

TOOL MATRIX
2014 DANA REARS, TUBE ASSY
Lathe - Turning, Asset # 10117,2445,10126,2463,2464,2440

Rev. level G
Rev date: 2/21/20

Dept. D4, OP40

Pos #	P SP D	Tool Description	Supplier	USM / Vendor #	QTY. REQ'D	EDGES	Tool Life	Pcs/ Tool	Tool Cost	Cost / Piece "P"	Cost / Piece "SP"	Cost / Piece "D"	Annual Tool Usage	Annual Tool Cost	MIN	MAX
		Rgh & Fin Carrier End - special clearance conditions only														
U3	D	Special Tool Block Assy	ANTECH	TD-14901	1	1	600,000	600,000	\$673.00	\$ -	\$ -	\$ 0.00	1	\$ 392.58	1	2
U12	SP	Special Shank Tool	CCT	TD-14909	1	1	135,000	135,000	\$225.00	\$ -	\$ 0.00	\$ -	3	\$ 583.33	1	2
	SP	Clamp Set	Sandvik	5412 028-021	1	1	15,000	15,000	\$ 8.95	\$ -	\$ 0.00	\$ -	23	\$ 208.83	2	3
	SP	Shim	Sandvik	5322 331-12	1	1	15,000	15,000	\$ 4.88	\$ -	\$ 0.00	\$ -	23	\$ 113.87	2	3
	SP	Shim Screw	Sandvik	5513 020-02	1	1	15,000	15,000	\$ 2.55	\$ -	\$ 0.00	\$ -	23	\$ 59.50	2	3
	P	Insert	Sandvik	WNMG 433-PM4315	1	6	100	600	\$ 5.02	\$ 0.01	\$ -	\$ -	583	\$ 2,928.33	49	73
		Finish Spindle DIA's														
U4	D	Tool Shank	Iscar	DDJNL 16 4D	1	1	135,000	135,000	\$ 62.46	\$ -	\$ -	\$ 0.00	3	\$ 161.93	1	2
U11	SP	Clamp Bridge	Iscar	LCGR-4	1	1	15,000	15,000	\$ 9.86	\$ -	\$ 0.00	\$ -	23	\$ 230.07	2	3
	SP	Clamp Screw	Iscar	SR 10400270	1	1	15,000	15,000	\$ 5.75	\$ -	\$ 0.00	\$ -	23	\$ 134.17	2	3
	SP	Shim	Iscar	RDT 443	1	1	15,000	15,000	\$ 16.27	\$ -	\$ 0.00	\$ -	23	\$ 379.63	2	3
	SP	Shim Screw	Iscar	SR 14-506	1	1	15,000	15,000	\$ 0.40	\$ -	\$ 0.00	\$ -	23	\$ 9.33	2	3
	P	Insert	Sandvik	DNMX 432-WF4315	1	4	100	400	\$ 10.47	\$ 0.026	\$ -	\$ -	875	\$ 9,161.25	73	109
		Rgh & Fin Carrier End														
U5	D	Special Tool Block Assy	ANTECH	TD-14901	1	1	600,000	600,000	\$673.00	\$ -	\$ -	\$ 0.00	1	\$ 392.58	1	2
U10	SP	Altered Shank Tool	CCT	TD-14908	1	1	135,000	135,000	\$182.00	\$ -	\$ 0.00	\$ -	3	\$ 471.85	1	2
	SP	Clamp Set	Sandvik	5412 028-021	1	1	15,000	15,000	\$ 8.95	\$ -	\$ 0.00	\$ -	23	\$ 208.83	2	3
	SP	Shim	Sandvik	5322 331-12	1	1	15,000	15,000	\$ 4.88	\$ -	\$ 0.00	\$ -	23	\$ 113.87	2	3
	SP	Shim Screw	Sandvik	5513 020-02	1	1	15,000	15,000	\$ 2.55	\$ -	\$ 0.00	\$ -	23	\$ 59.50	2	3
	P	Insert	Sandvik	WNMG 433-PM4315	1	6	100	600	\$ 5.02	\$ 0.01	\$ -	\$ -	583	\$ 2,928.33	49	73
		Rough Flange Face - Carrier Side														
U6	D	Special Tool Block Assy	ANTECH	TD-14901	1	1	600,000	600,000	\$673.00	\$ -	\$ -	\$ 0.00	1	\$ 392.58	1	2
U9	SP	Altered Shank Tool	CCT	TD-14910	1	1	135,000	135,000	\$ 155.00	\$ -	\$ 0.00	\$ -	3	\$ 401.85	1	2
	SP	Clamp Bridge	Mitsubishi	CL12	1	1	15,000	15,000		\$ -	\$ -	\$ -	23	\$ -	2	3
	SP	Clamp Screw	Mitsubishi	XNS510	1	1	15,000	15,000	\$ 3.20	\$ -	\$ 0.00	\$ -	23	\$ 74.67	2	3
	SP	Shim	Mitsubishi	ISSN533	1	1	15,000	15,000	\$ 8.21	\$ -	\$ 0.00	\$ -	23	\$ 191.57	2	3
	SP	Shim Pin	Mitsubishi	NL58	1	1	15,000	15,000	\$ 10.35	\$ -	\$ 0.00	\$ -	23	\$ 241.50	2	3
	P	Insert	Mitsubishi	SNMG 543 UE6020	1	8	125	1,000	\$ 6.30	\$ 0.01	\$ -	\$ -	350	\$ 2,205.00	29	44
		Finish Flange Face - Carrier Side														
	D	Special Tool Block Assy	ANTECH	TD-14901	1	1	600,000	600,000	\$673.00	\$ -	\$ -	\$ 0.00	1	\$ 392.58	1	2
U8	SP	Altered Shank Tool	CCT	TD-14911	1	1	135,000	135,000	\$ 155.00	\$ -	\$ 0.00	\$ -	3	\$ 401.85	1	2
	SP	Clamp Bridge	Mitsubishi	CL9	1	1	15,000	15,000	\$ 7.30	\$ -	\$ 0.00	\$ -	23	\$ 170.33	2	3
	SP	Clamp Screw	Mitsubishi	XNS510	1	1	15,000	15,000	\$ 3.20	\$ -	\$ 0.00	\$ -	23	\$ 74.67	2	3
	SP	Shim	Mitsubishi	ITSN432	1	1	15,000	15,000	\$ 7.61	\$ -	\$ 0.00	\$ -	23	\$ 177.57	2	3
	SP	Shim Pin	Mitsubishi	NL46	1	1	15,000	15,000	\$ 10.02	\$ -	\$ 0.00	\$ -	23	\$ 233.80	2	3
	P	Insert	Mitsubishi	TNMG 432 UE6020	1	6	125	750	\$ 6.99	\$ 0.009	\$ -	\$ -	467	\$ 3,262.00	39	58

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Pos #	P SP D	Tool Description	Supplier	USM / Vendor #	QTY. REQ'D	EDGES	Tool Life	Pcs/ Tool	Tool Cost	Cost / Piece "P"	Cost / Piece "SP"	Cost / Piece "D"	Annual Tool Usage	Annual Tool Cost	MIN	MAX
		Finish Back of Flange 10085761 & 5762 Only														
	D	Special Tool Block Assy	ANTECH	TD-14901	1	1	600,000	600,000	\$673.00	\$ -	\$ -	\$ 0.00	1	\$ 392.58	1	2
U8	SP	Altered Shank Tool	CCT	TD-XXXX	1	1	135,000	135,000	\$ 155.00	\$ -	\$ 0.00	\$ -	3	\$ 401.85	1	2
	SP	Insert Clamp	Seco	CL20	1	1	15,000	15,000	\$ 8.39	\$ -	\$ 0.00	\$ -	23	\$ 195.77	2	3
	SP	Clamp Screw	Seco	XNS-48	1	1	15,000	15,000	\$ 3.41	\$ -	\$ 0.00	\$ -	23	\$ 79.57	2	3
	SP	Shim	Seco	DSN-433	1	1	15,000	15,000	\$ 10.60	\$ -	\$ 0.00	\$ -	23	\$ 247.33	2	3
	SP	Shim Pin	Seco	NL46	1	1	15,000	15,000	\$ 10.02	\$ -	\$ 0.00	\$ -	23	\$ 233.80	2	3
	P	Insert	Seco	DNMG 432-M3 TP1501	1	4	75	300	\$ 9.59	\$ 0.032	\$ -	\$ -	1167	\$ 11,188.33	97	146
		Rough Spindle End														
L1	D	Tool Shank	Sandvik	DWLNL 16 4D	1	1	600,000	600,000	\$ 68.43	\$ -	\$ -	\$ 0.00	1	\$ 39.92	1	2
L6	SP	Insert Clamp Set	Sandvik	5412 028-021	1	1	15,000	15,000	\$ 8.95	\$ -	\$ 0.00	\$ -	23	\$ 208.83	2	3
	SP	Shim	Sandvik	5322 331-12	1	1	15,000	15,000	\$ 4.88	\$ -	\$ 0.00	\$ -	23	\$ 113.87	2	3
	SP	Shim Screw	Sandvik	5513 020-02	1	1	15,000	15,000	\$ 2.55	\$ -	\$ 0.00	\$ -	23	\$ 59.50	2	3
	P	Insert	KENN	WNMG 433-MN KCP40B	1	6	100	600	\$ 8.06	\$ 0.013	\$ -	\$ -	583	\$ 4,701.67	49	73
		Rough Flange Face - Spindle Side														
L2	D	Tool Shank	Mitsubishi	MSKNL 16 5D	1	1	600,000	600,000	\$ 47.27	\$ -	\$ -	\$ 0.00	1	\$ 27.57	1	2
L7	SP	Insert Clamp Bridge	Mitsubishi	CL12	1	1	15,000	15,000	\$ -	\$ -	\$ -	\$ -	23	\$ -	2	3
	SP	Insert Clamp Screw	Mitsubishi	XNS510	1	1	15,000	15,000	\$ 3.20	\$ -	\$ 0.00	\$ -	23	\$ 74.67	2	3
	SP	Shim	Mitsubishi	ISSN533	1	1	15,000	15,000	\$ 8.21	\$ -	\$ 0.00	\$ -	23	\$ 191.57	2	3
	SP	Shim Pin	Mitsubishi	NL58	1	1	15,000	15,000	\$ 10.35	\$ -	\$ 0.00	\$ -	23	\$ 241.50	2	3
	P	Insert	Mitsubishi	SNMG 543 UE6020	1	8	125	1,000	\$ 6.30	\$ 0.006	\$ -	\$ -	350	\$ 2,205.00	29	44
		Finish Flange Face - Spindle Side														
L3	D	Tool Shank	Mitsubishi	MTFNL 16 4D	1	1	600,000	600,000	\$ 47.27	\$ -	\$ -	\$ 0.00	1	\$ 27.57	1	2
L8	SP	Insert Clamp Bridge	Mitsubishi	CL9	1	1	15,000	15,000	\$ 7.30	\$ -	\$ 0.00	\$ -	23	\$ 170.33	2	3
	SP	Insert Clamp Screw	Mitsubishi	XNS510	1	1	15,000	15,000	\$ 3.20	\$ -	\$ 0.00	\$ -	23	\$ 74.67	2	3
	SP	Shim	Mitsubishi	ITSN432	1	1	15,000	15,000	\$ 7.61	\$ -	\$ 0.00	\$ -	23	\$ 177.57	2	3
	SP	Shim Pin	Mitsubishi	NL46	1	1	15,000	15,000	\$ 10.02	\$ -	\$ 0.00	\$ -	23	\$ 233.80	2	3
	P	Insert	Mitsubishi	TNMG 432 UE6020	1	6	125	750	\$ 6.99	\$ 0.009	\$ -	\$ -	467	\$ 3,262.00	39	58
		Tube O.D.-Spindle Side														
L4	D	Tool Shank	Sandvik	DWLNL 16 4D	1	1	600,000	600,000	\$ 68.43	\$ -	\$ -	\$ 0.00	1	\$ 39.92	1	2
L9	SP	Insert Clamp Set	Sandvik	5412 028-021	1	1	15,000	15,000	\$ 8.95	\$ -	\$ 0.00	\$ -	23	\$ 208.83	2	3
	SP	Shim	Sandvik	5322 266-01	1	1	15,000	15,000	\$ 4.88	\$ -	\$ 0.00	\$ -	23	\$ 113.87	2	3
	SP	Shim Screw	Sandvik	5513 020-02	1	1	15,000	15,000	\$ 2.55	\$ -	\$ 0.00	\$ -	23	\$ 59.50	2	3
	P	Insert	Sandvik	WNMG 434 PR4315	1	6	100	600	\$ 7.40	\$ 0.012	\$ -	\$ -	583	\$ 4,316.67	49	73
		Cut Threads														
L5	D	Tool Shank	Seco	CER 100 6-16CQHD	1	1	600,000	600,000	\$ 99.00	\$ -	\$ -	\$ 0.00	1	\$ 57.75	1	2
L10	SP	Clamp	Seco	CHD16	1	1	15,000	15,000	\$ -	\$ -	\$ -	\$ -	23	\$ -	2	3



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	SP	Clamo Screw	Seco	L85020-T15P	1	1	15,000	15,000		\$ -	\$ -	\$ -	23	\$ -	2	3
	SP	Clamp Spring	Seco	S6912	1	1	15,000	15,000		\$ -	\$ -	\$ -	23	\$ -	2	3
	SP	Anvil (Shim)	Seco	MX 16-1	1	1	15,000	15,000	\$ 13.65	\$ -	\$ 0.00	\$ -	23	\$ 318.50	2	3
	SP	Anvil Screw	Seco	CS3507-T09P	1	1	15,000	15,000		\$ -	\$ -	\$ -	23	\$ -	2	3
	P	Insert - 16 pitch	Seco	16ER 16UN-TT CP500	1	3	100	300	\$ 17.95	\$ 0.060	\$ -	\$ -	1167	\$ 20,941.67	97	146
	P	Insert - 12 pitch	Seco	16ER 12UN-TT CP500	1	3	100	300		\$ -	\$ -	\$ -	1167	\$ -	97	146
										\$ 0.192	\$ 0.023	\$ 0.007		\$77,363.741		
										Perish cost/pc	S-Per cost/pc	Durabl cost/pc		Annual Tool Cost		