # 9680210 - 70" H x 19-1/2" W x 30" D

Item #	Swing	Motor HP	Volts	Amps AC	Capacity Cast Iron	Spindle Speeds	RPM	Spindle Taper	Spindle Travel	Spindle to Table	Table Work Surface	Table Slots	Weight
9680158	15"	1/2	120/240, 1PH	8.6/4.3	5/8"	16	138 - 3476	MT2/JT3	5	29"	11-1/2" x 11-1/2"	5/8"	162 lbs.
9680177	17"	1	120/240, 1PH	10.2/5.1	7/8"	16	138 - 3476	MT2/JT3	5	25"	14-3/8" x 14-3/8"	5/8"	183 lbs.
9680178	17"	1	240, 3PH	5	7/8"	16	138 - 3476	MT2/JT3	5	25"	14-3/8" x 14-3/8"	5/8"	183 lbs.
9680209	20"	1-1/2	120/240, 1PH	14.2/7.1	1-1/4"	16	120 - 3605	MT2/JT4	6	26"	19-1/4" x 18-3/4"	5/8"	274 lbs.
9680210	20"	1-1/2	240, 3PH	5	1-1/4"	16	120 - 3605	MT2/JT4	6	26"	19-1/4" x 18-3/4"	5/8"	274 lbs.



Swing-mount motor and pulley system



Manual Spindle Reversing Switch On 9680210



9680158



9680177



9680209



LED Read Out
Industrial Paddle
Style Switch



Quick Change
Depth Stop



Chuck key
storage clip



Cast metal
3 spoke quill
feed handle

FLOOR PRODUCTION DUTY STEP PULLEY DRILL PRESSES

Palmgren premier line of step pulley drill presses have a wide range of speeds and are constructed throughout to form a solid base for heavy, accurate continuous use. The pulleys are long wearing aluminum alloy, fully machined and balanced.

Combined with a Gates 7M industrial V-ribbed V-belt that delivers better gripping and power with a service life of 10,000 hours. Speed changes are fast and easy – our exclusive quick change handle and motor spring plate provides consistent, proper tension from the motor to the belt and pulleys all the time. The fully enclosed machine tool spindle has a concentricity of 0.0005” at the spindle nose.

These drills can be used to perform all hole making operations – drilling, tapping, reaming, boring, spot-facing, counter-boring and chamfering in any type of material.

OTHER STANDARD FEATURES INCLUDE:

- Built in halogen work light
- Forward & reverse switch
- Drill depth stop
- Digital depth gauge (Item #9680216)
- Digital speed display (Item #9680216)
- T-slotted table and base
- Interlocking spindle safety guard
- Electric interlock on the pulley cover
- Magnetic overload protection
- Built in tool ejector
- Chuck and arbor

Item #	9680214 Floor	9680216 Floor
Electric Supply		
Motor	1HP / 115V / 1PH	3HP / 230V / 3PH
Drilling Capacity		
Drilling capacity in steel	Ø 28 mm / 1.103"	Ø 34 mm / 1.336"
Working range	16"	22"
Quill travel	105 mm / 4.134"	160 mm / 6.299"
Spindle Taper		
Spindle Taper	MT3/JT3	MT4/JT3
Speeds		
Spindle speeds	262 - 4075 rpm	150 - 4000 rpm
Number of pulley steps	16 steps	2 x 9 steps
Drilling Table		
Table size L x W	340 x 360 mm / 13.386" x 14.173"	420 x 400 mm / 16.535" x 15.748"
T-slot size	14 mm / .551"	14 mm / .551"
Distance spindle - table (max.)	860 mm / 33.858"	790 mm / 31.102"
Working surface base L x W	320 x 320 mm / 12.598" x 12.598"	390 x 370 mm / 15.354" x 14.567"
Distance spindle - base (max.)	1275 mm / 50.197"	1275 mm / 50.197"
Dimensions		
Column diameter	92 mm / 3.622"	115 mm / 4.528"
Length	698 mm / 27.480"	918 mm / 36.142"
Width	449 mm / 17.677"	585 mm / 23.032"
Height	1721 mm / 67.776"	1895 mm / 74.606"
Net weight	140 kg / 309 lbs.	274 kg / 605 lbs.



BENCH PRODUCTION DUTY STEP PULLEY DRILL PRESSES

Palmgren premier line of step pulley drill presses have a wide range of speeds and are constructed through-out to form a solid base for heavy, accurate continuous use. The pulleys are long wearing aluminum alloy, fully machined and balanced.

Combined with a Gates 7M industrial V-ribbed V-belt that delivers better gripping and power with a service life of 10,000 hours. Speed changes are fast and easy – our exclusive quick change handle and motor spring plate provides consistent, proper tension from the motor to the belt and pulleys all the time. The fully enclosed machine tool spindle has a concentricity of 0.0005" at the spindle nose.

These drills can be used to perform all hole making operations – drilling, tapping, reaming, boring, spot-facing, counter-boring and chamfering in any type of material.

OTHER STANDARD FEATURES INCLUDE:

- Built in halogen work light
- Forward & reverse switch
- Drill depth stop
- T-slotted table and base
- Interlocking spindle safety guard
- Electric interlock on the pulley cover
- Magnetic overload protection
- Item 9680215 comes with a built in tool ejector
- Chuck and arbor

Item #	9680221 Bench	9680215 Bench
Electric Supply		
Motor	1HP / 115V / 1PH	1HP / 115V / 1PH
Drilling Capacity		
Drilling capacity in steel	Ø 24 mm / .945"	Ø 28 mm / 1.103"
Working range	13"	16"
Quill travel	85 mm / 3.347"	105 mm / 4.134"
Spindle Taper		
Spindle Taper	MT2/JT33	MT3/JT3
Speeds		
Spindle speeds	420-4000 rpm	145-4800 rpm
Number of pulley steps	7 steps	16 steps
Drilling Table		
Table size L x W	280 x 300 mm / 11.024" x 11.811"	340 x 360 mm / 13.386" x 14.173"
T-slot size	14 mm / .551"	14 mm / .551"
Distance spindle - table (max.)	515 mm / 20.276"	685 mm / 26.968"
Working surface base L x W	280 x 260 mm / 11.024" x 10.236"	320 x 320 mm / 12.598" x 12.598"
Distance spindle - base (max.)	681 mm / 26.811"	699.5 mm / 27.5"
Dimensions		
Column diameter	80 mm / 3.150"	92 mm / 3.622"
Length	665 mm / 26.181"	698 mm / 27.480"
Width	434 mm / 17.087"	449 mm / 17.677"
Height	998 mm / 39.292"	1066 mm / 42"
Net weight	84 kg / 185 lbs.	136 kg / 300 lbs.



9680221

9680215

16" PRODUCTION DUTY STEP PULLEY WITH POWER FEED

Palmgren's elite step pulley drill press has a wide range of speeds and is constructed through-out to form a solid base for heavy, accurate, continuous use. The pulleys are long wearing aluminum alloy, fully machined and balanced. Speed changes are made fast and easy with our quick-change handle and motor spring plate provides consistent, proper tension from the motor to the belt and pulleys. This heavy-duty drill press uses a mechanical clutch system for the power feed and is built to handle all your drilling, reaming, chamfering, tapping, spot facing and counter boring applications.

STANDARD FEATURES:

- Mechanical clutch spindle power feed
- Maximum spindle runout of 0.0005"
- Built in halogen work light
- Forward & reverse switch
- Drill depth stop
- T-slotted table and base
- Interlocking spindle safety guard
- Electric interlock on the pulley cover
- Magnetic overload protection
- Built in tool ejector
- Chuck and arbor

Item # 9680130

Electric Supply	
Motor	1HP / 115V / 1PH
Drilling Capacity	
Drilling capacity in steel	1.1"
Working range	16"
Quill travel	4.21"
Quill Diameter	2.05"
Spindle Taper	
Spindle Taper	MT3/JT3
Speeds	
Spindle speeds	262-2,922
Number of pulley steps	12 Steps
Drilling Table	
Table size L x W	13.38" x 14.09"
T-slot size	14mm
Distance spindle - table (max.)	36.54"
Working surface base L x W	13.7" x 20.7"
Distance spindle - base (max.)	50.35"
Dimensions	
Column diameter	3.6"
Dimensions	28" x 18" x 68"
Net weight	321 lbs.



16" VARIABLE SPEED PRODUCTION DUTY STEP PULLEY WITH POWER FEED

Palmgren's elite Variable Speed Step Pulley Drill Press has a wide range of speeds and is rigidly constructed through-out to form a solid base for heavy, accurate, continuous use. The pulleys are long wearing aluminum alloy, fully machined and balanced. Speed changes are made fast and easy with our quick-change handle, with an electronic inverter providing infinite speed changes within each pulley step. The motor spring plate provides consistent, proper tension from the motor to the belts and pulleys. This heavy-duty drill press uses a mechanical clutch system for the power feed and is built to handle all your drilling, reaming, chamfering, tapping, spot facing and counter boring applications.

STANDARD FEATURES:

- Variable speed inverter
- Mechanical clutch spindle power feed
- Maximum spindle runout of 0.0005"
- Built in halogen work light
- Forward & reverse switch
- Drill depth stop
- T-slotted table and base
- Interlocking spindle safety guard
- Electric interlock on the pulley cover
- Magnetic overload protection
- Built in tool ejector
- Chuck and arbor

Item # 9680129

Electric Supply	
Motor	1HP / 230V / 1PH
Drilling Capacity	
Drilling capacity in steel	1.1"
Working range	16"
Quill travel	4.21"
Quill Diameter	2.05"
Spindle Taper	
Spindle Taper	MT3/JT3
Speeds	
Spindle speeds	80-3,500
Number of pulley steps	12 Steps+Variable
Drilling Table	
Table size L x W	13.38" x 14.09"
T-slot size	14mm
Distance spindle - table (max.)	36.54"
Working surface base L x W	13.7" x 20.7"
Distance spindle - base (max.)	50.35"
Dimensions	
Column diameter	3.6"
Dimensions	28" x 18" x 68"
Net weight	330 lbs.



16" VARIABLE SPEED PRODUCTION DUTY DRILL PRESS

Palmgren's highest quality drilling machine is built using the latest drilling technology and operational features that stand up to production output and accuracy. Built with the operator in mind these premier drills combine efficiency, safety and ergonomics giving them an edge over all competitive models. The unique combination of V-belt and variable speed inverter provides the broadest speed range available on the market today. This speed range delivers the power and torque for large hole drilling and the high speed and control for small hole applications - making it ideal for working in a great array of materials. The pulleys are long wearing aluminum alloy, fully machined and balanced and are driven by a Gates 7M industrial V-ribbed V-belt that delivers all the needed power to the spindle with a service life of 10,000 hours.

This drill uses a brushless DC motor with permanent current control combined with the latest state of the art variable speed inverter designed and built exclusively for metalworking machine tools. The fully enclosed machine tool spindle has a concentricity of .0005" at the spindle nose.

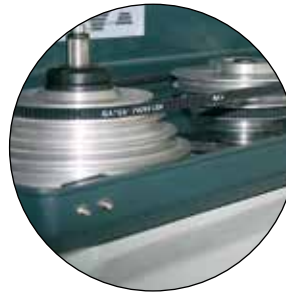
STANDARD FEATURES:

- Built in halogen work light
- Forward and reverse switch
- Tapping mode
- Coolant
- Digital spindle rpm readout
- Interlocking spindle safety guard
- Electric interlock on pulley cover
- Magnetic overload protection
- Built in tool ejector
- Chuck and arbor

Item # 9680217

Electrical Connection	
Motor	2HP / 230V / 1PH
Drilling Capacity	
Drilling capacity in steel	Ø 28 mm / 1.104 in
Working range	16 in
Quill travel	105 mm / 4.134 in
Spindle Taper	
Spindle Taper	MT3/JT3
Speeds	
Spindle Speeds	35 - 4000 RPM
Number of Pulley Steps	12 steps, continuously variable
Drilling Table	
Table Size Length x Width	340 x 360 mm / 13.386 in x 14.173 in
T-Slot Size	14 mm / .551 in
Distance Spindle - Table (max.)	860 mm / 33.858 in
Working Surface Base L x W	370 mm x 360 mm / 14.57 in x 12.6 in
Distance Spindle - Base (max.)	1275 mm / 50.197 in
Dimensions	
Column Diameter	92 mm / 3.622 in
Length	701 mm / 27.598 in
Width	474 mm / 18.661 in
Height	1755 mm / 69.094 in
Net weight	141 kg / 311 lbs.

These drills can be used to perform all hole making operations – drilling, tapping, reaming, boring, spot-facing, counter-boring and chamfering in any type of material.



Vibration free
Ground aluminum pulleys
Gates 7M industrial V-ribbed V-belt
Service life of the V-belts up to 10,000 operating hours
Increased flexibility reduces heat build-up
More torque than common V-belts

18" GEAR HEAD BENCH DRILL PRESS

This versatile all gear drive drill press is ideal for precision drilling applications and continuous industrial use. The all gear drive transmission delivers full power at any speed, driving the cutting tools at nearly 100% of the available motor horsepower. This drill utilizes the combination of steel and reinforced fiber gears to ensure positive, quiet operation. All clutches are made of ground steel for added performance and strength. The wide speed range makes this drill ideal for drilling small to large diameter holes fast and easily.

STANDARD FEATURES:

- Wide speed range with 8 different speeds
- Simple knob selectors for operator ease in changing spindle speeds
- Fully enclosed machine tool spindle with internal 3 MT mounted in precision bearings for maximum accuracy, minimizing deflection
- Front mounted control panel designed for operator convenience
- Forward & reverse spindle switch
- T-slotted production table and base
- Rack and pinion table raiser
- Front mounted dial adjusted work stop
- Interlocking chuck guard

Item # 9680224

Drive Type	Gear Head
Swing	18"
Spindle Taper	MT3
Motor	1-1/2HP - 2HP / 240V - 3PH / 60Hz
Capacity Steel	1"
Capacity Cast Iron	1"
Power Feed	No
Number of Speeds	8
Spindle Speed	90 - 3480 RPM
Spindle Travel	5"
Base Size	20-5/8" x 13-13/16"
Table Work Surface	15" x 15"
Number of T-Slots	2
Table Slot Size	1/2"
Column Dia.	3 - 39/64"
Max. Spindle To Base	24"
Quill Dia.	2"
Spindle to Table	17 - 45/64"
Dimensions (W x L x H)	17" x 23" x 51"
Includes	• Chuck Guard



20" GEAR HEAD DRILL PRESS

This versatile all gear drive drill press is ideal for precision drilling applications and continuous industrial use. The all gear drive transmission delivers full power at any speed, driving the cutting tools at nearly 100% of the available motor horsepower. This drill utilizes the combination of steel and reinforced fiber gears to ensure positive, quiet operation. All clutches are made of ground steel for added performance and strength. The wide speed range makes this drill ideal for drilling small to large diameter holes fast and easily.

STANDARD FEATURES:

- Wide speed range with 8 different speeds
- Simple knob selectors for operator ease in changing spindle speeds
- Fully enclosed machine tool spindle with internal 3 MT mounted in precision bearings for maximum accuracy, minimizing deflection
- Quick release drill ejector
- Front mounted control panel designed for operator convenience
- Forward & reverse spindle switch
- T-slotted production table and base
- Rack and pinion table raiser
- Front mounted dial adjusted work stop
- Interlocking chuck guard
- Work light

Item # 9680223

Drive Type	Gear Head
Swing	20"
Spindle Taper	MT3
Motor	1-1/2 - 2HP - 240V - 3PH - 60Hz
Capacity Steel	1 - 1/8"
Capacity Cast Iron	1 - 1/8"
Power Feed	No
Number of Speeds	8
Spindle Speed	90 - 3480 RPM
Spindle Travel	5"
Base Size	22-5/8" x 15-3/4"
Table Work Surface	15-1/2" x 14 - 13/16"
Number of T-Slots	2
Table Slot Size	1/2"
Column Dia.	3 - 39/64"
Max. Spindle To Base	47 - 13/64"
Quill Dia.	2 - 23/64"
Spindle to Table	34 - 13/32"
Dimensions (W x L x H)	15" x 25" x 82"
Includes	<ul style="list-style-type: none"> • Chuck Guard • Halogen Light



22" GEAR HEAD DRILL PRESS WITH MECHANICAL CLUTCH

Ruggedly constructed Palmgren's 22" gear head drill press delivers full power at any speed and has the operational features to withstand continuous industrial use. This heavy duty drill press uses a mechanical clutch system for the power feed and is built to handle all you drilling, reaming, chamfering, tapping, spot facing and counter boring applications with ease.

STANDARD FEATURES:

- Spindle gear box is equipped with hardened and ground steel gears and shafts lubricated on a continuous oil bath for long term quiet, smooth operation
- Fully enclosed machine tool ground spindle with internal 4 MT mounted in precision bearings for maximum accuracy, minimizing deflection
- Front mounted control panel designed for operator convenience
- Forward & reverse spindle switch
- Mechanical clutch spindle power feed
- Fine feed wheel for small hole and finishing operations
- Rack and pinion head and table raiser system
- T-slotted production table and base
- Front mounted dial adjusted work stop
- 4.5" column provides maximum head, table and base support and stability
- Safety electrical package with emergency push button stop switch, 24 volts at the switch and interlocking chuck guard
- Flood coolant system

Item # 9680212

Drive Type	Gear Head
Swing	22"
Spindle Taper	MT4/JT3
Motor	1-1/2HP - 2HP / 240V - 3PH / 60Hz
Capacity Steel	1-1/4"
Capacity Cast Iron	1 - 9/16"
Power Feed	Yes
Number of Speeds	12
Chuck Size	5/8"
Spindle Speed	95 - 3200 RPM
Spindle Travel	4-3/4"
Base Size	16" x 20"
Table Work Surface	16-3/4" x 17-1/2"
Number of T-Slots	2
Table Slot Size	1/2"
Column Dia.	4-1/2"
Max. Spindle To Base	46-1/4"
Quill Dia.	2 - 61/64"
Spindle to Table	29-3/4"
Dimensions (W x L x H)	23-1/2" x 28" x 80"
Includes	<ul style="list-style-type: none"> • Chuck and Arbor • Safety Drill Guard • Halogen Work Light • Tool Ejector • Coolant System



22" GEAR HEAD DRILL PRESS WITH ELECTRO-MAGNETIC CLUTCH

This versatile all gear drive drill press is ideal for precision drilling applications and continuous industrial use. Equipped with a state-of-the-art push button electro-mechanical clutch for power feed engagement and overload protection. The all gear drive transmission delivers full power at any speed, driving the cutting tools at nearly 100% of the available motor horsepower. This drill utilizes the combination of steel and reinforced fiber gears to ensure positive, quiet operation. All clutches are made of ground steel for added performance and strength. The wide speed range makes this drill ideal for drilling small to large diameter holes fast and easily.

STANDARD FEATURES:

- Wide speed range with 8 different speeds
- Simple knob selectors for operator ease in changing spindle speeds
- Electro-magnetic clutch power feed – the operator simply dials in the desired feed rate and engages the power feed with the push of a button. The feed disengages automatically when the preset depth is reached
- Fully enclosed machine tool spindle with internal MT4 mounted in precision bearings for maximum accuracy, minimizing deflection
- Quick release drill ejector
- Front mounted control panel designed for operator convenience
- Forward & reverse spindle switch
- T-slotted production table and base
- Rack and pinion table raiser
- Front mounted dial adjusted work stop
- Interlocking chuck guard
- Work light
- Coolant system
- Reversing switch included as standard accessory

Item # 9680225

Drive Type	Gear Head
Swing	22"
Spindle Taper	MT4
Motor	2.0HP - 3.0HP / 240V - 3PH / 60Hz
Capacity Steel	1-1/4"
Capacity Cast Iron	1 - 9/16"
Power Feed	Yes
Number of Speeds	8
Spindle Speed	90 - 2480 RPM
Spindle Travel	4-3/4"
Base Size	17-3/4" x 26"
Table Work Surface	15-3/4" x 16-1/2"
Number of T-Slots	2
Table Slot Size	1/2"
Column Dia.	4-1/2"
Max. Spindle To Base	50"
Quill Dia.	2 - 61/64"
Spindle to Table	32-1/4"
Dimensions (W x L x H)	23-1/2" x 28" x 86-1/2"
Includes	<ul style="list-style-type: none"> ● Coolant System ● Chuck Guard ● Halogen Work Light ● Reversing Foot Switch



Reversing Foot Switch

20" VARIABLE SPEED GEAR HEAD DRILL PRESSES

Palmgren Gear Head Drill Presses are ideal for precision drilling applications and continuous industrial use. These versatile, gear driven, drill presses are ruggedly constructed with an all gear driven transmission to deliver full power at any speed, driving the cutting tool at nearly 100% of the available motor horsepower. The drill ensures positive and quiet operation by the use of steel and reinforced fiber gears.

STANDARD FEATURES:

- Wide speed range with 4 different speed settings
- Simple knob selectors for operator ease in controlling spindle speeds
- Fully enclosed machine tool spindle with internal 3 MT mounted in precision bearings for maximum accuracy, minimizing deflection
- Front mounted control panel designed for operator convenience
- T-slotted production table and base
- Rack and pinion table raiser
- Front mounted dial adjusted work stop
- Interlocking chuck guard
- Maximum spindle runout of 0.0005"
- Work light
- Reversing switch included as standard accessory

Item #	9680134	9680138
Height (inches)	81"	81"
Width (inches)	15" ⁹⁶⁸⁰¹³⁴	15"
Depth (inches)	25"	25"
Weight (lbs)	506	506
Capacity Cast Iron	1-1/8"	1-1/8"
Capacity Steel	1"	1"
HP	2	2
VOLTAGE	230	460
AMPS	6.5	3.2
PHASE	3	3
Drive Type	Gear	Gear
Number of Speeds	Variable	Variable
Spindle Speed	54 to 3800	54 to 3800
Swing	20"	20"
Spindle Taper	MT3	MT3
Spindle Travel	5"	5"
Max. Spindle to Table	34-1/2"	34-1/2"
Max Spindle to Base	47"	47"
Quill Diameter	62mm	62mm
Column Diameter	3.62"	3.62"
Table Work Surface	15.5" x 14.75"	15.5" x 14.75"
Table Slots	4	4
Table Slot Size	14mm	14mm
Base Size	13.75" x 12.625"	13.75" x 12.625"



Reversing Foot Switch

22" VARIABLE SPEED GEAR HEAD DRILL PRESSES

Palmgren's 22" Variable Speed Gear Head Drill Presses have a rigid construction that delivers full power at any speed, with the operational features to withstand continuous industrial use. These versatile, gear driven, drill presses are ruggedly constructed with an all gear driven transmission to drive the cutting tool at nearly 100% of the available motor horsepower. The wide speed range makes this drill ideal for drilling small to large diameter holes fast and easily.

STANDARD FEATURES:

- Wide speed range with 4 different speed settings
- Simple knob selectors for operator ease in controlling spindle speeds
- Fully enclosed machine tool spindle with internal 4 MT mounted in precision bearings for maximum accuracy, minimizing deflection
- Front mounted control panel designed for operator convenience
- T-slotted production table and base
- Rack and pinion table raiser
- Front mounted dial adjusted work stop
- Interlocking chuck guard
- Maximum spindle runout of 0.0005"
- Work light
- Reversing switch included as standard accessory

Item #	9680135	9680139
Height (inches)	85"	85"
Width (inches)	17.5"	17.5"
Depth (inches)	29"	29"
Weight (lbs)	812	812
Capacity Cast Iron	1-1/4"	1-1/4"
Capacity Steel	1-1/16"	1-1/16"
HP	3	3
VOLTAGE	230	460
AMPS	10	4.9
PHASE	3	3
Drive Type	Gear	Gear
Number of Speeds	Variable	Variable
Spindle Speed	60 to 3600	60 to 3600
Swing	22"	22"
Spindle Taper	MT4	MT4
Spindle Travel	5"	5"
Max. Spindle to Table	32-1/3"	32-1/3"
Max Spindle to Base	50"	50"
Quill Diameter	68mm	68mm
Column Diameter	4.53"	4.53"
Table Work Surface	16.5" x 15.75"	16.5" x 15.75"
Table Slots	4	4
Table Slot Size	14mm	14mm
Base Size	16.5" x 15.5"	16.5" x 15.5"



Reversing Foot Switch

28" VARIABLE SPEED DRILL PRESSES

Palmgren's 28" Variable Speed Gear Head Drill Press delivers full power at any speed and has the operational features to withstand continuous industrial use. These versatile, all gear driven, drill presses are ideal for precision drilling applications and continuous industrial use. The gear driven transmission is designed to deliver full power at any speed, driving the cutting tool at nearly 100% of the available motor horsepower.

STANDARD FEATURES:

- Wide speed range with 4 different speed settings
- Spindle gear box is equipped with hardened and ground steel gears and shafts, lubricated by an internal oil pump for quiet, smooth operation
- Fully enclosed machine tool spindle with internal 4 MT mounted in precision bearings for maximum accuracy, minimizing deflection
- Front mounted control panel designed for operator convenience
- T-slotted production table and base
- Rack and pinion table raiser system
- Front mounted dial adjusted work stop
- 6" column provides maximum head, table and base support and stability
- Flood coolant system
- Maximum spindle runout of 0.0005"
- Table tilts left & right 45°
- Reversing switch included as standard accessory

Item #	9680136	9680140
Height (inches)	86.5"	86.5"
Width (inches)	19"	19"
Depth (inches)	33.5"	33.5"
Weight (lbs)	1474	1474
Capacity Cast Iron	1-3/4"	1-3/4"
Capacity Steel	1-1/2"	1-1/2"
HP	3	3
VOLTAGE	230	460
AMPS	10	4.9
PHASE	3	3
Drive Type	Gear	Gear
Number of Speeds	8	8
Spindle Speed	105 to 1800	105 to 1800
Swing	28"	28"
Spindle Taper	MT4/JT3	MT4/JT3
Spindle Travel	6-5/8"	6-5/8"
Max. Spindle to Table	28-1/2"	28-1/2"
Max Spindle to Base	47-1/2"	47-1/2"
Quill Diameter	70mm	70mm
Column Diameter	5.9"	5.9"
Table Work Surface	21.25" x 18.5"	21.25" x 18.5"
Table Slots	3	3
Table Slot Size	14mm	14mm
Tilting Angle	0° to 90°	0° to 90°
Base Size	29.75" x 18.8"	29.75" x 18.8"



Tilting Table

Reversing Foot Switch

30" GEAR HEAD DRILL PRESS

This very rugged drill press is the ideal choice for medium – to heavy duty – large hole making production and is built with performance features to withstand continuous industrial use.

This drill is built to last even in the most adverse working conditions. Large heavy cast iron construction for maximum stability with all gear drive hardened and ground steel gears that operate in an oil bath with 18 speeds to choose from. Tempered, ground spindle with internal taper mounted in precision bearings for maximum accuracy, 6 spindle power feed rates with electromagnetic clutch, power feed is engaged by push button located in the three spoke hand feed lever.

These drills can be used to perform all hole making operations – drilling, tapping, reaming, boring, spot-facing, counter-boring and chamfering in any type of material.

STANDARD FEATURES:

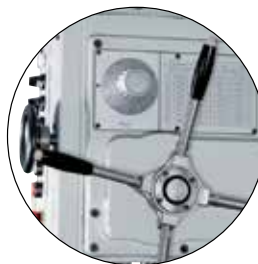
- Tapping mode
- Built in halogen work light
- Hand wheel for fine feed of spindle
- Coolant system
- Electronic interlock spindle safety guard
- Automatic tool ejector

Item # 9680222

Electrical Connection	
Motor	3HP/4HP / 230V / 3PH
Motor Coolant Pump	40 W / .054 HP / 230V
Drilling Capacity	
Drilling Capacity in Steel	Ø 50 mm / 2 in
Threading in Steel	M 42 / 1-5/8 in
Drilling Capacity in Cast Iron	Ø 60 mm / 2-3/8 in
Tapping in Cast Iron	M 50 / 2 in
Working Range	375 mm / 14.75 in
Sleeve Travel	230 mm / 9 in
Spindle Taper	
Spindle Taper	MT4/JT3
Automatic Spindle Sleeve Feed	6 steps, .002 / .012 in/rev
Speeds	
Spindle Speeds	50 - 2090 RPM
Number of Steps	18 Steps
Drilling Table	
Working Surface Table L x W	600 x 600 mm / 23-5/8" x 23-5/8 in
T-Slot Size	18 mm / 3/4 in
Distance Spindle - Table (max.)	800 mm / 31-1/2 in
Working Surface Stand L x W	600 x 520 mm / 23-5/8" x 20-7/16 in
Distance Spindle - Base (max.)	1300 mm / 51 in
Dimensions	
Column Diameter	200 mm / 7-7/8 in
Length	1134 mm / 44 in
Width	610 mm / 24 in
Height	2454 mm / 97 in
Net weight	950 kg / 2090 lbs.



9 selectable speeds via gear shifting lever at the front of the drill head combined with a two-stage motor provides 18 spindle speeds



Automatic spindle feed with electromagnetic clutch

For deep hole drilling the automatic spindle sleeve feed can be engaged or disengaged at any time by actuating the push button switches



32" VARIABLE SPEED DRILL PRESSES

These versatile, variable speed, gear head, drill presses are all gear driven, thus they are perfect for precision drilling applications and continuous industrial use. The Palmgren 32" Drill Presses use a gear driven transmission that is designed to deliver full power at any speed, driving the cutting tool at nearly 100% of the available motor horsepower.

STANDARD FEATURES:

- Extra wide speed range with 16 selectable speeds
- Spindle gear box is equipped with hardened and ground steel gears and shafts, lubricated by an internal oil pump for quiet, smooth operation
- Fully enclosed machine tool ground spindle with internal 4 MT mounted in precision bearings for maximum accuracy, minimizing deflection
- Front mounted control panel designed for operator convenience
- Rack and pinion table raiser system
- T-slotted production table and base
- Front mounted, dial adjusted, work stop
- 8" column provides maximum head, table and base support and stability
- Flood coolant system
- Maximum spindle runout of 0.0005"
- Motorized table
- Table tilts left & right 45°

Item #	9680137	9680141
Height (inches)	92.5"	92.5"
Width (inches)	29"	29"
Depth (inches)	40.3"	40.3"
Weight (lbs)	2046	2046
Capacity Cast Iron	2-1/8"	2-1/8"
Capacity Steel	2"	2"
HP	4-5	4-5
VOLTAGE	230	460
AMPS	16	8
PHASE	3	3
Drive Type	Gear	Gear
Number of Speeds	16	16
Spindle Speed	54 to 2400	54 to 2400
Swing	33"	33"
Spindle Taper	MT4/JT3	MT4/JT3
Spindle Travel	7-7/8"	7-7/8"
Max. Spindle to Table	28-1/2"	28-1/2"
Max Spindle to Base	51"	51"
Quill Diameter	88mm	88mm
Column Diameter	8"	8"
Table Work Surface	25" x 20.5"	25" x 20.5"
Table Slots	3	3
Table Slot Size	14mm	14mm
Base Size	35.75" x 23.625"	35.75" x 23.625"



Tilting Table

Reversing Foot Switch

RADIAL ARM DRILL PRESSES

An extended reach, tilting drill head is ideal for large or odd-shaped work pieces. The table tilts 45° left or right allowing easy machining of holes at almost any angle.

- Durable cast iron head, table & base
- Spindle supported by high quality ball bearings
- Rack and pinion table raiser
- Table tilts 45° right & left and swivels 360° around the column
- 1/2" through table & base slots for easy mounting and clamping of workpiece
- Front mounted safety, paddle on/off switch
- Drill chuck & key
- The head tilts 90° left and 45° right
- The head of the drill press moves 12-1/2" forward or backward

DIMENSIONS:

Item # 9680341 - 32" H x 10" W x 33" D

Item # 9680342 - 65" H x 14" W x 33" D



The head tilts 90° left and 45° right.



The head of the drill press moves 12-1/2" forward or backward



9680341



9680342

Item #	Swing	Motor HP	Volts	Amps AC	Capacity Cast Iron	Spindle Speeds	RPM	Spindle Taper	Spindle Travel	Spindle to Table	Table Work Surface	Table Slots	Weight
9680341	9" to 33"	1/2	115	5.5	5/8	5	600-2592	MT2/JT33	3-5/32"	15"	8-7/8" x 9"	1/2"	90 lbs.
9680342	9" to 33"	1/2	115	5.5	5/8	5	600-2592	MT2/JT33	3-5/32"	30"	10-3/8" x 10-3/8"	1/2"	120 lbs.

DRILL PRESS GUARD

This specially designed drill guard gives full protection from quill to drill point by the smooth telescopic action of the guard, which collapses as the drill penetrates the workpiece, returning to the extended position when the spindle is raised. This unit is made from strong, injection molded, high impact polycarbonate which offers clear and safe vision through body and visor. In the operating position the guard is securely locked in the closed position by a spring-loaded plunger pin assembly. When released, the guard hinges up, allowing instant access for cutting tool and/or chuck change. Complies fully with all ANSI and OSHA guidelines.

- Clear vision for safe operation
- Rapid adjustment for drill length
- Fast access for cutting tool changes



Item #	Max. Chuck Dia.	Lower Spindle Bearing Collar Dia.	Max. Stroke	Min. Stroke
9615025	2-1/8"	1.77", 2.04", 2.36", 2.6", 2.95"	6-1/4"	4-1/2"

SWING-AWAY ADJUSTABLE SAFETY GUARD

Designed specifically for use on mill/drill machines, vertical turret milling machines and larger size drilling machines, these shields are intended to deliver protection by deflecting chips, sparks, coolant or lubricants away from the operator and others in the work area. The unit is made of strong cast iron brackets and high impact polycarbonate which offers the operator clear and safe vision during the machining process. The height clearance is easily adjusted with convenient locking knobs located on the mounting bracket and the large shield easily swings in or out allowing instant access for cutting tool and tool holder changes. Complies with all ANSI and OSHA guidelines.



Item #	L x	W x	H
9615035	16"	13-1/5"	8"

PALMGREN'S PARALLEL ARM TAPPING SYSTEMS

**THE ELIMINATION
OF TAPPING ON
YOUR MACHINING
CENTERS CAN
SAVE BETWEEN
30% TO
40%
OR MORE.**

The use of a Palmgren parallel arm tapping machine in combination with primary operations will generate savings through improved operator utilization, reduced set-up time, reduced material handling, and improved material flow.

When used in conjunction with a CNC machining center, profitability is increased through additional hourly production. Coupled with the savings through the elimination of costly tool holders and additional programming time a tapping arm easily pays for itself in no time.



FEATURES

- Taps both blind and through holes
- Faster tapping cycles
- Greater thread quality and accuracy
- Easy to operate
- Extends tap life
- Eliminates broken taps
- Faster tap positioning with difficult locations – easier to reach holes
- No indexing or laborious handling of work pieces
- Increases productivity – lowers tapping cost per part
- Can be applied to many other shop uses and applications
- Highly flexible, mobile and easy to use

APPLICATIONS

Palmgren offers a variety of universal (articulated) arm systems that can perform a wide range of applications. This allows you to customize a unit to fit a particular need saving you time and money while improving overall quality.

STANDARD APPLICATIONS (with tapping motor)

- Tapping new holes
- Re-tap previous tapped holes from damaged to warped heat treated holes (The tap will automatically self-center so the tap matches to the same lead already in the hole.)
- Reaming
- Countersinking
- Drilling – soft materials only
- Chamfering
- Hone
- Burnish & size through holes
- Finishing with wire brush or abrasives

CUSTOM APPLICATIONS

- Screw driving
- Nut running
- Routing
- Grinding/deburring with die grinders, straight or vertical grinders
- Insert Helicoils

COST COMPARISON: PARALLEL ARM VS. MACHINING CENTER TAPPING

	CNC Machining Center	Parallel Arm
Estimated Operating Burden		
Average Machine Burden Rate	\$50.00/hr	\$3.00/hr
Average Operator Burden Rate	\$20.00/hr	\$0.00
Average Programming Burden Rate	\$28.00/hr	\$0.00
Average Total Burden	\$98.00/hr	\$3.00/hr
Estimated Time for Tapping Each Hole		
Programming/Fixturing	.4 minutes	0 minutes
Set Up	.1 minute	0 minutes
Locating/Tool Changing	.4 minutes	.2 minutes
Tapping	.5 minutes	.3 minutes
Spindle Reversing	.4 minutes	.3 minutes
Total Time per Hole	1.8 minutes	.8 minutes
Estimated Cost per Hole	\$2.94 per hole	.05 per hole



MAKE TAPPING EASY

and offer the best solution
for all of your tapping needs

**FOLLOW
THESE EASY
STEPS
TO CHOOSE THE
RIGHT TAPPING
SYSTEM FROM
PALMGREN:**

1 SELECT THE TAPPING ARM SYSTEM THAT BEST FITS YOUR REQUIREMENTS.

UNIVERSAL-TAP/ELECTRIC
Variable mounting capabilities with a unique articulating arm design which optimizes work area coverage. Suitable for small, medium and large size taps and all secondary bench operations, with a high torque reversible electric motor and a working reach area of 55".

QUICK-TAP
Variable mounting capabilities, suitable for small and medium size taps with 2 different motor choices and a working area reach of 37".

SHOP-TAP
Variable mounting capabilities, suitable for general purpose tapping with 2 different motor choices and a working area reach of 62".

PRODUCTION-TAP
Variable mounting capabilities, suitable for a wide range of general purpose to heavy duty tapping with 3 different motor choices and a working reach of 55".

2 SELECT THE MOTOR THAT BEST FITS YOUR OVERALL REQUIREMENTS.

The single speed 400 or 700 rpm motors are an economical choice when tapping small to medium size holes. The 300 rpm motor and electric motor are the proper choice when tapping medium to large size holes or when your applications cover a broad range of tap sizes.

Motor RPM	Number of Speeds	Tap Capacity Mild Steel	Tap Capacity Aluminum
400	1	1/2"	9/16"
700	1	3/8"	7/16"
300	1	5/8"	11/16"
130 & 400	2	5/8"	3/4"

3 SELECT THE TAP HOLDERS REQUIRED TO MEET YOUR NEEDS.

Whether you're tapping small, medium or large size holes it is recommended that you use a clutch style torque drive tap holder. They provide the added sensitivity and help prevent broken taps. A separate tap holder is required for each size tap you use. Tap holders come in two sizes (1 & 2). The specification box for each model of tapping machine lists the quick change tooling size. Also choose the correct size tap holder located on page 167 that properly matches up to the quick change adaptor on the tapping arm system chosen.

PALMGREN

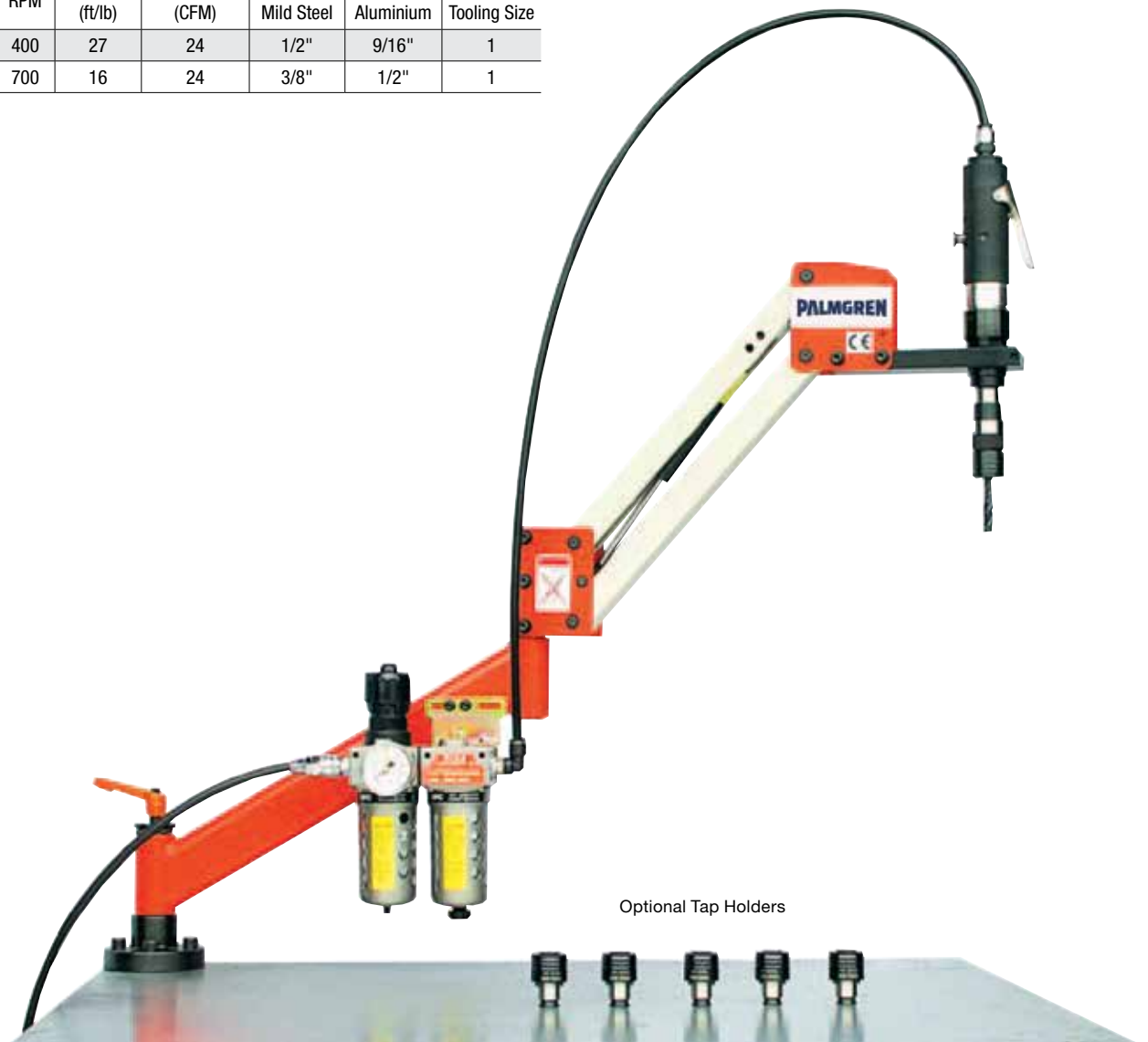
**PALMGREN
3 YEAR
WARRANTY**

QUICK TAP

Pneumatic tapping machine is suitable for small to medium size taps.

- Parallel arm reach 37" max. / 4" min.
- Stationary bench bracket
- Quick change tooling adaptor
- Air preparation unit with lubricator, filter, regulator and pressure gauge
- Vertical motor bracket
- High torque reversible air motor
- See page 35 for optional Tap Holders

Model #	Item #	Motor RPM	Torque @90 PSI (ft/lb)	Air Consumption (CFM)	Max. Tap Capacity/ Mild Steel	Max. Tap Capacity/ Aluminium	Quick Change Tooling Size
QT400	9680420	400	27	24	1/2"	9/16"	1
QT700	9680421	700	16	24	3/8"	1/2"	1



Optional Tap Holders

SHOP TAP

Palmgren's Shop Tap pneumatic tapping machine is a medium duty general purpose machine suitable for tapping small to medium size holes.

- Parallel arm reach 62" max. / 22.5" min.
- Stationary bench bracket
- Quick change tooling adaptor
- Air preparation unit with lubricator, filter, regulator and pressure gauge
- Vertical motor bracket
- High torque reversible air motor
- See page 35 for optional Tap Holders

Model #	Item #	Motor RPM	Torque @90 PSI (ft/lb)	Air Consumption (CFM)	Max. Tap Capacity/ Mild Steel	Max. Tap Capacity/ Aluminium	Quick Change Tooling Size
ST400	9680400	400	27	24	1/2"	9/16"	1
ST700	9680401	700	16	24	3/8"	1/2"	1

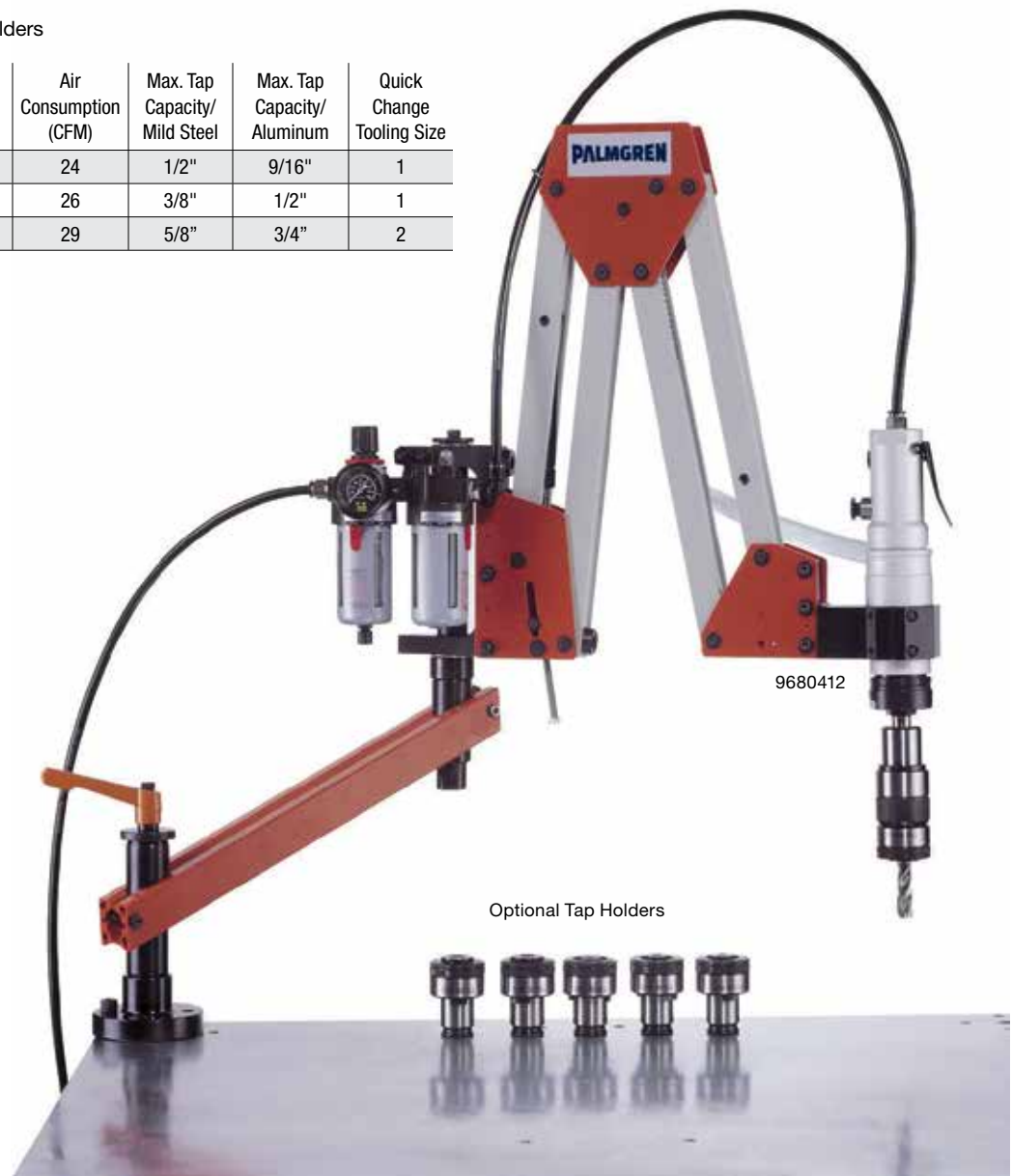


PRODUCTION TAP

Palmgren's Production-Tap pneumatic tapping machine is suitable for a wide range of general purpose to heavy duty tapping applications. The arm is equipped with lubricated for life bearings at all swivel points, provides weightless operation over a wide area and permits the operator to bring the tap to the hole on very large and multi-level parts with ease.

- Refer to page 159 for how to order
- Parallel arm with 8" to 55" reach
- Stationary bench bracket
- Quick change tooling adaptor
- Air preparation unit with lubricator, filter, regulator and pressure gauge
- High torque reversible air motor
- See page 35 for optional Tap Holders

Model #	Item #	Motor RPM	Torque @90 PSI (ft/lb)	Air Consumption (CFM)	Max. Tap Capacity/ Mild Steel	Max. Tap Capacity/ Aluminum	Quick Change Tooling Size
PT400	9680410	400	27	24	1/2"	9/16"	1
PT700	9680411	700	16	26	3/8"	1/2"	1
PT300	9680412	300	30	29	5/8"	3/4"	2



UNIVERSAL TAP

Palmgren's Universal-Tap electric tapping machine is suitable for small, medium and large size taps. It utilizes a unique single articulating arm design that permits tapping as close as eight inches to the vertical mounting bracket. This feature provides a large work envelope even in confined work areas. The arm is equipped with lubricated for life bearings at all swivel points, provides weightless operation through the use of gas counter balance springs and permits the operator to bring the tap to the hole with ease.

- Articulating arm with 8" to 55" reach
- Stationary bench bracket
- Quick change tooling adaptor
- Two-speed gear reducer with variable speed control to adjust torque speed to optimize the treading process
- 115 volt, 1 phase high torque reversible electric motor
- See page 35 for optional Tap Holders



Model #	Item #	Motor RPM	Motor	Max. Tap Capacity/ Mild Steel	Max. Tap Capacity/ Aluminium	Quick Change Tooling Size
IMS-16	9680426	0-300	3/4 HP/115V/1PH	5/8"	3/4"	2

PNEUMATIC HAND TAPPER

The clutch built into the tap holder ratchets when the tap bottoms, hits any interference or begins to dull. Whether you have only a few holes or many to tap the Palmgren hand tapper can save you up to 90% of time as compared to tapping by hand.

- 1/8" to 7/16" capacity in mild steel
- Ergonomic comfort grip
- Adjustable side handle
- Trigger reverse
- Quick change tooling adaptor
- Precision machined and hardened gear reduction
- High torque reversible air motor



Item #	RPM	CFM	HP	Tapping Cap Mild Steel	Quick Change Tooling Size	Noise dB	Air Inlet (npt)	Min. Hose Size (i.d.)	Max. Pressure PSI	Weight
9680451	150	27	.50	1/8-7/16	1	80	1/4"	3/8"	90	2.6 lbs

HORIZONTAL VERTICAL MOTOR BRACKET

The optional horizontal/vertical motor bracket offers the operator the ability to tap vertically or horizontally or at any position in-between.

Item #9680428

Horizontal/Vertical motor bracket for the 300 rpm pneumatic tapping motor and the Universal-Tap electric motor.

Item #9680429

Horizontal/Vertical motor bracket for all 400 and 700 rpm pneumatic tapping motors.



TORQUE DRIVE TAP HOLDERS

The torque clutch allows the tap to stop turning when it becomes dull or encounters any obstruction that might cause the tap to break. Adjustable for all types of materials. The quick change tap holder allows you to change from one size tap to another in 3 to 5 seconds. No gears, head height or stops to change.

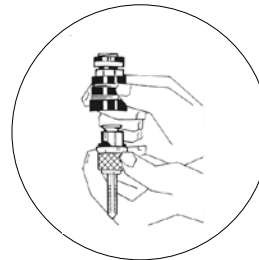
Item#	Description	Quick Change Adapter Size
9680500	0-6 Tap holder w/clutch	1
9680501	8 Tap holder w/clutch	1
9680502	10 Tap holder w/clutch	1
9680503	12 Tap holder w/clutch	1
9680504	1/4" Tap holder w/clutch	1
9680505	5/16" Tap holder w/clutch	1
9680506	3/8" Tap holder w/clutch	1
9680507	7/16" Tap holder w/clutch	1
9680508	1/2" Tap holder w/clutch	1
9680509	9/16" Tap holder w/clutch	1
9680510	1/8" NPT Pipe tap holder w/clutch	1
9680511	9/16" NPT Pipe tap holder w/clutch	1
9680520	Size M3 Tap holder w/clutch	1
9680521	Size M4 Tap holder w/clutch	1
9680522	Size M5 Tap holder w/clutch	1
9680523	Size M6 Tap holder w/clutch	1
9680524	Size M8 Tap holder w/clutch	1
9680525	Size M10 Tap holder w/clutch	1
9680526	Size M12 Tap holder w/clutch	1
9680527	Size M14 Tap holder w/clutch	1
9680530	5/16" Tap holder w/clutch	2
9680531	3/8" Tap holder w/clutch	2
9680532	7/16" Tap holder w/clutch	2
9680533	1/2" Tap holder w/clutch	2
9680534	9/16" Tap holder w/clutch	2
9680535	5/8" Tap holder w/clutch	2
9680536	11/16" Tap holder w/clutch	2
9680537	3/4" Tap holder w/clutch	2
9680538	13/16" Tap holder w/clutch	2
9680539	7/8" Tap holder w/clutch	2
9680540	1" Tap holder w/clutch	2
9680541	1/4" NPT Pipe tap holder w/clutch	2
9680542	3/8" NPT Pipe tap holder w/clutch	2
9680550	Adaptor for size 2 to 1- fits size 2 quick change adaptor and accepts all size 1 tap holders	2
	Drill Chuck w/Size 1 Quick Change Adaptor	
9680515	5/16" Drill chuck on size 1 quick change adaptor	



9680550 Adaptor for size 2 to 1- fits size 2 quick change adaptor and accepts all size 1 tap holders



9680515 Drill chuck with size 1 quick change adaptor



Tap adaptors change easily by sliding chuck sleeve until adaptor is free



Torque drive tap holder shown with tap



For a detailed catalog of the full line of Palmgren Machine Tools visit our web site: www.palmgren.com or e-mail us to request a printed or electronic (pdf) catalog at: sales@chhanson.com

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