

## Take charge of your business with PULSE Dashboard & Analytics Software

## **Single & Multi-Level Bill of Material Enhancement**

We offer two bill of materials (BOM) reporting options in our PULSE Dashboard & Analytics software:

- The Single-Level BOM report is a standard report that comes with the software. This report can easily be converted to a Single-Level Where-Used report.
- The Multi-Level BOM report was developed for customers needing a custom report that can be adjusted to meet a wide variety of needs.

Parent Item # 🛆					
Parent Description	Comp Item #	Component Description	Seq #	Qty Per Par	
]c	RBC	R C	=	=	
Parent Item #: BCABASSY					
Brake and Cable Assem	BCALIPER	Brake Caliper, Titanium	10		
Brake and Cable Assem	BPADS	Brake Pads, Extra Dual Pivot	20		
Brake and Cable Assem	CABLEHOUSE	Cable Housing, Derailleur	30		
Brake and Cable Assem	BCABLE	Cable for Brakes 1	40		
Brake and Cable Assem	DRFRONT	Derailleurs, Front Clamp On	50		
Brake and Cable Assem	DRREAR	Derailleurs, Rear Clamp On	60		
Brake and Cable Assem	LEVER	Levers, Light Allow, Double	70		
Brake and Cable Assem	BOLT	BOLT	80		
Brake and Cable Assem	BRACKETS	Brackets for Seat	90		
Brake and Cable Assem	BOLT	BOLT	100		

#### **Single-Level Bill of Material Report**

#### **Single-Level Where-Used Report**

Bill of Mate	Q			<u>- ۲ • • 9 ه</u> ط م
Parent Item #	Parent Description	Component Description	Seq # △	Qty Per Par
R B C	+	R B C	=	=
🖯 Comp Ite	m #: #f GROMMET			
9602	MetoR	GROMMET	7	1
9692	MOTOR	GROMMET	7	1
6790	HOUSING	GROMMET	11	4
6792	HOUSING	GROMMET	13	8
6786	HOUSING	GROMMET	13	8

#### **Multiple-Level Bill of Material Report**

The standard multi-level bill of material report requires you to be licensed for the PULSE Designer module. There is a charge for this report and any requested modifications.

The report utilizes the Advanced Screen Designer option of the Designer Module. That is, the report is divided into two panels. The top panel lists your manufactured items. When you click on a manufactured item number in the upper panel, it displays the muli-level bill of material in the lower panel (see the example below)

			View													
Prod Cat	Loc	Item # △	Item Des	Item Description		Last Mfg	) Dt									
I C	8 <mark>0</mark> 0	REC 3000	REC		R	-										
AB	CIN	003-E30	WHEEL		М	6/13/2	21									
FAB	CIN	005-E30	WHEEL		М	5/19/	21									
SUM	CIN	009-E30	WHEEL		M	6/18/	21									
SUM	CIN	011-E30	WHEEL		M	11/21	19									
SUM	CIN	102-E30	HOUSING		M	5/27/2	21									
SUM	CIN	104-E30	HOUSING		M	6/11/2	21									
SUM	CIN	134-E30	HOUSING		M	6/18/2	21									
SUM	CIN	135-E30	HOUSING		M	3/14/2	20									
SLIM	CIN	145-E30	HOUSING		м	12/8/	10									
=7	5															
<b>Multi-Lev</b> Drag a colun	el BOM Vie	o group by th	t column	)		-	-				-					
	nn header have t		t column	Comp Item #	Comp Item Desc	Activity	Pur/Mfg	Qty Per Par	Qty_On Ord	Qty_Alloc	Comp	Average Cost	Extended Avg Cost	Extended Std	Scrap	
Drag a colun Item #	nn header here t	o group by t		Comp Item #	Comp Item Desc	Activity Flag	Pur/Mfg	Qty Per Par	Qty_On Ord	Qty_Alloc =	Comp Loc	Average Cost	Extended Avg Cost	Extended Std Cost	Scrap Factor	
Drag a colun Item #	Parent Loc REC =	o group by the $\Delta$ Seq #	2 Parent Item Desc	Item #	8 <u>0</u> c	Flag					LOC	=	Avg Cost =	Cost	Factor	Qt =
Drag a colun Item # noc 003-E30	Parent Loc REC = CIN	el $\triangle$ Seq #	A Parent Item Desc	Item # #@c E30	8 <u>0</u> c	Flag	a D c	-	-	=		= \$6.440446	Avg Cost = 11.27078	Cost =	Factor =	Qt =
Drag a colun Item # nCc 003-E30 003-E30	Parent Loc REC = CIN CIN	el $\triangle$ Seq #	A Parent Item Desc	Item # RC E30 ZIPP	EDGE HOUSING	Flag R©c A	я <mark>о</mark> с Р	= 1.75	= 0.00	= 123.43	Loc REC CIN CIN	= \$6.440446 \$0.300000	Avg Cost = 11.27078 0.399000	Cost = 12.16250	Factor = 0	Qt =
Drag a colun Item # #C 003-E30 003-E30 003-E30	Parent Loc Lev RC = CIN CIN CIN	o group by 8 el △ Seq # = 0 0	<ul> <li>Parent Item Desc</li> <li>Cr</li> <li>VHEEL</li> <li>IHEEL</li> </ul>	Item # E30 ZIPP ZIPP	EDGE HOUSING ZIPPER BAGS	Flag R©c A A	P P	= 1.75 1.33	= 0.00 0.00	= 123.43 12,092.00	Loc REC CIN CIN CIN CIN	= \$6.440446 \$0.300000 \$0.046000	Avg Cost = 11.27078 0.399000 0.046000	Cost = 12.16250 0.399000	Factor = 0 0	Qt =
Drag a colun Item # "C 003-E30 003-E30 003-E30 003-E30	Parent Lev Loc = CIN CIN CIN CIN CIN	o group by the el △ Seq # = 0 0 0	Parent Item Desc Cr 1 /HEEL 2 /HEEL 3 VHEEL	Item # E30 ZIPP ZIPP COR	REC EDGE HOUSING ZIPPER BAGS ZIPPER BAGS PACKAGING MATERIAL	Flag R©c A A A A	R P P P	= 1.75 1.33 1	= 0.00 0.00 0.00	= 123.43 12,092.00 6,818.00	Loc R CIN CIN CIN CIN CIN CIN	= \$6.440446 \$0.300000 \$0.046000 \$0.020000	Avg Cost = 11.27078 0.399000 0.046000 0.150000	Cost = 12.16250 0.399000 0.046000	Factor = 0 0 0	Qt =
Drag a colun Item # *C 003-E30 003-E30 003-E30 003-E30 003-E30	Parent Lev Loc = CIN CIN CIN CIN CIN CIN CIN	o group by b el △ Seq # 0 0 0 0 0 0	Parent Item Desc C 1 /HEEL 2 /HEEL 3 VHEEL 4 VHEEL	Item # E30 ZIPP ZIPP COR POL	EDGE HOUSING ZIPPER BAGS ZIPPER BAGS PACKAGING MATERIAL BUSHING	Flag R®c A A A A	R P P P P P	= 1.75 1.33 1 7.5	= 0.00 0.00 0.00 0.00	= 123.43 12,092.00 6,818.00 50,964.71	Loc R CIN CIN CIN CIN CIN CIN	= \$6.440446 \$0.300000 \$0.046000 \$0.020000 \$6.880000	Avg Cost = 11.27078 0.399000 0.046000 0.150000 6.880000	Cost = 12.16250 0.399000 0.046000 0.150000	Factor = 0 0 0 0	Qt =
Drag a colun Item # "C 003-E30 003-E30 003-E30 003-E30 003-E30	Parent Lev Loc Lev CIN CIN CIN CIN CIN CIN CIN CIN	e group by b el ∆ Seq # = 0 0 0 0 0 0 0 0	A Parent Item Desc C VHEEL VHEEL VHEEL VHEEL VHEEL VHEEL	Item # E30 ZIPP ZIPP COR POL EWFR	EDGE HOUSING ZIPPER BAGS ZIPPER BAGS PACKAGING MATERIAL BUSHING	Flag RCC A A A A A A	∎ P P P P P P	= 1.75 1.33 1 7.5 1	= 0.00 0.00 0.00 0.00 4.00	= 123.43 12,092.00 6,818.00 50,964.71 6.00	Loc R CIN CIN CIN CIN CIN CIN CIN CIN	= \$6.440446 \$0.300000 \$0.046000 \$0.020000 \$6.880000 \$0.018481	Avg Cost = 11.27078 0.399000 0.046000 0.150000 6.880000 0.018481	Cost = 12.16250 0.399000 0.046000 0.150000 6.880000	Factor = 0 0 0 0 0 0 0	Qt =
Drag a colun Item # * 003-E30 003-E30 003-E30 003-E30 003-E30 003-E30	Parent Lev Loc Lev CIN CIN CIN CIN CIN CIN CIN CIN CIN CIN	e group by b el ∆ Seq # = 0 0 0 0 0 0 0 0 0 0 0 0 0	Parent Item Desc C C VHEEL VHEEL VHEEL VHEEL VHEEL VHEEL VHEEL	Item # E30 ZIPP ZIPP COR POL EWFR	EDGE HOUSING ZIPPER BAGS ZIPPER BAGS PACKAGING MATERIAL BUSHING EDGE HOUSING BUSHING	Flag RC A A A A A A A A	∎ P P P P P P P P	= 1.75 1.33 1 7.5 1 1	= 0.00 0.00 0.00 4.00 0.00	= 123.43 12,092.00 6,818.00 50,964.71 6.00 1,151.27	Loc CIN CIN CIN CIN CIN CIN CIN CIN CIN	= \$6.440446 \$0.300000 \$0.046000 \$0.020000 \$6.880000 \$0.018481 \$0.100000	Avg Cost = 11.27078 0.399000 0.46000 0.150000 6.880000 0.018481 0.400000	Cost = 12.16250 0.399000 0.046000 0.150000 6.880000 0.000000	Factor 0 0 0 0 0 0 0 0 0 0 0 0	Qt =
Drag a colun           Item #           *[]c           003-E30	nn header hvor f Parent Loc Lev CIN CIN CIN CIN CIN CIN CIN CIN	o group by b el △ Seq # — 0 0 0 0 0 0 0 0 0 0 0 0 0	Parent Item Desc           Image: Constraint of the end of th	Item # #E30 ZIPP ZIPP COR POL EWFR POL W0005	EDGE HOUSING ZIPPER BAGS ZIPPER BAGS PACKAGING MATERIAL BUSHING EDGE HOUSING BUSHING	Flag RC A A A A A A A A A	P P P P P P P P P	= 1.75 1.33 1 7.5 1 1 1 4	= 0.00 0.00 0.00 4.00 0.00 0.00	= 123.43 12,092.00 6,818.00 50,964.71 6.00 1,151.27 58,159.03	Loc RCIN CIN CIN CIN CIN CIN CIN CIN	= \$6.440446 \$0.300000 \$0.046000 \$0.020000 \$6.880000 \$0.018481 \$0.100000 \$0.018100	Avg Cost = 11.27078 0.399000 0.046000 0.150000 6.880000 0.018481 0.400000 0.018100	Cost = 12.16250 0.399000 0.046000 0.150000 6.880000 0.000000 0.400000	Factor = 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Qt =
Drag a colun           Item #           *[]r           003-E30	Parent Lev Loc = CIN CIN CIN CIN CIN CIN CIN CIN CIN CIN	e group by b el △ Seq # 	Parent Item Desc           IP           IP           VHEEL           2           HEEL           3           HEEL           5           HEEL           6           HEEL           7           HEEL           8           /HEEL	Item #  Item #	EDGE HOUSING ZIPPER BAGS ZIPPER BAGS PACKAGING MATERIAL BUSHING EDGE HOUSING BUSHING LABEL LABOR COST	Flag RC A A A A A A A A A A	P P P P P P P P P P P	= 1.75 1.33 1 7.5 1 1 1 4 1	= 0.00 0.00 0.00 4.00 0.00 0.00 0.00	= 123.43 12,092.00 6,818.00 50,964.71 6.00 1,151.27 58,159.03 936.00	Loc REC CIN CIN CIN CIN CIN CIN CIN CI	= \$6.440446 \$0.300000 \$0.046000 \$0.020000 \$6.880000 \$0.018481 \$0.100000 \$0.018481 \$0.100000 \$0.018100 \$10.500000	Avg Cost = 11.27078 0.399000 0.046000 0.150000 6.880000 0.018481 0.400000 0.018100 3.255000	Cost = 12.16250 0.399000 0.46000 0.150000 0.880000 0.000000 0.400000 0.028190	Factor = 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Qt =
Item #           *Drag a colum           Item #           *Drag a colum           003-E30           003-E30	Parent Lev Parent Lev CIN CIN CIN CIN CIN CIN CIN CIN	e group by b el △ Seq # 	Parent Item Desc           IP           1           4           4           4           5           4	Item #  Item #	EDGE HOUSING ZIPPER BAGS ZIPPER BAGS BUSHING EDGE HOUSING BUSHING LABEL LABOR COST OVERHEAD COST	Flag RC A A A A A A A A A A N	P P P P P P P P P P P P	= 1.75 1.33 1 7.5 1 1 4 1 4 1 0.31	= 0.00 0.00 0.00 4.00 0.00 0.00 0.00 0.0	= 123.43 12,092.00 6,818.00 50,964.71 6,00 1,151.27 58,159.03 936.00 6,068.54	Loc REC CIN CIN CIN CIN CIN CIN CIN CI	= \$6.440446 \$0.300000 \$0.046000 \$0.020000 \$6.880000 \$0.018481 \$0.100000 \$10.500000 \$10.500000	Avg Cost = 11.27078 0.399000 0.046000 0.150000 0.018481 0.400000 0.018481 0.400000 3.255000 3.255000	Cost = 12.16250 0.399000 0.46000 0.460000 0.000000 0.400000 0.400000 0.402000 3.255000	Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
Drag a colun	Parent Lev Loc = CIN CIN CIN CIN CIN CIN CIN CIN CIN CIN	o group by th = △ Seq # = 0 0 0 0 0 0 0 0 0 0 0 0 0	Parent Item Desc Parent Item	Item # *©c E30 ZIPP ZIPP COR POL WVR POL W0005 LABOR OVE  E3409	EDGE HOUSING ZIPPER BAGS ZIPPER BAGS PACKAGING MATERIAL BUSHING EDGE HOUSING BUSHING LABEL LABOR COST OVERHEAD COST	Flag R A A A A A A A A A A A N N	■	= 1.75 1.33 1 7.5 1 1 4 4 1 0.31 0.31	= 0.00 0.00 0.00 4.00 0.00 0.00 0.00 0.0	= 123.43 12,092.00 6,818.00 50,964.71 6.00 1,151.27 58,159.03 936.00 6,068.54 6,030.25	Loc REC CIN CIN CIN CIN CIN CIN CIN CI	= \$6.440446 \$0.300000 \$0.046000 \$0.020000 \$0.018481 \$0.100000 \$10.500000 \$10.500000 \$8.244070	Avg Cost = 11.27078 0.399000 0.046000 0.150000 0.018481 0.400000 0.018100 3.255000 3.255000 20.28041	Cost = 12.16250 0.399000 0.46000 0.150000 0.000000 0.400000 0.28190 3.255000 3.255000	Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Qt =

### **Customizing the Multiple-Level Bill of Material Report**

The Multi-Level BOM report was designed to be easily modified. The example below was developed for customers that want to determine if they have sufficient on-hand quantities of each component to make the item ordered by their customer.

The upper panel of the report lists all unshipped customer orders. If you click on an item in the upper panel, the report displays the indented bill of material in the lower panel. The lower panel also tells you quickly if any component has an insufficient available quantity. See the example below.

	order oor	nponent	Availability											<u> </u>
OE Order #	Status	Ord Dt	Cust #	Customer N	ame	Pur or MFG	Open?	Item #	Item Des	scription O	d Qty ⊽	O/H Qty (Loc)	Qty Avail (Loc)	Order Total \$
0 c	REC	-	REC	8 <b>0</b> C		8∎c M	в∎с у	RBC	#8C	=		=	=	=
0212228	1	4/15/21	00000001300	FLORIDA DISTRIBUTORS		М	Y	2373	BELT		728	1,384	-1,616	\$20,930.00
0212227	1	4/15/21	00000001300	FLORIDA DISTRIBUTORS		M	Y	2373	BELT		672	1,384	-1,616	\$19,320.00
0212228	1	4/15/21	00000001300	FLORIDA DISTRIBUTORS		M	Y	2374	BELT		624	0	-2,204	\$3,276.00
0212227	1	4/15/21	00000001300	FLORIDA DISTRIBUTORS		M	Y	2374	BELT		576	0	-2,204	\$3,024.00
0215465	1	4/30/21	00000001000	CINCINNATI DISTRIBUTO	RS	M	Y	6210S	PRODUCT LINE TR	UCK	417	790	373	\$9,119.79
0212231	1	4/15/21	00000001300	FLORIDA DISTRIBUTORS		M	Y	2373	BELT		412	1,384	-1,616	\$11,845.00
0212230	1	4/15/21	00000001300	FLORIDA DISTRIBUTORS		M	Y	2373	BELT		408	1,384	-1,616	\$11,730.00
0218884	1	5/15/21	00000001300	FLORIDA DISTRIBUTORS		M	Y	2373	BELT		400	0	-3,300	\$11,500.00
0212229	1	4/15/21	00000001300	FLORIDA DISTRIBUTORS		M	Y	2373	BELT		392	1,384	-1,616	\$11,270.0
0212232	1	4/15/21	00000001300	ELORIDA DISTRIBUTORS		м	Y	2373-	BELT		388	1 384	-1.616	\$11 155 0
											20,315			\$813,960.2
			Contains([Open?], 'y')		<b>N</b>									Edit F
Availabili		EOrder	# = 00215465 AM	ID Item # = 6210S-541(	)									
Availabili	ty View (O	EOrder	# = 00215465 AN	ID Item # = 6210S-5410	) Comp pur_or_mfg	Parent Qnt Needa	Make	? 🛆	Total Component Qty Needed	Comp_Qty_Avail	Cor	1p_Qty_On_Hand	Comp_Qty_Allocated	Edit F
<b>Availabili</b> Drag a colum	ty View (O	E Order	# = 00215465 AN		Comp pur_or_mfg		Make *Ec	? 🛆	Needed	Comp_Qty_Avail	Con	1p_Qty_On_Hand	Comp_Qty_Allocated	
Availabili Drag a colum OE Order #	ty View (O n header here Item #	E Order to group by Comp Item #	# = 00215465 AN that column Com		Comp pur_or_mfg	Neede =		: -	Needed		-	1p_Qty_On_Hand 50,000.00		Short QTY
Vailabili Drag a colum DE Order # OC 215465	ty View (O n header here Item #	E Order to group by Comp Item # # C POLY	# = 00215465 AN that column Com		Comp pur_or_mfg	Needa = 41	e 🛛 c	: -	Needed	-	= 03		=	Short QTY = .03 9,411
Vailabili Drag a colum DE Order # 00215465 00215465	ty View (O n header here Item # atc 6210S-5	E Order to group by Comp Item # #C POLY POLY	# = 00215465 AN that column Com n c BUSHING		Comp pur_or_mfg #Cc P	Needs = 41	REC 7 No	: -	Needed 1,251.00	-8,159	= 03 00	50,000.00	= 58,159	Short QTY = .03 9,411 .00 1,361
Vailabili Drag a colum DE Order # 00215465 00215465 00215465	ty View (O n header here Item # 6210S-5 6210S-5	E Order to group by Comp Item # POLY POLY VELC	# = 00215465 AN that column Com *©c BUSHING BUSHING	p Item Desc 1	Comp pur_or_mfg	Needs = 41	No 7 No 7 No	: -	Needed 1,251.00 417.00	= -8,159. -951.	= 03 00 00	50,000.00	= 58,159 951	Short QTY = .03 9,411 .00 1,36i .00 1,975
Availabili Drag a colum OE Order #	ty View (O n header here Item # 6210S-5 6210S-5 6210S-5	E Order to group by Comp Item # POLY POLY VELC CART	# = 00215465 AN that column Com BUSHING BUSHING VELCRO	p Item Desc 1	Comp pur_or_mfg *Ex	Needs = 41	* C 7 No 7 No 7 No 7 No 7 Yes	: -	Needed 1,251.00 417.00 417.00	= -8,159 -951 -1,558	= 03 00 00	50,000.00 0.00 0.00	= 58,159 951 1,558	Short QTV = .03 9,411 .00 1,361 .00 1,979 .00 0

# For information on any of our PULSE family of Macola® add-on software products, call (513) 723-8091

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Independent ERP and Macola<sup>®</sup> Specialists Expert Support/Optimization for 25 years Developer of Pulse Dashboard software 8-23