



Gearbox/Brake Combination

New Solutions To Old Problems By Thinking 'Inside The Box'

Gearboxes have been copied repeatedly. They are available from a number of sources and they suffer the same problems. Now there is a new design that addresses old problems. PT Tech offers a gearbox and enclosed wet brake combination.

Applications

- Scoops
- Shield Haulers



Enclosed Wet Brake on Intermediate Shaft

- Eliminates alignment and leaky seal issues
- Allows for flow through cooling
- Same brake regardless of gearbox ratio
- Brake maintenance is easy
- Excellent thermal capacity

Increased Durability

- Bigger shafts
- Metalurgically stronger shaft material
- Improved housing for greater strength and rigidity

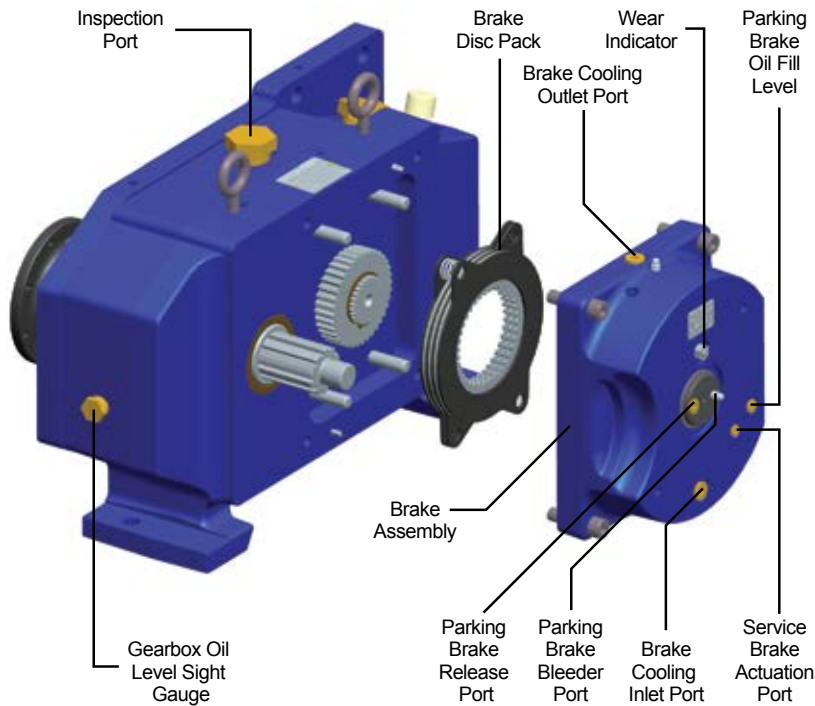
Retrofits Old Gearboxes

- Same mounting footprint
- Similar shape and size
- Same ratios

PT Tech is known in the coal industry for its torque limiters and enclosed wet brakes. Most continuous miners, shuttle cars and scoops have PT Tech products.

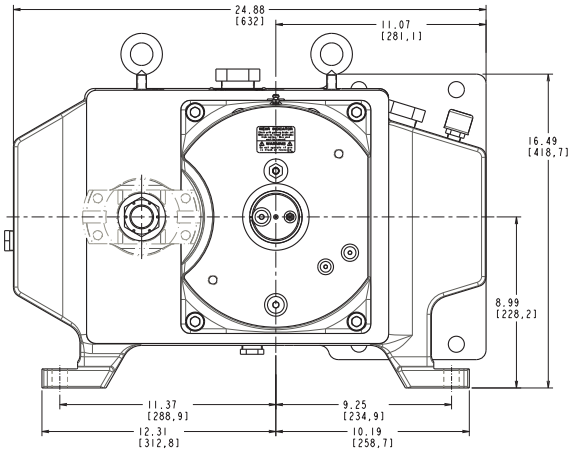
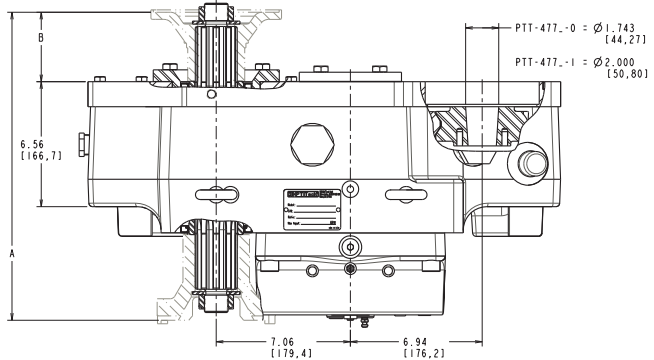
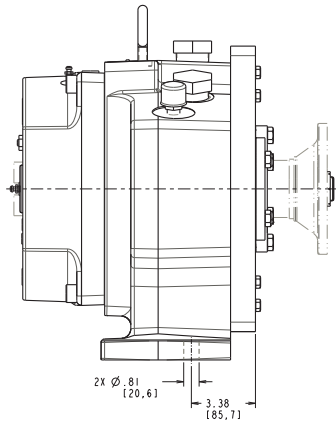
In other markets PT Tech is also known for its gearboxes... some up to 1000 Hp (746 kilowatt). This gearbox/brake offers a combination of both.

PT Tech is a trusted name for its quality and customer service. As an employee owned company we are proud to offer this durable 477 gearbox.



Dimensional Data

- For the "A" dimension:
- With (2) companion flanges (5-1-6331) the dimension is 15.21" (386.3 mm)
 - With (2) 7C flanges (513-067P1) the dimension is 16.96" (430.8 mm)
 - With (1) companion flange (5-1-6331) and (1) 7C flange (513-067P1) the dimension is 16.18" (411 mm)
- For the "B" dimension:
- With companion flange (5-1-6331) the dimension is 3.65" (92.7 mm)
 - With 7C flange (513-067P1) the dimension is 4.43" (112.5 mm)



Parking Brake

Min. Release Pressure	1000 p.s.i.	68.9 bar
Max. Release Pressure	1500 p.s.i.	103.4 bar

Gearbox

Rated Input Power @ 1500 RPM	75 Hp	55.9 kW
Rated Input Torque	890 LB-FT	1207 Nm
Weight	580 lbs.	263 kg
Input Spline	SAE 2-1/4 - 10	
Output Spline	SAE 2-1/4 - 10	

Service Brake

Energy Capacity	24,000 ft.-lbs./stop	32,539 joules/stop
Coolant Flow Required	2 g.p.m.	7.5 liters per min.
Max. Pressure	2000 p.s.i.	137.9 bar

Gearbox Part No.	Ratio	Parking Brake Torque	Service Brake Torque @ 1300 PSI
PTT-477A-0	3.35:1	3710 LB-FT 5030 Nm	2222 LB-FT 3013 Nm
PTT-477B-0	4.56:1	5050 LB-FT 6847 Nm	3025 LB-FT 4101 Nm
PTT-477C-0	5.81:1	6435 LB-FT 8725 Nm	3855 LB-FT 5226 Nm
PTT-477D-0	2.20:1	2436 LB-FT 3303 Nm	1459 LB-FT 1978 Nm

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ISO 2001:2008 with design