Johnson's Rule Job Shop Scheduling – Job Info

Job	Operation #1	Operation #2	Machine for	Machine for	Time for	Time for
100	Operation #1	Operation #2	Operation #1	Operation #2	Operation #1	Operation #2
1	A1	A2	M1	M2	3	4
2	B1	B2	M1	M2	6	5
3	C1	C2	M1	M2	4	5
4	D1	D2	M1	M2	3	2
5	E1	E2	M1	M2	4	3
6	F1	F2	M1	M2	2	3
7	G1	G2	M1	M2	7	6
8	H1	H2	M1	M2	5	6
9	I1	12	M1	M2	5	4
10	J1	J2	M1	M2	6	7
11	K1	K2	M1	M2	12	2

Machine Schedule - Machine 1

Machine 1									
Job#	Job ID	Operation ID	Duration	Start	Finish				
1	6	F1	2	0	2				
2	1	A1	3	2	5				
3	3	C1	4	5	9				
4	8	H1	5	9	14				
5	10	J1	6	14	20				
6	7	G1	7	20	27				
7	2	B1	6	27	33				
8	9	11	5	33	38				
9	5	E1	4	38	42				
10	11	K1	12	42	54				
11	4	D1	3	54	57				

Machine Schedule – Machine 2

Machine 2										
Job#	Job ID	Operation ID	Duration	Start	Finish					
1	6	F2	3	2	5					
2	1	A2	4	5	9					
3	3	C2	5	9	14					
4	8	H2	6	14	20					
5	10	J2	7	20	27					
6	7	G2	6	27	33					
7	2	B2	5	33	38					
8	9	12	4	38	42					
9	5	E2	3	42	45					
10	11	K2	2	54	56					
11	4	D2	2	57	59					

Gantt Chart

Gantt Chart for Sequence 1 through 11 (A through K)																	
Time taken																	
Time	Time 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 6											8 59 60					
M1	F1	A1	C1	H1	J1	G1	B1	I1	E1	K1			D1				
M2		F2	A2	C2	H2	J2	G2	B2	12	E2					K2		D2

The Gantt chart for the sequence 6-1-3-8-10-7-2-9-5-11-4. The value of make-span is 59.