

# Black Friday Inventory Insights - Power Tools

Aggressive Distribution, Innovation and Discounting gave Dewalt a win during Black Friday and Cyber Monday

## Key Findings

**Key takeaways** from power tools in home improvement retail, as it relates to Black Friday:

1. **\$ Inventory On Hand (OH):** the night before Black Friday, on an avg SKU and store basis, Milwaukee had the highest share of shelf space, representing 28% of the dollars in stock. Dewalt came in second at 19%
2. **\$ Inventory On Hand (OH):**
3. **Revenues / SKU / Store:**

## Outstanding questions

1. **Store inventory sold:** following the Black Friday weekend, Datavations will examine how the inventory turned at these stores, by examining the qty sold and how much inventory was left on the shelves to see what brands
  - a. Overstocked (# of units still on shelves after promotional period ends)
  - b. Understocked (# of out of stocks)
2. **Ecommerce:** we have excluded the inventory allocated for ecommerce sales in this analysis as that should be analyzed with regards to Cyber Monday. We will be publishing insights related to this following Cyber Monday.

## Store Performance

### \$ Inventory On Hand (OH): Certain brands were better stocked leading up to Black Friday

Value of inventory on-hand of avg. SKU and Store - EOD November 26											
	Drills	Grinders	Impact Wrenches	Nail Guns	Power Tool Batteries	Power Tool Combo Sets	Bare Tools	Sanders	Saws	Wet Vacuums	Grand Total
MILWAUKEE	\$1,119	\$1,018	\$792	\$1,521	\$2,621	\$4,508	\$899	\$235	\$908	\$1,461	<b>\$15,082</b>
DEWALT	\$1,079	\$910	\$1,310	\$965	\$941	\$2,003	\$1,044	\$273	\$1,122	\$459	<b>\$10,106</b>
RIDGID	\$496	\$476	\$1,117	\$585	\$449	\$2,668	\$422	\$520	\$1,204	\$800	<b>\$8,737</b>
RYOBI	\$1,031	\$440	\$360	\$764	\$910	\$1,651	\$662	\$522	\$800	\$432	<b>\$7,573</b>
MAKITA	\$580	\$448	\$1,066	\$604	\$1,485	\$1,368	\$669	\$250	\$894		<b>\$7,364</b>
BOSCH	\$1,404	\$666						\$287	\$1,009	\$1,464	<b>\$4,831</b>
<b>Grand Total</b>	<b>\$5,710</b>	<b>\$3,959</b>	<b>\$4,645</b>	<b>\$4,440</b>	<b>\$6,406</b>	<b>\$12,198</b>	<b>\$3,695</b>	<b>\$2,087</b>	<b>\$5,937</b>	<b>\$4,617</b>	<b>\$53,694</b>

Value of inventory on-hand of avg. SKU and Store (% share) - EOD November 26											
	Drills	Grinders	Impact Wrenches	Nail Guns	Power Tool Batteries	Power Tool Combo Sets	Bare Tools	Sanders	Saws	Wet Vacuums	Grand Total
MILWAUKEE	19.59%	25.72%	17.04%	34.26%	40.92%	36.96%	24.32%	11.27%	15.29%	31.65%	<b>28.09%</b>
DEWALT	18.89%	22.99%	28.20%	21.74%	14.68%	16.42%	28.24%	13.10%	18.91%	9.95%	<b>18.82%</b>
RIDGID	8.69%	12.03%	24.06%	13.18%	7.01%	21.87%	11.41%	24.90%	20.27%	17.32%	<b>16.27%</b>
RYOBI	18.06%	11.11%	7.75%	17.22%	14.20%	13.54%	17.91%	25.02%	13.48%	9.37%	<b>14.10%</b>
MAKITA	10.17%	11.33%	22.96%	13.60%	23.18%	11.21%	18.12%	11.96%	15.05%		<b>13.72%</b>
BOSCH	24.60%	16.83%						13.74%	17.00%	31.71%	<b>9.00%</b>
<b>Grand Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

By end of day Nov 26, the day before Black Friday, Milwaukee was a clear winner in the amount it had stocked shelves at retail locations, representing a 28% share at the average store and SKU. Note that we divide the total inventory value by the amount of skus and stores that stock the inventory to extract relative value and normalize for brand catalog adoption at the retailer. The second highest brand was Dewalt with a significantly lower share of inventory dollars on hand, followed closely by Ridgid, Ryobi and Makita. On the downside, the outlier is Bosch at 9%, which could be induced by a limited categorical participation in our store panel (only 5/10 of the categories).

By Philip Odelfelt, CEO, Datavations

From a category perspective, we see high stockings taking place in the Power Tools Combo Sets, which is Milwaukee's second highest stocked category, shortly after Power Tool Batteries. Makita was low in Combo Sets, but strong in Batteries. Dewalt has the strongest advantage in Impact Wrenches and Saws.

## Revenues / SKU / Store: Select categories brought the Black Friday win to Dewalt

Next, we examine the revenues of the average SKU and store that took place on Nov 27 (Black Friday). By tracking inventory movements out of stores, Datavations extrapolates the sales units and revenues in it's panel. We also adjust for inventory movements that aren't sales, such as shipments from one store to another and catalog resets.

Revenue \$ of avg. SKU and Store - Nov 27 (Black Friday)												
	Drills	Grinders	Impact Wrenches	Nail Guns	Power Tool Batteries	Power Tool Combo Sets	Bare Tools	Sanders	Saws	Wet Vacuums	Grand Total	
DEWALT		\$69	\$28	\$267	\$55	\$78	\$330	\$54	\$20	\$73	\$5	<b>\$979</b>
MILWAUKEE		\$25	\$36	\$62	\$49	\$77	\$257	\$33	\$12	\$34	\$54	<b>\$639</b>
RYOBI		\$28	\$14	\$7	\$48	\$9	\$447	\$23	\$11	\$44	\$6	<b>\$637</b>
RIDGID		\$8	\$7	\$11	\$10	\$4	\$48	\$7	\$12	\$112	\$33	<b>\$252</b>
MAKITA		\$7	\$15	\$8	\$24	\$20	\$107	\$14	\$10	\$18		<b>\$223</b>
BOSCH		\$29	\$7						\$12	\$15	\$0	<b>\$63</b>
<b>Grand Total</b>		<b>\$166</b>	<b>\$107</b>	<b>\$355</b>	<b>\$186</b>	<b>\$188</b>	<b>\$1,189</b>	<b>\$131</b>	<b>\$77</b>	<b>\$296</b>	<b>\$98</b>	<b>\$2,793</b>

Revenue share % of avg. SKU and Store - Nov 27 (Black Friday)											
	Drills	Grinders	Impact Wrenches	Nail Guns	Power Tool Batteries	Power Tool Combo Sets	Bare Tools	Sanders	Saws	Wet Vacuums	Grand Total
DEWALT	41.6%	26.2%	75.2%	29.6%	41.5%	27.8%	41.2%	26.0%	24.7%	5.1%	<b>35.1%</b>
MILWAUKEE	15.1%	33.6%	17.5%	26.3%	41.0%	21.6%	25.2%	15.6%	11.5%	55.1%	<b>22.9%</b>
RYOBI	16.9%	13.1%	2.0%	25.8%	4.8%	37.6%	17.6%	14.3%	14.9%	6.1%	<b>22.8%</b>
RIDGID	4.8%	6.5%	3.1%	5.4%	2.1%	4.0%	5.3%	15.6%	37.8%	33.7%	<b>9.0%</b>
MAKITA	4.2%	14.0%	2.3%	12.9%	10.6%	9.0%	10.7%	13.0%	6.1%	0.0%	<b>8.0%</b>
BOSCH	17.5%	6.5%	0.0%	0.0%	0.0%	0.0%	0.0%	15.6%	5.1%	0.0%	<b>2.3%</b>
<b>Grand Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

On an average sku and store basis, we observe the spike in revenue being the most favorable to Dewalt, reaping an impressive market share of 35.1%, while Milwaukee and Ryobi fall behind at 23%. Meanwhile, the extreme laggards are in Ridgid, Makita and Bosch. A large portion of Dewalt's win can be attributed to Impact Wrenches, reaping 75.2% of revenues, representing 27% of the brands revenues. If we observe the inventory dollars from the prior day, we see Dewalt had the largest advantage in Impact Wrenches, with 28% of the inventory on shelves. Appropriately stocking up had a positive impact on sales in this category for Dewalt, giving a strong relative win.

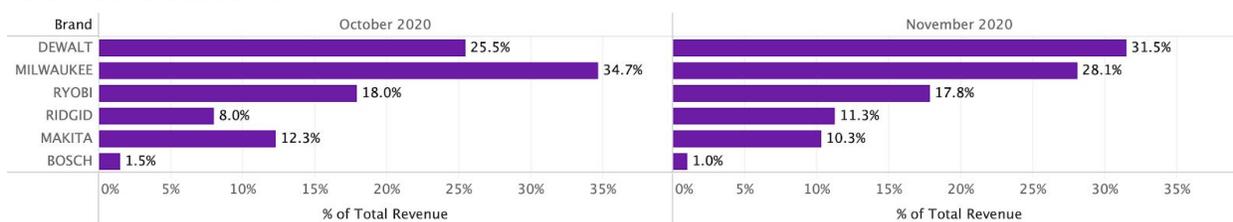
## Aggregate Revenues: Growth And Product Innovation

As seen in the table to the right, on an M/M aggregate revenues basis, we have observed a high M/M growth of 127.7% for Dewalt in November. This correlates with innovation momentum as Dewalt introduced 31 new SKUs. Meanwhile, Milwaukee only brought 12 new SKUs to market, grew revenues by 48.9% M/M, and shrunk share from 34.7% to 28.1%. Ridgid's innovation efforts are also impressive with 29 new SKUs, which shows in a revenue growth of 158.9%, and share gain from 8.0% to 11.2%.

Revenue and SKU growth

Brand		November 2020
BOSCH	Revenue M/M	22.0%
	SKUs added	1
DEWALT	Revenue M/M	127.7%
	SKUs added	31
MAKITA	Revenue M/M	53.8%
	SKUs added	15
MILWAUKEE	Revenue M/M	48.9%
	SKUs added	12
RIDGID	Revenue M/M	158.9%
	SKUs added	29
RYOBI	Revenue M/M	82.5%
	SKUs added	14

Power Tools- revenue share %



## Aggregate Revenues: Combo Sets Category

Combo sets represented 42% of average SKU and Store revenues in power tools on Black Friday (see figure 2 above). The category has contributed tailwind for Dewalt due to it's promotional activity and innovation.

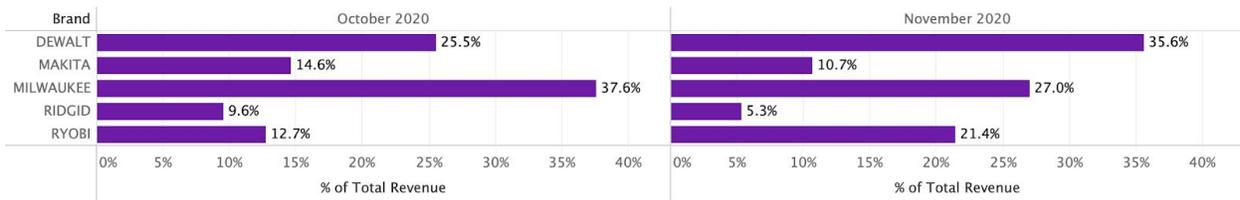
In the table to the right you see the growth in the category being linked to the number of new SKUs introduced in the month. For Dewalt, categories such as Combo Sets (2 new SKUs, 265% growth), revenues have grown significantly.

Combo Sets – SKU count and revenue Growth

Brand	November 2020
DEWALT	265.2% 2
MAKITA	90.0% 1
MILWAUKEE	86.8% 0
RIDGID	44.8% 1
RYOBI	337.8% 1

However, when looking at Dewalt's SKUs in the category, we see the innovation had a smaller impact on the avg. store revenue growth than the items already in the catalog. The ATOMIC 20-Volt SKUs show extreme growth. Showing high Black Friday discounts of 48% for the 4-Tool and 50% for the 2-tool.

Combo Sets – revenue share %



Avg Store Revenue – Dewalt Power Tool Combo Sets

Title	October 2020	November 2020
20-Volt MAX Lithium Ion Cordless Brushless Hammer Drill/Driver Combo Kit (2-Tool) with FLEXVOLT ADVANTAGE		\$935
20-Volt MAX Lithium-Ion Cordless Brushless Combo Kit (2-Tool) with FLEXVOLT and 20-Volt Battery and Charger	\$443	\$64
20-Volt MAX Lithium-Ion Cordless Drill/Impact Combo Kit (2-Tool) with 2 Batteries 1.5 Ah, Charger and Tool Bag	\$199	\$0
20-Volt MAX XR Cordless Brushless Hammer Drill/Impact Combo Kit (2-Tool) with (1) Battery 2Ah and (1) Battery 4Ah	\$908	\$492
20-Volt MAX XR Lithium-Ion Cordless Brushless Drill/Impact Combo Kit (2-Tool) with (2) Batteries 2Ah, Charger and Bag	\$560	\$274
20-Volt MAX XR Lithium-Ion Cordless Combo Kit (5-Tool) with (1) 4.0Ah Battery, (1) 2.0Ah Battery, Charger & Bag		\$1,196
ATOMIC 20-Volt Lithium-Ion Combo Kit (4-Tool) with Two 2.0 Ah Batteries and Charger	\$1,691	\$7,073
ATOMIC 20-Volt MAX Lithium-Ion Brushless Cordless Compact Drill/Impact Combo Kit (2-Tool) 2 Batteries 1.3Ah and Charger	\$1,379	\$6,497

## Ecommerce Performance

Certain ecommerce promotions start as early as Thursday evening and carry into cyber Monday. We therefore use the 11/26/2020 - 11/30/2020 date frame to analyze the online event.

Revenue of avg. SKU in ecom channel - 11/26 to 11/30											
	Drills	Grinders	Impact Wrenches	Nail Guns	Power Tool Batteries	Power Tool Combo Sets	Bare Tools	Sanders	Saws	Wet Vacuums	Grand Total
DEWALT	\$76,608	\$35,860	\$64,413	\$30,826	\$100,824	\$211,500	\$128,426	\$151,558	\$172,380	\$45,837	\$1,018,230
MILWAUKEE	\$29,895	\$32,660	\$100,226	\$122,261	\$114,146	\$327,525	\$33,056	\$11,697	\$73,995	\$135,583	\$981,044
RYOBI	\$30,295	\$17,066	\$19,298	\$111,404	\$45,741	\$162,056	\$45,178	\$38,616	\$84,830	\$55,332	\$609,817
MAKITA	\$2,315	\$1,742	\$2,511	\$4,730	\$98,248	\$94,105	\$7,003	\$5,878	\$12,061	\$6,793	\$235,386
BOSCH	\$3,184	\$836						\$2,349	\$10,893	\$3,719	\$20,980
<b>Grand Total</b>	<b>\$142,297</b>	<b>\$88,163</b>	<b>\$186,448</b>	<b>\$269,221</b>	<b>\$358,959</b>	<b>\$795,186</b>	<b>\$213,663</b>	<b>\$210,099</b>	<b>\$354,159</b>	<b>\$247,263</b>	<b>\$2,865,458</b>

Revenue share % of avg. SKU in ecom channel - 11/26 to 11/30											
	Drills	Grinders	Impact Wrenches	Nail Guns	Power Tool Batteries	Power Tool Combo Sets	Bare Tools	Sanders	Saws	Wet Vacuums	Grand Total
DEWALT	53.8%	40.7%	34.5%	11.4%	28.1%	26.6%	60.1%	72.1%	48.7%	18.5%	35.5%
MILWAUKEE	21.0%	37.0%	53.8%	45.4%	31.8%	41.2%	15.5%	5.6%	20.9%	54.8%	34.2%
RYOBI	21.3%	19.4%	10.4%	41.4%	12.7%	20.4%	21.1%	18.4%	24.0%	22.4%	21.3%
MAKITA	1.6%	2.0%	1.3%	1.8%	27.4%	11.8%	3.3%	2.8%	3.4%	2.7%	8.2%
BOSCH	2.2%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	3.1%	1.5%	0.7%
<b>Grand Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

## About Datavations

Datavations has the largest data lake of inventory data in the market. Inventory data has strong predictive properties as it relates to the holidays. Our real time inventory data reveals the inventory of thousands of big box stores intra daily. In the below article you can see what brands in the power tools sectors were sufficiently stocked leading into Black Friday, and then how it impacted inventory profiles and sales performance of the brands during the event.

## Dataset and methodology

- **In this data panel** we track on hand inventory values 1300+ of the largest home improvement retail locations in the US market
- **The categories** examined are: Drills, Grinders, Impact Wrenches, Nail Guns, Power Tool Batteries, Power Tool Combo Sets, Bare Tools (i.e. "tool only"), Sanders, Saws and Wet Vacuums
- **The cadence of our data is** hourly inventory units on hand and price, both at the store and ecommerce level
- **For stores**, we examine the top 700 and the bottom 700 retail locations by population density surrounding the retail locations, to eliminate geographic bias.
- **For ecommerce**, we examine nation-wide demand, represented by a panel of 32,000 average daily transactions for power tools alone
- We also examine inventory units on an average sku and store basis to eliminate bias of brand catalog size and location adoption in our panel of stores

Our high velocity of data capture allows us to calculate the units shipped to stores (i.e. "qty replenished") as well as the units that left the store as consumers pick up inventory (i.e. "qty sold"). By joining the pricing insights we also calculate the revenues, utilizing the current price. Datavations does not capture deals related to for example: "2-for-1", but diligently track deals related to percentage discounts. However, Datavations captures price at the ecommerce level, so store specific pricing may vary.

## 2 GROWTH

**BRAND/CAT: GROWTH IN AVG(INVENTORY OH) \$ / # SKUS**

(NOV 26 / NOV 1 - 1) (OCT 31 / OCT 1)

- INVENTORY TURN QUERY

**BRAND/CAT: GROWTH IN INVENTORY QTY REPLENISHED \$ / # SKUS**

(past 30 days / prior 30 -1)

**BRAND/CAT: GROWTH IN INVENTORY QTY sold \$ / # SKUS**

(past 30 days / prior 30)

- Show who was better positioned in relation to past trends
- Over or under stocked?

## 3 AVG SKU

**BRAND/CAT: \$ INV OH / # SKUS**

(cumulative growth past 30 days)

**BRAND/CAT: # INV OH / # SKUS**

(cumulative growth past 30 days)

- See the build up in inventory over time
- Who had timely, and who rushed it

## 4 AVG SKU

**BRAND/CAT: AVG price / # SKUS**

(Daily growth)

- Are certain brands positioning for higher volume as the promotions are more aggressive
- Can also check power tools Black Friday savings here: [https://www.homedepot.com/c/tool\\_savings](https://www.homedepot.com/c/tool_savings)